Filed pursuant to Rule 424(b)(5)
Registration No. 333-251500
Registration No. 333-237610

PROSPECTUS SUPPLEMENT
(To Prospectuses dated January 4, 2021 and April 17, 2020)

58,333,334 Shares of Common Stock

We are offering 58,333,334 shares of our common stock, par value $0.001 per share, or Common Stock, pursuant to this prospectus supplement and the accompanying prospectuses.

Our Common Stock is listed on The Nasdaq Global Market under the symbol "TNXP." On February 5, 2021, the last reported sale price of our Common Stock as reported on The Nasdaq Global Market was $1.27 per share.

Pursuant to the investor agreement dated as of February 8, 2021, by and between us and the purchasers identified therein, any purchaser that purchases shares of our Common Stock in this offering, as a condition to such purchase, agrees to vote the shares of our Common Stock that they own or control on the record date of the stockholder meeting (or any postponement, adjournment or reconvening thereof) at which our stockholders consider and vote upon a proposal to approve an amendment to our articles of incorporation to increase the number of authorized shares of our Common Stock from 400,000,000 to 800,000,000, as previously approved by our board of directors. This proposal will be submitted to our stockholders at a special meeting of stockholders scheduled to be held on March 26, 2021. The record date for the special meeting of stockholders will be set on or about February 9, 2021.

In addition, the investor agreement also provides that, beginning on the pricing date of this offering and ending at 11:59 pm ET on February 8, 2021 (the "leak-out period"), investors in this offering are only be permitted to sell such securities purchased in the offering during the leak-out period in an amount as not to exceed 3.75%, in the aggregate, of the daily trading volume of our common stock on any given trading day, as reported by Bloomberg, LP, provided however, that this restriction shall not apply to any "long" sales (as defined in the Securities Exchange Act of 1934) by such investors at a price per share greater than $2.00 per share.

Investing in our securities involves a high degree of risk. Before buying any of our securities, you should carefully read the discussion of material risks of investing in our securities under the heading "Risk Factors" beginning on page S-6 of this prospectus supplement and the documents incorporated by reference herein and page 2 of the accompanying prospectuses.

We have engaged A.G.P./Alliance Global Partners ("AGP") to act as our sole placement agent in connection with this offering. The placement agent has agreed to use its reasonable best efforts to place the securities offered by this prospectus supplement. We have agreed to pay the placement agent the fees set forth in the table below.

	Per Share	Total
Public offering price	$ 1.20	$ 70,000,000.80
Placement agents' fees	$ 0.084	$ 4,900,000.06
Proceeds, before expenses, to us	$ 1.116	$ 65,100,000.74

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

Delivery of the shares of Common Stock is expected to be made on or about February 9, 2021, subject to customary closing conditions.

Sole Placement Agent

A.G.P.

The date of this prospectus is February 8, 2021

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No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus supplement or the accompanying prospectuses. You must not rely on any unauthorized information or representations. This prospectus supplement and the accompanying prospectuses are an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus supplement and the accompanying prospectuses is current only as of their respective dates.

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectuses are part of two registration statements that we filed with the U.S. Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. This document is in three parts: (i) the prospectus supplement, (ii) a shelf registration statement on Form S-3 (File No. 333-251500) that the SEC declared effective on January 4, 2021, or the 2021 Shelf and (iii) a shelf registration statement on Form S-3 (File No. 333-237610) that the SEC declared effective on April 17, 2020, or the 2020 Shelf. $19.0 million in aggregate offering amount of shares sold in the offering described in this prospectus supplement will be deemed to be made from the 2020 Shelf, and $51.0 million will be made from the 2021 Shelf. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to and updates information contained in the accompanying prospectuses and the documents incorporated by reference herein. The second and third parts, the accompanying prospectuses, provide more general information. Generally, when we refer to this prospectus, we are referring to all parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectuses or any document incorporated by reference therein filed prior to the date of this prospectus supplement, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date-for example, a document incorporated by reference in the accompanying prospectuses, the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

You should rely only on the information contained in this prospectus supplement or the accompanying prospectuses, or incorporated by reference herein. We have not authorized, and the placement agents have not authorized, anyone to provide you with information that is different. The information contained in this prospectus supplement or the accompanying prospectuses, or incorporated by reference herein or therein is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement and the accompanying prospectuses or of any sale of our Common Stock. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectuses, including the documents incorporated by reference herein and therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you in the sections entitled "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus supplement and in the accompanying prospectuses, respectively.

We are offering to sell, and seeking offers to buy, the securities offered by this prospectus supplement only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectuses and the offering of the securities offered by this prospectus supplement in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectuses must inform themselves about, and observe any restrictions relating to, the offering of the Common Stock and the distribution of this prospectus supplement and the accompanying prospectuses outside the United States. This prospectus supplement and the accompanying prospectuses do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectuses by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

When used herein, unless the context requires otherwise, references to the "Company," "we," "our" and "us" refer to Tonix Pharmaceuticals Holding Corp., a Nevada corporation.

All trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend the use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

NOTE ON FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference in this prospectus supplement contain, and our officers and representatives may from time to time make, "forward-looking statements," which include information relating to future events, future financial performance, financial projections, strategies, expectations, competitive environment and regulation. Words such as "may," "should," "could," "would," "predicts," "potential," "continue," "expects," "anticipates," "future," "intends," "plans," "believes," "estimates," "goal," "seek," "project," "strategy," "likely," and similar expressions, as well as statements in future tense, identify forward-looking statements. Forward-looking statements are neither historical facts, nor should they be read as a guarantee of future performance or results and may not be accurate indications of when such performance or results will be achieved. Forward-looking statements are based on information we have when those statements are made or management's good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause such differences include, but are not limited to:

- our ability to continue to operate despite our history of operating losses and expectation that we will continue to incur operating losses for the foreseeable future;
- our current and future capital requirements to support our development efforts and our ability to satisfy our capital needs;
- our ability to obtain FDA approval for any of our product candidates;
- our ability to maintain or protect the validity of our patents and other intellectual property;
- our ability to retain key executives and medical and science personnel;
- the timing and progress of clinical development of our product candidates;
- our ability to internally develop new inventions and intellectual property;
- interpretations of current laws and the passages of future laws;
- acceptance of our business model by investors;
- the accuracy of our estimates regarding expenses and capital requirements;
- our ability to adequately support growth; and
- our ability to advance our clinical development programs could be impacted by the COVID-19 pandemic.

The foregoing does not represent an exhaustive list of matters that may be covered by the forward-looking statements contained herein and in the documents incorporated by reference herein or risk factors that we are faced with that may cause our actual results to differ from those anticipate in our forward-looking statements. Please see "Risk Factors" for additional risks which could adversely impact our business and financial performance.

Moreover, new risks regularly emerge and it is not possible for our management to predict or articulate all risks we face, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933, as amended, do not protect any forward-looking statements that we make in connection with this offering. All forward-looking statements included in this prospectus and in the documents incorporated by reference in this prospectus are based on information available to us on the date of this prospectus or the date of the applicable document incorporated by reference. Except to the extent required by applicable laws or rules, we undertake no obligation to publicly update or revise any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained above and throughout this prospectus and in the documents incorporated by reference in this prospectus. We qualify all of our forward-looking statements by these cautionary statements.

IN ADDITION TO THE ABOVE RISKS, BUSINESSES ARE OFTEN SUBJECT TO RISKS NOT FORESEEN OR FULLY APPRECIATED BY OUR MANAGEMENT. IN REVIEWING THIS PROSPECTUS AND THE DOCUMENTS INCORPORATED BY REFERENCE IN THIS PROSPECTUS, POTENTIAL INVESTORS SHOULD KEEP IN MIND THAT THERE MAY BE OTHER POSSIBLE RISKS THAT COULD BE IMPORTANT.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectuses and in the documents incorporated by reference herein and therein. This summary is not complete and does not contain all the information you should consider before investing in our securities pursuant to this prospectus supplement and the accompanying prospectuses. Before making an investment decision, to fully understand this offering and its consequences to you, you should carefully read this entire prospectus supplement and the accompanying prospectuses, including "Risk Factors," the financial statements, and related notes, and the other information incorporated by reference herein and therein.

When used herein, unless the context requires otherwise, references to the "Company," "we," "our" and "us" refer to Tonix Pharmaceuticals Holding Corp., a Nevada corporation.

All trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend the use or display of other companies' trademarks and trade names to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Company Overview

We are a clinical-stage biopharmaceutical company focused on discovering, licensing, acquiring, developing and manufacturing small molecules and biologics to manage treat and prevent human disease and alleviate suffering. Tonix's portfolio is primarily composed of central nervous system (CNS) and immunology product candidates. The CNS product candidates include both small molecules and biologics to treat pain, neurologic, psychiatric and addiction conditions. The immunology product candidates include vaccines to prevent infectious diseases and biologics to address organ transplantation rejection, cancer and autoimmune diseases.

Tonix's lead CNS candidate, TNX-102 SL[1], a sublingual formulation of cyclobenzaprine designed for daily dosing at bedtime, is in Phase 3 development with the goal of providing a safe and effective long-term treatment for the management of fibromyalgia. We reported positive topline results in the first potential pivotal Phase 3 RELIEF study in December 2020. The topline data showed that TNX-102 SL 5.6 mg achieved statistical significance on the primary endpoint of reducing daily pain and also showed activity in improving sleep, reducing fatigue, and global syndromal improvement of symptoms and functional impairment in fibromyalgia. Tonix is currently enrolling participants in a second potential pivotal Phase 3 RALLY study for the management of fibromyalgia using TNX-102 SL. Data from an interim analysis[2] based on the first 50% of randomized participants is expected in the second quarter of 2021 and topline results are expected in the fourth quarter of 2021. TNX-102 SL is also in development for posttraumatic stress disorder (PTSD), agitation in Alzheimer's disease (AAD) and alcohol use disorder (AUD). The PTSD program is in Phase 3 development while AAD and AUD are Phase 2 ready. The AAD program has FDA Fast Track designation.

In the first quarter of 2020, we announced a program to develop a potential vaccine, TNX-1800[3], to protect against the novel coronavirus disease, or COVID-19. TNX-1800 is a live replicating, attenuated vaccine based on the horsepox viral vector platform to protect against COVID-19, primarily by eliciting a T cell response. In November 2020, Tonix reported positive immune response results following vaccination of non-human primates with TNX-1800. The Company expects to report data from a challenge study, in the first quarter of 2021, in which the TNX-1800 vaccinated and control animals have been challenged with SARS-CoV-2, the virus that causes COVID-19. TNX-801[3], live horsepox virus vaccine for percutaneous administration, is in development to protect against smallpox and monkeypox. Tonix is also developing TNX-2300[3] and TNX-2600[3], live replicating, attenuated vaccine candidates for the prevention of COVID-19, but using bovine parainfluenza as the vector. The Company expects animal data to measure efficacy of TNX-2300 in challenge studies using SARS-CoV-2 in the second quarter of 2021. In February 2021, we announced a program to develop a potential *in vivo* diagnostic, TNX-2100 [3], to measure exposure and T cell immunity to SARS-CoV-2. TNX-2100 is based on mixtures of synthetic peptides that are administered intradermally to elicit a delayed type hypersensitivity (DTH) response in individuals who have T cell immunity to one or more of the peptides. TNX-2100 is in the pre-investigational new drug stage and has not been approved for any indication.

Tonix is developing TNX-1900[1], intranasal potentiated oxytocin, which is a small peptide product candidate for migraine and craniofacial pain. Tonix intends to submit an IND application for this program to the FDA in the second quarter of 2021 and is also targeting to start a Phase 2 study of TNX-1900 for the treatment of migraine in the U.S. in the second quarter of 2021. A Phase 2 trial under an investigator-initiated IND has previously been completed in the U.S. using TNX-1900. Tonix is developing TNX-1300[3], cocaine esterase, which is a biologic product candidate for treating life-threatening cocaine intoxication. TNX-1300 is a recombinant protein that degrades cocaine in the bloodstream, and it has been granted Breakthrough Therapy designation by the FDA. Tonix expects to initiate a Phase 2 open-label safety study in an emergency department setting to study TNX-1300 in the first quarter of 2021. Results of a positive Phase 2 proof-of-concept and pharmacokinetic study of volunteer cocaine abusers in a controlled laboratory setting were reported prior to Tonix licensing the technology.

Our preclinical pipeline includes: TNX-601[1] CR for depression, TNX-701[1] for radioprotection, TNX-1500[3] for organ transplant rejection/autoimmune conditions, TNX-1600[1] for daytime treatment for posttraumatic stress disorder, depression and attention deficit hyperactivity disorder, and TNX-1700[3] for gastric and pancreatic cancers.

We have assembled a management team with significant industry experience to lead the development of our product candidates. We complement our management team with a network of scientific, clinical, and regulatory advisors that includes recognized experts in their respective fields.

[1] TNX-102 SL, TNX-601 CR, TNX-701, TNX-1600 and TNX-1900 are investigational new drugs and have not been approved for any indication.

[2] Pending submission and agreement from FDA on the statistical analysis plan.

[3] TNX-1800, TNX-2300, TNX-2100, TNX-2600, TNX-801, TNX-1300, TNX-1500 and TNX-1700 are investigational new biologics and have not been approved for any indication.

Overview of Lead Product Candidates

TNX-102 SL – Fibromyalgia (FM)

TNX-102 SL is a small, rapidly disintegrating tablet containing cyclobenzaprine (CBP) for sublingual administration. TNX-102 SL employs a proprietary protective eutectic formulation of CBP, Protectic™, which enables rapid systemic exposure and increased bioavailability through transmucosal absorption. We are

developing TNX-102 SL 5.6 mg for the management of FM. TNX-102 SL for FM is a non-opioid, centrally-acting analgesic that could potentially provide a new therapeutic option for FM patients. In September 2016, we interrupted the development of TNX-102 SL for the management of FM to focus on the treatment of PTSD. Our previous development efforts for TNX-102 SL in FM studied the 2.8 mg dose in a Phase 2 and a Phase 3 study. Based on our experience with higher doses of TNX-102 SL, 5.6 mg (2 x 2.8mg tablets), in PTSD participants, we restarted the clinical program in FM using TNX-102 SL 5.6 mg. We met with the FDA in March 2019 to discuss the clinical development plan and the RELIEF (F304) Phase 3 study design to support the FM indication. We received clear guidance from the FDA to advance FM using TNX-102 SL 5.6 mg and have completed testing this dose in the Phase 3 RELIEF (F304) study for which enrollment was completed in July 2020 and positive topline data was announced in December 2020. Based on the results of topline data, TNX-102 SL achieved statistical significance on the primary endpoint of reducing daily pain compared to placebo (p=0.01) and also showed activity in improving sleep, reducing fatigue, and improving global syndromal measures of FM symptoms and function. TNX-102 SL was generally well tolerated with adverse events comparable to prior studies and with no new safety signals observed. In September 2020, we initiated enrollment in a second Phase 3 study of TNX-102 SL for fibromyalgia, the RALLY study (F306), for which we expect interim results in the second quarter of 2021 and topline results from the full study in the fourth quarter of 2021. Upon achieving positive outcomes in both F304 and F306, Tonix is on track to potentially file an NDA with the FDA for marketing approval in 2022.

TNX-1800 – Potential COVID-19 Vaccine

TNX-1800 is a potential vaccine for the novel coronavirus disease, COVID-19, based on a modified version of live horsepox virus grown in cell culture. TNX-1800 is designed to express the spike protein from SARS-CoV-2 virus, which causes COVID-19. Our plan is to test whether vaccination with TNX-1800 will elicit an immune response to the SARS-CoV-2 spike protein and if so, whether such an immune response will protect against COVID-19.

TNX-1800 is based on Tonix's proprietary horsepox vector platform. Horsepox is closely related to vaccinia vaccines, which are a group of orthopoxviruses that have been used as smallpox vaccines and as experimental vectors for certain other disease-related antigens. Under the terms of a research collaboration, Southern Research will test TNX-1800 for its ability to express the SARS-CoV-2 spike protein and elicit protective immune responses to challenge with SARS-CoV-2 in animals. In November 2020, Tonix reported data from an immune response study in which vaccination with TNX-1800 resulted in all eight non-human primates successfully producing anti-SARS-CoV-2 neutralizing antibodies. In addition, vaccination with TNX-1800 also elicited a skin reaction called a "take" which is a validated biomarker of functional T cell immunity. In the second phase of the study, the TNX-1800 vaccinated and control animals will be challenged with SARS-CoV-2. Results from this efficacy study are expected in the first quarter of 2021. The further development of TNX-1800 for clinical trials will require manufacturing according to Good Manufacturing Practice, or GMP, standards which is expected to be ready in the second half of 2021. The Company also expects to initiate a Phase 1 study in humans using TNX-1800 in the second half of 2021.

Horsepox and vaccinia are closely related orthopoxviruses that are believed to share a common ancestor. Orthopoxviruses, like vaccinia, can be engineered to express foreign genes and have been explored as platforms for vaccine development because they: (1) possess large packaging capacity for exogenous DNA inserts, (2) possess precise virus-specific control of exogenous gene insert expression, (3) have a lack of persistence or genomic integration in the host, (4) possess strong immunogenicity as a vaccine, (5) possess the ability to rapidly generate vector/insert constructs, (6) have the potential to be manufactured at industrial scale, and (7) possess the ability to provide direct antigen presentation. Although vaccinia vectors are available, different orthopoxvirus strains may behave differently as vectors in part because of their different repertoire of genes that modulate immune responses and host range susceptibility. Potential advantages of horsepox-based vaccines include the strong immunogenicity we observed for TNX-801 in rhesus macaques and mice with good tolerability. The protein synthesis connected with a replicating, attenuated live virus vaccine provides direct antigen presentation, which can stimulate cellular ('T cell') immunity in addition to humoral immunity.

There is much effort currently being invested into methods of providing vaccines to protect against COVID-19, but there is still much unknown about the biology of the SARS-CoV-2 virus and the methods, if any, for producing a protective immune response. For example, based on studies of a related coronavirus diseases, Severe Acute Respiratory Syndrome, or SARS, from 2003, and Middle East Respiratory Syndrome, or MERS, from 2012, there is potential risk that antibodies to SARS-CoV-2 may potentiate, rather than protect against, infection in some individuals. This phenomenon is called antibody-mediated enhancement. Safety tests will be required to ensure that antibody mediated enhancement, if present, does not compromise protection for any potential COVID-19 vaccine.

We have filed a provisional patent on TNX-1800's technology. In addition, we expect TNX-1800 will be eligible for 12 years of non-patent-based exclusivity under the Patient Protection and Affordable Care Act, or PPACA.

We intend to meet with the FDA to discuss the most efficient and appropriate investigational plan, to establish the safety and effectiveness evidence to support the licensure of TNX-1800. We are currently working to develop a vaccine that meets cGMP quality to support a clinical study.

TNX-2100 – Diagnostic for COVID-19 Immunity

TNX-2100 is a program to develop a potential *in vivo* diagnostic to measure exposure and T cell immunity to SARS-CoV-2. TNX-2100 is based on mixtures of synthetic peptides that are administered intradermally to elicit a delayed type hypersensitivity (DTH) response in individuals who have T cell immunity to one or more of the peptides. Discovered in 1882 by Robert Koch, the DTH reaction has been used for more than a century as a clinical test for T cell-mediated immune reactions. In the 1940s, Landsteiner and Chase demonstrated that the reaction was mediated by the cellular and not the antibody arm of the immune system. When small quantities of antigen are injected intradermally, a hallmark response is elicited which includes induration, swelling and monocytic infiltration into the site of the lesion within 24 to 48 hours. This reaction has been shown to be dependent on the presence of memory T cells. Both the CD4+ and CD8+ T cells have been shown to participate in this response. DTH skin tests have been commonly used to detect T cell responses to tuberculosis, fungal pathogens, and mumps virus. Tonix expects to submit an IND in the second quarter of 2021. The Company has manufactured peptides under current good manufacturing process or cGMP. Tonix expects clinical trials of TNX-2100 can be initiated, upon FDA clearance of the IND application, in the second half of 2021. TNX-2100 is currently in the pre-investigational new drug stage and has not been approved for any indication.

TNX-801 – Potential Smallpox and Monkeypox Vaccine

TNX-801 is a novel potential smallpox-preventing vaccine based on a synthetic version of live horsepox virus, grown in cell culture. Though it shares structural characteristics with vaccinia-based vaccines, TNX-801 has unique properties that we believe indicate potential safety advantages over existing live replicating vaccinia virus vaccines, which have been associated with adverse side effects such as myopericarditis in some individuals. Viral genome researchers recently reported 99.7% colinear identity between a circa 1860 U.S. smallpox vaccine and horsepox virus (Brinkmann A et al, *Genome Biology* (2020) 21:286). These findings indicate that horsepox was used a smallpox vaccine as late as approximately 1860. Emergent BioSolutions' ACAM2000® is the only replicating vaccinia virus vaccine currently approved by the FDA to protect against smallpox. We believe replicating virus vaccines have potential efficacy advantages over non-replicating vaccines, relating to the stimulation of cell mediated immunity. Bavarian Nordic's Jynneos® is the only non-replicating virus vaccine currently approved by the FDA to protect against smallpox and monkeypox. We believe TNX-801 has the potential to have improved tolerability relative to replicating vaccinia vaccines and the potential to have improved efficacy relative to non-replicating vaccinia vaccines.

Smallpox was eradicated by a World Health Organization program that vaccinated individuals with live replicating vaccinia vaccines wherever smallpox appeared. Functional immunity to smallpox vaccination was measured by the skin reaction called a "take". In the 1970s, vaccination of civilians to protect against smallpox was discontinued in the U.S.; however, smallpox remains a material threat to national security and a proportion of military personnel, including members of the Global Response Force, continue to be vaccinated. We are developing TNX-801 as a potential smallpox-preventing vaccine for the U.S. strategic national stockpile and for potential widespread immunization in the event of malicious reintroduction of variola, the virus that causes smallpox. Monkeypox is a growing problem in certain regions of Africa. Some cases of monkeypox have been reported outside of Africa in patients who had been infected while in Africa.

In January 2020 at the American Society of Microbiology Biothreats conference, we reported the results of experiments on TNX-801 that were performed in collaboration with Southern Research that showed TNX-801 vaccinated macaques were protected against monkeypox challenge. The TNX-801 vaccinated macaques showed no overt clinical signs after a monkeypox challenge that resulted in all four sham vaccinated animals developing clinical signs of systemic monkeypox infection including skin lesions. Furthermore, eight of eight animals vaccinated with two different doses of TNX-801 showed no lesions after monkeypox challenge.

We have filed a patent to protect the TNX-801 vaccine. In addition, we expect that TNX-801 will be eligible for 12 years of non-patent-based exclusivity under the PPACA. Following the passage of the 21st Century Cures Act, a law designed to help accelerate medical product development, we believe TNX-801 will qualify as a medical countermeasure, and would therefore be eligible for a Priority Review Voucher upon receiving FDA approval. However, the Priority Review Voucher program provision of the 21st Century Cures Act is set to expire in 2023. If TNX-801 does not receive FDA approval by 2023, we may not be able to capitalize on the incentives contained in the 21st Century Cures Act unless the provision allowing for the Priority Review Voucher Program is extended until such time as TNX-801 is licensed by the FDA.

We intend to meet with the FDA to discuss the most efficient and appropriate investigational plan, to establish the safety and effectiveness evidence to support the licensure of TNX-801. We are currently working to develop a vaccine that meets cGMP quality to support a clinical study.

TNX-102 SL – Posttraumatic Stress Disorder (PTSD)

TNX-102 SL is in Phase 3 development as a potential treatment for PTSD under an effective Investigational New Drug application, or IND. TNX-102 SL has been studied for the treatment of PTSD in a Phase 2 AtEase (P201) study, with TNX-102 SL 2.8 mg and 5.6 mg, in military-related PTSD. TNX-102 SL 5.6 mg also was studied in the Phase 3 HONOR study (P301) for the treatment of military-related PTSD. HONOR was a randomized, double-blind, placebo-controlled Phase 3 study of TNX-102 SL, planned for enrollment of approximately 550 participants with military-related PTSD. The primary efficacy endpoint of the HONOR study was the 12-week mean change from baseline in the severity of PTSD symptoms as measured by the Clinician-Administered PTSD Scale for DSM-5, or CAPS-5, between those treated with TNX-102 SL and those receiving placebo. In the third quarter of 2018, the HONOR study was discontinued after the results of an interim analysis indicated the study met a pre-defined threshold p-value for the study Independent Data Monitoring Committee (IDMC) to recommend stopping the study for futility. Safety data from these participants did not reveal any serious and unexpected adverse events. The most common adverse events were mostly related to local administration site reactions, such as oral hypoaesthesia (37.3%), product taste abnormal (11.9%), and oral paraesthesia (9.7%). The most common systemic adverse event was somnolence (15.7%). Retrospective analysis of this Phase 3 study revealed a treatment effect in participants who experienced the PTSD-inducing index trauma less than or equal to nine years prior to screening. This analysis defined an optimal treatment window for treatment with TNX-102 SL for PTSD within nine years after the index trauma that resulted in PTSD. This retrospective analysis guided the design of the Phase 3 RECOVERY (P302) study, which was initiated in March 2019 and enrolled individuals with civilian or military-related PTSD. In February 2020, based on interim analysis results of the first 50% of enrolled participants of the P302 study, an IDMC recommended stopping the study for futility as TNX-102 SL was unlikely to demonstrate a statistically significant improvement over placebo in the primary endpoint after 12 weeks. Tonix stopped enrollment of new participants but continued to study those participants currently enrolled at the time of the interim analysis until completion. In December 2020, Tonix reported topline results for the full cohort of enrolled participants in the RECOVERY study. Consistent with the previously reported interim analysis, the study did not achieve statistical significance on the primary efficacy endpoint of change from baseline to Week 12 in CAPS-5 between TNX-102 SL 5.6 mg and placebo (p=0.343). However, TNX-102 SL separated from placebo in the first key secondary endpoint, Clinical Global Impression – Severity (CGI-S) scale (p=0.024) and in the Patient Global Impression of Change (PGIC), (p=0.007). TNX-102 SL also trended for improvement on the PROMIS Sleep Disturbance scale (p=0.055), consistent with the proposed mechanism of targeting the PTSD sleep disturbance. TNX-102 SL was generally well tolerated and no new safety signals were observed. Tonix plans to meet with the FDA to discuss a proposed new indication: TNX-102 SL for the treatment of PTSD related sleep disturbance.

Risk Factors

Investing in our securities involves a high degree of risk. You should carefully consider all of the information in this prospectus and in the documents incorporated by reference prior to investing in our securities. These risks are discussed more fully in the section titled "Risk Factors" herein and in our Annual Report on Form 10-K for the year ended December 31, 2019, which is incorporated by reference in this prospectus. These risks and uncertainties include, but are not limited to, the following:

- We have incurred significant losses and anticipate that we will continue to incur significant losses for the foreseeable future and may never achieve or maintain profitability.
- The known and unknown impact of the COVID-19 pandemic on us;
- Our profitability depends on our ability to develop and commercialize our current and future product candidates.
- Our ability to continue as a going concern will require us to obtain additional financing to fund our current operations, which may be unavailable on acceptable terms, or at all.
- Because our product candidates are in the clinical stage of development, there is a high risk of failure, and we may never succeed in developing marketable products or generating product revenue.
- We may encounter substantial delays in our clinical trials, or our clinical trials may fail to demonstrate the safety and efficacy of our product candidates to the satisfaction of applicable regulatory authorities.
- It may be difficult for us to predict the time and cost of product development. Unforeseen problems may prevent further development or approval of our product candidates.
- We will require substantial additional financing to achieve our goals, and a failure to obtain necessary capital when needed would force us to delay, limit, reduce or terminate our product development or commercialization efforts.
- We rely, and expect to continue to rely, on third parties to conduct preclinical studies and clinical trials for our product candidates, and if they do not properly and successfully perform their obligations to us, we may not be able to obtain regulatory approvals for our product candidates.
- We face substantial competition from other pharmaceutical and biotechnology companies, which may result in others discovering, developing or commercializing products before, or more successfully, than we do.
- It is difficult and costly to protect our proprietary rights, and we may not be able to ensure their protection. If our patent position and other intellectual property rights do not adequately protect our product candidates, others could compete against us (including directly), which could materially harm our business, results of operations and financial condition.

Corporate Information

We were incorporated on November 16, 2007 under the laws of the State of Nevada as Tamandare Explorations Inc. On October 11, 2011, we changed our name to Tonix Pharmaceuticals Holding Corp. Our principal executive offices are located at 26 Main Street, Chatham, New Jersey 07928, and our telephone number is (862) 904-8182. Our website addresses are *www.tonixpharma.com, www.tonix.com,* and *www.krele.com*. The information on our websites is not part of this prospectus. We have included our website addresses as a factual reference and do not intend them to be active links to our websites.

THE OFFERING

Common Stock offered by us in this offering	58,333,334 shares
Offering price per share	$1.20
Common Stock outstanding immediately before this offering	265,580,997 shares
Common Stock outstanding immediately after this offering	323,914,331 shares
Investor Agreement	Pursuant to the investor agreement dated as of February 8, 2021, by and between us and the purchasers identified therein, any purchaser that purchases shares of our Common Stock in this offering agrees to vote the shares of our Common Stock that they own or control on the record date of the stockholder meeting (or any postponement, adjournment or reconvening thereof) at which our stockholders consider and vote upon a proposal to approve an amendment to our articles of incorporation to increase the number of authorized shares of our Common Stock from 400,000,000 to 800,000,000, as previously approved by our board of directors. This proposal will be submitted to our stockholders at a special meeting scheduled to be held on March 26, 2021. The record date for the special meeting of stockholders will be set on or about February 9, 2021. In addition, the investor agreement also provides that, beginning on the pricing date of this offering and ending at 11:59 pm ET on February 8, 2021 (the "leak-out period"), investors in this offering are only be permitted to sell such securities purchased in the offering during the leak-out period in an amount not to exceed 3.75%, in the aggregate, of the daily trading volume of our common stock on any given trading day, as reported by Bloomberg, LP, provided however, that this restriction shall not apply to any "long" sales (as defined in the Securities Exchange Act of 1934) by such investors at a price per share greater than $2.00 per share.
Use of proceeds	We plan to use the net proceeds of this offering for the acquisition and build out of research and development capabilities, working capital and other general corporate purposes. See "Use of Proceeds."
Risk factors	You should carefully read and consider the information beginning on page S-6 of this prospectus supplement and page 2 of the accompanying prospectuses set forth under the headings "Risk Factors" and all other information set forth in this prospectus supplement, the accompanying prospectuses, and the documents incorporated herein and therein by reference before deciding to invest in our securities.
Nasdaq Global Market symbol	"TNXP"

The number of shares of Common Stock to be outstanding after this offering is based on 265,580,997 shares of Common Stock outstanding at February 5, 2021 and excludes the following:

- 10,209,286 shares of Common Stock issuable upon exercise of stock options outstanding at a weighted-average exercise price of $2.93 per share;
- 648,306 shares of Common Stock issuable upon exercise of warrants outstanding at a weighted-average exercise price of $32.41 per share;
- 31,657,986 shares of Common Stock reserved and available for issuance under our equity compensation plan; and
- 245,553 shares of Common Stock reserved and available for issuance under our employee stock purchase plan.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risk factors we describe in this prospectus supplement and in any related free writing prospectus that we may authorize to be provided to you or in any report incorporated by reference into this prospectus supplement, including our Annual Report on Form 10-K for the year ended December 31, 2019, or any Quarterly Report on Form 10-Q that is incorporated by reference into this prospectus supplement. Although we discuss key risks in those risk factor descriptions, additional risks not currently known to us or that we currently deem immaterial also may impair our business. Our subsequent filings with the SEC may contain amended and updated discussions of significant risks. We cannot predict future risks or estimate the extent to which they may affect our financial performance.

Risks Related to This Offering

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our Common Stock. Moreover, a portion of the proceeds from this offering is expected to be used for the acquisition and build out of research and development capabilities. However, there can be no guarantee that we will acquire such a facility and we have never built out such a facility. Our failure to apply these and any of the funds from this offering effectively could have a material adverse effect on our business and cause the price of our Common Stock to decline.

You may experience dilution as a result of future equity offerings and other issuances of our Common Stock or other securities. In addition, this offering and future equity offerings and other issuances of our Common Stock or other securities may adversely affect our Common Stock price.

In order to raise additional capital, we may in the future offer additional shares of our Common Stock or other securities convertible into or exchangeable for our Common Stock at prices that may not be the same as the price per share in this offering. We may not be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our Common Stock or securities convertible into Common Stock in future transactions may be higher or lower than the price per share in this offering. You will incur dilution upon exercise of any outstanding stock options, warrants or upon the issuance of shares of Common Stock under our stock incentive programs. In addition, the sale of shares in this offering and any future sales of a substantial number of shares of our Common Stock in the public market, or the perception that such sales may occur, could adversely affect the price of our Common Stock. We cannot predict the effect, if any, that market sales of those shares of Common Stock or the availability of those shares of Common Stock for sale will have on the market price of our Common Stock.

An active trading market for our Common Stock may not be sustained.

Although our Common Stock is listed on The Nasdaq Global Market, the market for our Common Stock has demonstrated varying levels of trading activity. Furthermore, the current level of trading may not be sustained in the future. The lack of an active market for our Common Stock may impair investors' ability to sell their shares at the time they wish to sell them or at a price that they consider reasonable, may reduce the fair market value of their shares and may impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire additional intellectual property assets by using our shares as consideration.

Our stock price may be subject to substantial volatility, and stockholders may lose all or a substantial part of their investment.

Our Common Stock currently trades on The Nasdaq Global Market. There is limited public float, and trading volume historically has been low and sporadic. As a result, the market price for our Common Stock may not necessarily be a reliable indicator of our fair market value. The price at which our Common Stock trades may fluctuate as a result of a number of factors, including the number of shares available for sale in the market, quarterly variations in our operating results, actual or anticipated announcements of new releases by us or competitors, the gain or loss of significant customers, changes in the estimates of our operating performance, market conditions in our industry and the economy as a whole.

Because we do not anticipate paying any cash dividends on our Common Stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never paid or declared any cash dividends on our Common Stock. We currently intend to retain earnings, if any, to finance the growth and development of our business and we do not anticipate paying any cash dividends in the foreseeable future. As a result, only appreciation of the price of our Common Stock will provide a return to our stockholders.

Certain provisions of the investor agreement executed in connection with this offering could result in the approval of the issuance of additional shares of Common Stock or preferred stock without stockholder approval or other antitakeover measures.

Pursuant to the invstor agreement executed by purchasers in this offering, purchasers in the offering have agreed to vote the shares held by them on the record date of the stockholder meeting (or any postponement, adjournment or reconvening thereof) at which our stockholders consider and vote upon a proposal to approve an amendment to our articles of incorporation to increase the number of authorized shares of our Common Stock from 400,000,000 to 800,000,000, as previously approved by our board of directors. This proposal will be submitted to our stockholders at a special meeting scheduled to be held on March 26, 2021. The record date for the special meeting of stockholders will be set on or about February 9, 2021. If the requisite stockholders vote for approval of such proposal is obtained, our board of directors will have the right to issue the additional shares of Common Stock created through such increase in authorized shares. The issuance of such additional shares of Common Stock may be used as an "anti-takeover" device without further action on the part of our stockholders, and may adversely affect the holders of the Common Stock.

USE OF PROCEEDS

Based upon the public offering price of $1.20 per share of Common Stock, we estimate that the net proceeds from the sale of the securities offered under this prospectus supplement, after deducting placement agents' fees and commissions and estimated offering expenses payable by us will be approximately $65.0 million.

We currently expect to use the net proceeds from this offering for the acquisition and build out of research and development capabilities, working capital and other general corporate purposes.

Although we may use a portion of the net proceeds of this offering for the acquisition or licensing, as the case may be, of additional technologies, other assets or businesses, or for other strategic investments or opportunities, except as set forth above we have no current understandings, agreements or commitments to do so.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our Board of Directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions, and other factors that our Board of Directors may deem relevant. In addition, the terms of our revolving credit facility place certain limitations on the amount of cash dividends we can pay, even if no amounts are currently outstanding.

PLAN OF DISTRIBUTION

A.G.P./Alliance Global Partners has agreed to act as sole placement agent in connection with this offering. The placement agent is not purchasing or selling any of the shares of our Common Stock offered by this prospectus supplement, but will use its reasonable best efforts to arrange for the sale of the securities offered by this prospectus supplement. We have entered into a securities purchase agreement directly with investors in connection with this offering. We will make offers only to a limited number of accredited investors. The offering is expected to close on or about February 9, 2021, subject to customary closing conditions, without further notice to you.

Fees and Expenses

We have agreed to pay the placement agent a placement agent's fee equal to 7.0% of the aggregate purchase price of the shares of our Common Stock sold in this offering. The following table shows the per share and total cash placement agent's fees we will pay to the placement agent in connection with the sale of the shares of our Common Stock offered pursuant to this prospectus supplement and the accompanying prospectuses.

	Per Share	Total
Public offering price	$ 1.20	$ 70,000,000.80
Placement agent's fees[(1)]	$ 0.084	$ 4,900,000.06
Proceeds to us before expenses	$ 1.116	$ 65,100,000.74

We estimate that the total expenses of the offering payable by us will be approximately $100,000.

Regulation M

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the shares sold by it while acting as a principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares by the placement agent acting as a principal. Under these rules and regulations, the placement agent:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

Nasdaq Listing

Our Common Stock is listed on The Nasdaq Global Market under the symbol "TNXP." On February 5, 2021, the last reported sale price of our Common Stock as reported on The Nasdaq Global Market was $1.27 per share.

Indemnification

We have agreed to indemnify the placement agent and other specified persons against certain civil liabilities, including liabilities under the Securities Act and the Exchange Act, and to contribute to payments that the placement agent may be required to make in respect of such liabilities.

Investor Agreement

Pursuant to the investor agreement dated as of February 8, 2021, by and between us and the purchasers identified therein, any purchaser in this offering agrees to vote the shares of our Common Stock that they own or control on the record date of the stockholder meeting (or any postponement, adjournment or reconvening thereof) at which our stockholders consider and vote upon a proposal to approve an amendment to our articles of incorporation to increase the number of authorized shares of our Common Stock from 400,000,000 to 800,000,000, as previously approved by our board of directors. This proposal will be submitted to our stockholders at a special meeting scheduled to be held on March 26, 2021. The record date for the special meeting of stockholders will be set on or about February 9, 2021.

In addition, the investor agreement also provides that , beginning on the pricing date of this offering and ending at 11:59 pm ET on February 8, 2021 (the "leak-out period"), investors in the offering are only be permitted to sell securities purchased in the offering in an amount as not to exceed 3.75%, in the aggregate, of the daily trading volume of our common stock on any given trading day, as reported by Bloomberg, LP, provided however, that this restriction shall not apply to any "long" sales (as defined in the Securities Exchange Act of 1934) by such investors at a price per share greater than $2.00 per share.

Other Relationships

The placement agent or its affiliates may in the future engage in transactions with, and may perform, from time to time, investment banking and advisory services for us in the ordinary course of their business and for which it would receive customary fees and expenses. In addition, in the ordinary course of its business activities, the placement agent and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for its own account and for the accounts of its customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates.

Specifically, on January 13, 2021, we sold an aggregate of 50,000,000 shares of our Common Stock in a registered direct offering at an offering price of $0.80 per share. A.G.P. acted as sole placement agent for this offering. In connection with the offering, we paid A.G.P. approximately $2.85 million in discounts and expense reimbursement. On July 15, 2020, we sold an aggregate of 20,940,000 shares of our Common Stock in a registered direct offering at an offering price of $0.50 per share. A.G.P. acted as sole placement agent for this offering. In connection with the offering, we paid A.G.P. approximately $0.8 million in discounts and expense reimbursement. On March 3, 2020, we sold an aggregate of 14,550,000 shares of our Common Stock in a registered direct offering at an offering price of $1.10 per share. A.G.P. acted as sole placement agent for this offering. In connection with the offering, we paid A.G.P. approximately $1.17 million in discounts and expense reimbursement. In addition, on February 11, 2020, we sold an aggregate of 3,837,000 Class A Units consisting of an aggregate of 3,837,000 shares of our Common Stock and warrants to purchase an aggregate of 3,837,000 shares of our Common Stock, as well as 5,313 Class B Units, with each Class B Unit offered to the public at a public offering price of $1,000 per Class B Unit and consisting of one share of the Company's Series B Convertible Preferred Stock, with a stated value of $1,000 and convertible into 1,754.386 shares of Common Stock at the conversion price of $0.57 per share (9,321,052 shares of Common Stock in the aggregate), and one warrant to purchase 1,754.386 shares of Common Stock at an exercise price equal to $0.57 per share of Common Stock (9,321,052 shares of Common Stock in the aggregate). A.G.P. acted as sole underwriter for this offering. In connection with the offering, we paid A.G.P. approximately $755,006 in discounts and expense reimbursement. In addition, on September 4, 2020, we entered into a Sales Agreement with A.G.P., pursuant to which A.G.P. has agreed to serve as our Sales Agent for the offer and sale of up to an aggregate of $100 million of shares of our Common Stock.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. The placement agent is being represented by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., New York, New York.

EXPERTS

The consolidated balance sheets of Tonix Pharmaceuticals Holding Corp. and subsidiaries as of December 31, 2019 and 2018 and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the years then ended have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein, which report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. Such financial statements are incorporated herein in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of Common Stock being offered by this prospectus supplement and the accompanying prospectuses. This prospectus supplement and the accompanying prospectuses do not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the Common Stock offered by this prospectus supplement and the accompanying prospectuses, we refer you to the registration statement and its exhibits. Statements contained in this prospectus supplement and the accompanying prospectuses as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

We are subject to the information and periodic reporting requirements of the Exchange Act of 1934, as amended (the "Exchange Act"), and we file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information are available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at *http://www.tonixpharma.com*. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus, and any references to this website or any other website are inactive textual references only. You may also request a copy of these filings, at no cost, by writing us at 26 Main Street, Chatham, New Jersey 07928 or calling us at (862) 904-8182.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus supplement. We are incorporating by reference the documents listed below, which we have already filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the Commission on March 24, 2020;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020, June 20, 2020, and September 30, 2020 filed with the SEC on May 12, 2020, August 10, 2020, and November 9, 2020, respectively;
- our definitive Proxy Statements on Schedule 14A, filed on March 30, 2020 and May 15, 2020;
- our Current Reports on Form 8-K, filed on January 6, 2020, January 13, 2020, January 16, 2020, January 23, 2020, January 24, 2020, January 29, 2020, February 5, 2020, February 7, 2020, February 10, 2020, February 11, 2020, February 26, 2020, February 28, 2020, March 3, 2020, March 20, 2020, March 24, 2020, April 8, 2020, April 13, 2020, April 20, 2020, April 22, 2020, April 24, 2020, May 1, 2020, May 7, 2020, May 8, 2020, May 12, 2020, May 15, 2020, May 19, 2020, May 21, 2020, June 1, 2020, June 5, 2020, June 10, 2020, June 11, 2020, June 18, 2020, June 19, 2020, June 22, 2020, June 29, 2020, July 7, 2020, July 10, 2020, July 13, 2020, July 14, 2020, July 15, 2020, July 16, 2020, August 3, 2020, August 4, 2020, August 6, 2020, August 10, 2020, August 17, 2020, August 28, 2020, August 31, 2020, September 3, 2020, September 4, 2020, September 15, 2020, September 16, 2020, September 29, 2020, October 2, 2020, October 15, 2020, October 15, 2020, November 2, 2020, November 9, 2020, November 10, 2020, November 12, 2020, November 16, 2020, December 4, 2020, December 7, 2020, December 8, 2020, December 14, 2020, December 21, 2020, December 22, 2020, December 23, 2020, January 5, 2021, January 12, 2021, January 14, 2021, February 8, 2021 and February 9, 2021 (other than any portions thereof deemed furnished and not filed); and
- the description of our common stock, par value $0.001 per share, contained in our Form 8-A filed on July 23, 2013.

In addition, all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of the offering (excluding any information furnished rather than filed) shall be deemed to be incorporated by reference into this prospectus.

Notwithstanding the statements in the preceding paragraphs, no document, report or exhibit (or portion of any of the foregoing) or any other information that we have "furnished " to the SEC pursuant to the Securities Exchange Act of 1934, as amended shall be incorporated by reference into this prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to:

Tonix Pharmaceuticals Holding Corp.
26 Main Street, Suite 101
Chatham, New Jersey 07928
Attention: Investor Relations
Telephone (862) 904-8182

You also may access these filings on our website at http://www.tonixpharma.com. We do not incorporate the information on our website into this prospectus or any supplement to this prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus or any supplement to this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus or any supplement to this prospectus).

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

$150,000,000

Common Stock
Preferred Stock
Warrants
Units

We may offer and sell, from time to time in one or more offerings, any combination of common stock, preferred stock, warrants, or units having an aggregate initial offering price not exceeding $150,000,000. The preferred stock, warrants, and units may be convertible or exercisable or exchangeable for common stock or preferred stock or other securities of ours and have not been approved for listing on any market or exchange, and we have not made any application for such listing.

Each time we sell a particular class or series of securities, we will provide specific terms of the securities offered in a supplement to this prospectus. The prospectus supplement may also add, update or change information in this prospectus. You should read this prospectus and any prospectus supplement, as well as the documents incorporated by reference or deemed to be incorporated by reference into this prospectus, carefully before you invest in any securities.

This prospectus may not be used to offer or sell our securities unless accompanied by a prospectus supplement relating to the offered securities.

Our common stock is presently listed on The NASDAQ Global Market under the symbol "TNXP". On December 17, 2020, the last reported sale price of our common stock was $0.61. Each prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

These securities may be sold directly by us, through dealers or agents designated from time to time, to or through underwriters or dealers or through a combination of these methods on a continuous or delayed basis. See "Plan of Distribution" in this prospectus. We may also describe the plan of distribution for any particular offering of our securities in a prospectus supplement. If any agents, underwriters or dealers are involved in the sale of any securities in respect of which this prospectus is being delivered, we will disclose their names and the nature of our arrangements with them in a prospectus supplement. The net proceeds we expect to receive from any such sale will also be included in a prospectus supplement.

Investing in our securities involves various risks. See "Risk Factors" beginning on page 2 of this prospectus and in the applicable prospectus supplement, and in the risks discussed in the documents incorporated by reference in this prospectus and in the applicable prospectus supplement, as they may be amended, updated or modified periodically in our reports filed with the Securities and Exchange Commission. You should carefully read and consider these risk factors before you invest in our securities.

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

This prospectus is dated January 4, 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of a shelf registration statement that we filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings from time to time having an aggregate initial offering price of $150,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, we will provide you with a prospectus supplement that describes the specific amounts, prices and terms of the securities we offer. The prospectus supplement also may add, update or change information contained in this prospectus. You should read carefully both this prospectus and any prospectus supplement together with additional information described below under the caption "Where You Can Find More Information."

This prospectus does not contain all the information provided in the registration statement we filed with the SEC. You should read both this prospectus, including the section titled "Risk Factors," and the accompanying prospectus supplement, together with the additional information described under the heading "Where You Can Find More Information."

You should rely only on the information contained or incorporated by reference in this prospectus or a prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any prospectus supplement, as well as information we have previously filed with the SEC and incorporated by reference, is accurate as of the date on the front of those documents only. Our business, financial condition, results of operations and prospects may have changed since those dates.

OUR BUSINESS

Except where the context otherwise requires, the terms, "we," "us," "our" or "the Company," refer to the business of Tonix Pharmaceuticals Holding Corp., a Nevada corporation and its wholly-owned subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company focused on discovering, licensing, acquiring, developing and manufacturing small molecules and biologics to treat and prevent human disease and alleviate suffering. Tonix's portfolio is primarily composed of central nervous system (CNS) and immunology product candidates. The CNS product candidates include both small molecules and biologics to treat pain, neurologic, psychiatric and addiction conditions. The immunology product candidates include vaccines to prevent infectious diseases and biologics to address organ transplantation rejection, cancer and autoimmune diseases.

Tonix's lead CNS candidate, TNX-102 SL, a sublingual formulation of cyclobenzaprine designed for daily dosing at bedtime, is in Phase 3 development with the goal of providing a safe and effective long-term treatment for the management of fibromyalgia. The Company reported positive topline results in the first potential pivotal Phase 3 RELIEF study in December 2020. The topline data showed that TNX-102 SL 5.6 mg achieved statistical significance on the primary endpoint of reducing daily pain and also showed activity in improving sleep, reducing fatigue, and global syndromal improvement of symptoms and functional impairment in fibromyalgia. Tonix is currently enrolling participants in a second potential pivotal Phase 3 RALLY study for the management of fibromyalgia using TNX-102 SL. One unblinded interim analysis by an independent data monitoring committee (IDMC) based on 50% of randomized participants is planned with results expected in the second quarter of 2021[1]. Topline results from the full study are expected in the fourth quarter of 2021. TNX-102 SL is also in development for posttraumatic stress disorder (PTSD), agitation in Alzheimer's disease (AAD) and alcohol use disorder (AUD). The PTSD program is in Phase 3 development while AAD and AUD are Phase 2 ready. The AAD program has FDA Fast Track designation.

In the first quarter of 2020, we announced a program to develop a potential vaccine, TNX-1800, to protect against the novel coronavirus disease, or COVID-19. TNX-1800 is a live replicating, attenuated vaccine based on the horsepox viral vector platform to protect against COVID-19, primarily by eliciting a T cell response. In November 2020, Tonix reported positive immune response results following vaccination of non-human primates with TNX-1800. The Company expects to report data from a challenge study, in which the TNX-1800 vaccinated and control animals will be given SARS-CoV-2 in the first quarter of 2021. TNX-801, live horsepox virus vaccine for percutaneous administration, is in development to protect against smallpox and monkeypox. Tonix is also developing TNX-2300 and TNX-2600, live replicating, attenuated vaccine candidates for the prevention of COVID-19, but using bovine parainfluenza as the vector. The Company expects animal data to measure efficacy of TNX-2300 in challenge studies using SARS-CoV-2 in the second quarter of 2021.

Tonix is developing TNX-1900, intranasal potentiated oxytocin which is a small peptide product candidate for migraine and craniofacial pain. Tonix intends to submit an IND application for this program to the FDA in the first quarter of 2021 and is targeting to start a Phase 2 study of TNX-1900 for the treatment of migraine in the U.S. in the second quarter of 2021. A Phase 2 trial under an investigator-initiated IND has previously been completed in the U.S. using TNX-1900. Tonix is developing TNX-1300, cocaine esterase, which is a biologic product candidate for treating life-threatening cocaine intoxication. TNX-1300 is a recombinant protein that degrades cocaine in the bloodstream, and it has been granted Breakthrough Therapy designation by the FDA. Tonix expects to initiate a Phase 2 open-label safety study in an emergency department setting to study TNX-1300 in the first quarter of 2021. Results of a positive Phase 2 proof-of-concept and pharmacokinetic study of volunteer cocaine abusers in a controlled laboratory setting were reported prior to Tonix licensing the technology.

Our preclinical pipeline includes: TNX-601 CR for depression, TNX-701 for radioprotection, TNX-1500 for organ transplant rejection/autoimmune conditions, TNX-1600 for daytime treatment for posttraumatic stress disorder, depression and attention deficit hyperactivity disorder, and TNX-1700 for gastric and pancreatic cancers.

We have assembled a management team with significant industry experience to lead the development of our product candidates. We complement our management team with a network of scientific, clinical, and regulatory advisors that includes recognized experts in their respective fields.

[1] Interim analysis is pending submission and agreement from FDA on statistical analysis plan.

Corporate Information

We were incorporated on November 16, 2007 under the laws of the State of Nevada as Tamandare Explorations Inc. On October 11, 2011, we changed our name to Tonix Pharmaceuticals Holding Corp. Our principal executive offices are located at 26 Main Street, Suite 101, Chatham, New Jersey, 07928, and our telephone number is (212) 980-9155. Our website addresses are *www.tonixpharma.com, www.tonix.com,* and *www.krele.com*. The information on our websites is not part of this prospectus. We have included our website addresses as a factual reference and do not intend them to be active links to our websites.

Risks Associated with Our Business and this Offering

Our business and our ability to implement our business strategy are subject to numerous risks, as more fully described in the section of this prospectus entitled "Risk Factors." You should read these risks before you invest in our securities. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy. In particular, risks associated with our business include:

- There is substantial doubt about our ability to continue as a going concern, which may affect our ability to obtain future financing and may require us to curtail our operations. We will need to raise additional capital to support our operations.
- We have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future, and our future profitability is uncertain.
- Our product candidates must undergo rigorous clinical testing. Such clinical testing may fail to demonstrate safety and efficacy and any of our product candidates could cause undesirable side effects, which would substantially delay or prevent regulatory approval or commercialization.
- We are dependent on patents and proprietary technology. If we fail to adequately protect this intellectual property or if we otherwise do not have exclusivity for the marketing of our products, our ability to commercialize products could suffer.
- If our competitors are able to develop and market products that are more effective, safer or more affordable than ours are, or obtain marketing approval before we do, our commercial opportunities may be limited.
- We may not be able to manufacture, or otherwise secure the manufacture of, sufficient amounts of our product candidates for our preclinical studies and clinical trials.
- We may be unable to achieve and maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act.
- If you purchase our securities in this offering, you may incur dilution.
- We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.
- Our ability to advance our clinical development programs could be impacted by the COVID-19 pandemic.

RISK FACTORS

Investing in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the specific risk factors discussed in the sections entitled "Risk Factors" contained in our annual report on Form 10-K for the fiscal year ended December 31, 2019 under the heading "Item 1A. Risk Factors," and as described or may be described in any subsequent quarterly report on Form 10-Q under the heading "Item 1A. Risk Factors," as well as in any applicable prospectus supplement and contained or to be contained in our filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, or any applicable prospectus supplement. For a description of these reports and documents, and information about where you can find them, see "Where You Can Find More Information" and "Incorporation of Certain Information by Reference." If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected.

In that case, the trading price of our securities could decline and you might lose all or part of the value of your investment.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as “expects,” “anticipates,” “intends,” “estimates,” “plans,” “believes,” “seeks,” “may,” “should”, “could” or the negative of such terms or other similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus.

You should read this prospectus and any accompanying prospectus supplement and the documents that we reference herein and therein and have filed as exhibits to the registration statement, of which this prospectus is part, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this prospectus and any accompanying prospectus supplement is accurate as of the date on the front cover of this prospectus or such prospectus supplement only. Because the risk factors referred to above, as well as the risk factors referred to on page 2 of this prospectus and incorporated herein by reference, could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of the information presented in this prospectus and any accompanying prospectus supplement, and particularly our forward-looking statements, by these cautionary statements.

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities offered by this prospectus for working capital and general corporate purposes.

The intended application of proceeds from the sale of any particular offering of securities using this prospectus will be described in the accompanying prospectus supplement relating to such offering. The precise amount and timing of the application of these proceeds will depend on our funding requirements and the availability and costs of other funds.

THE SECURITIES WE MAY OFFER

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize all the material terms and provisions of the various types of securities that we may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement information, where applicable, about material United States federal income tax considerations relating to the securities, and the securities exchange, if any, on which the securities will be listed.

We may sell from time to time, in one or more offerings:

- shares of our common stock;
- shares of our preferred stock;
- warrants to purchase any of the securities listed above; and/or
- units consisting of any of the securities listed above.

The terms of any securities we offer will be determined at the time of sale. We may issue securities that are exchangeable for or convertible into common stock or any of the other securities that may be sold under this prospectus. When particular securities are offered, a supplement to this prospectus will be filed with the SEC, which will describe the terms of the offering and sale of the offered securities.

DESCRIPTION OF COMMON STOCK

The following is a summary of all material characteristics of our common stock as set forth in our articles of incorporation and bylaws. The summary does not purport to be complete and is qualified in its entirety by reference to our articles of incorporation and bylaws, each as amended, and to the provisions of Chapters 78 and 92A of the Nevada Revised Statutes, as amended ("NRS").

Common Stock

We are authorized to issue up to 400,000,000 shares of our common stock, par value $0.001 per share. As of December 17, 2020, there were 191,648,251 shares of our common stock issued and outstanding. The outstanding shares of our common stock are validly issued, fully paid and nonassessable.

Holders of our common stock are entitled to one vote for each share on all matters submitted to a stockholder vote. Holders of our common stock do not have cumulative voting rights. Therefore, holders of a majority of the shares of our common stock voting for the election of directors collectively hold the voting power to elect all of the directors. Holders of our common stock representing a majority of the voting power of our capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of stockholders. A vote by the holders of a majority of our outstanding shares is required to effectuate certain fundamental corporate changes such as dissolution, merger or an amendment to our articles of incorporation. However, a two-thirds vote is required for stockholders to amend our bylaws.

Subject to the rights of holders of shares of our preferred stock, if any, the holders of our common stock are entitled to share in all dividends that our board of directors, in its discretion, declares on our common stock from legally available funds. In the event of a liquidation, dissolution or winding up, each outstanding share of our common stock entitles its holder to participate pro rata in all assets that remain after payment of liabilities and after providing for each class of stock, if any, having preference over our common stock. Our common stock has no pre-emptive, subscription or conversion rights and there are no redemption provisions applicable to our common stock.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is vStock Transfer, LLC, 18 Lafayette Place, Woodmere, NY 11598.

DESCRIPTION OF PREFERRED STOCK

The following is a summary of all material characteristics of our preferred stock as set forth in our articles of incorporation and bylaws. The summary does not purport to be complete and is qualified in its entirety by reference to our articles of incorporation and bylaws, each as amended, and to the provisions of Chapter 78 and 92A of the NRS.

Preferred Stock

We are authorized to issue up to 5,000,000 shares of preferred stock, par value $0.001 per share, none of which are currently outstanding. Shares of our preferred stock may be issued in series, and each such series shall have such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in the certificate of designation relating to such series, as approved by our board of directors and filed with the Nevada Secretary of State. The board of directors is expressly vested with the authority to determine and fix in the resolution or resolutions providing for the issuances of preferred stock the voting powers, designations, preferences and rights, and the qualifications, limitations or restrictions thereof, of each such series to the full extent now or hereafter permitted by the laws of the State of Nevada.

Terms of the Preferred Stock That We May Offer and Sell to You

We summarize below some of the provisions that will apply to the preferred stock that we may offer to you unless the applicable prospectus supplement provides otherwise. This summary may not contain all information that is important to you. You should read the prospectus supplement, which will contain additional information and which may update or change some of the information below. Prior to the issuance of any new series of preferred stock, we will further amend our articles of incorporation, as amended, by way of a certificate of designation designating such series and setting forth its terms. We will file the certificate of designation that contains the terms of each new series of preferred stock with the Nevada Secretary of State, and we will file a copy of the certificate of designation with the SEC, each time we designate a new series of preferred stock. Each certificate of designation will establish the number of shares included in a designated series and fix the designation, powers, privileges, preferences and rights of the shares of each series as well as any applicable qualifications, limitations or restrictions. You should refer to our articles of incorporation, as amended, including the applicable certificate of designation relating to such series of preferred stock and all other then-effective certificates of designation, before deciding to buy shares of any series of our preferred stock as described in the applicable prospectus supplement.

Our board of directors has the authority, without further action by the stockholders, to issue preferred stock in one or more series and to fix the number of shares, dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking funds, and any other rights, preferences, privileges and restrictions applicable to each such series of preferred stock.

The issuance of any preferred stock could adversely affect the rights of the holders of common stock and, therefore, reduce the value of the common stock. The ability of our board of directors to issue preferred stock could discourage, delay or prevent a takeover or other corporate action.

The terms of any particular series of preferred stock will be described in the prospectus supplement relating to that particular series of preferred stock, including, where applicable:

- the designation, stated value and liquidation preference of such preferred stock;
- the number of shares within the series;
- the offering price;
- the dividend rate or rates (or method of calculation), the date or dates from which dividends shall accrue, and whether such dividends shall be cumulative or noncumulative and, if cumulative, the dates from which dividends shall commence to cumulate;
- any redemption or sinking fund provisions;
- the amount that shares of such series shall be entitled to receive in the event of our liquidation, dissolution or winding-up;
- the terms and conditions, if any, on which shares of such series shall be convertible or exchangeable for shares of our stock of any other class or classes, or other series of the same class;
- the voting rights, if any, of shares of such series; the status as to reissuance or sale of shares of such series redeemed, purchased or otherwise reacquired, or surrendered to us on conversion or exchange;
- the conditions and restrictions, if any, on the payment of dividends or on the making of other distributions on, or the purchase, redemption or other acquisition by us or any subsidiary, of the common stock or of any other class of our shares ranking junior to the shares of such series as to dividends or upon liquidation;
- the conditions and restrictions, if any, on the creation of indebtedness by us or by any subsidiary, or on the issuance of any additional stock ranking on a parity with or prior to the shares of such series as to dividends or upon liquidation; and
- any additional dividend, liquidation, redemption, sinking or retirement fund and other rights, preferences, privileges, limitations and restrictions of such preferred stock.

The description of the terms of a particular series of preferred stock in the applicable prospectus supplement will not be complete. You should refer to our articles of incorporation, as amended, including the applicable certificate of designation relating to such series of preferred stock and all other then-effective certificates of designation, for complete information regarding a series of our preferred stock.

The preferred stock will, when issued against payment of the consideration payable therefore, be fully paid and nonassessable.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. If there are differences between that prospectus supplement and this prospectus, the prospectus supplement will control. Thus, the statements we make in this section may not apply to a particular series of warrants. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement which includes this prospectus.

General

We may issue warrants for the purchase of common stock and/or preferred stock in one or more series. We may issue warrants independently or together with common stock and/or preferred stock, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we may issue under a separate agreement. We may enter into the warrant agreement with a warrant agent. Each warrant agent may be a bank that we select which has its principal office in the United States and a combined capital and surplus of at least $50,000,000. We may also choose to act as our own warrant agent. We will indicate the name and address of any such warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the warrant agreement under which the warrants will be issued;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- anti-dilution provisions of the warrants, if any;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire or, if the warrants are not continuously exercisable during that period, the specific date or dates on which the warrants will be exercisable;
- the manner in which the warrant agreement and warrants may be modified;
- the identities of the warrant agent and any calculation or other agent for the warrants;
- federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants;

- any securities exchange or quotation system on which the warrants or any securities deliverable upon exercise of the warrants may be listed; and

- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 p.m. Eastern Time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate, and in the applicable prospectus supplement, the information that the holder of the warrant will be required to deliver to the warrant agent.

Until the warrant is properly exercised, no holder of any warrant will be entitled to any rights of a holder of the securities purchasable upon exercise of the warrant.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights By Holders of Warrants

Any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants in accordance with their terms.

Calculation Agent

Calculations relating to warrants may be made by a calculation agent, an institution that we appoint as our agent for this purpose. The prospectus supplement for a particular warrant will name the institution that we have appointed to act as the calculation agent for that warrant as of the original issue date for that warrant. We may appoint a different institution to serve as calculation agent from time to time after the original issue date without the consent or notification of the holders.

The calculation agent’s determination of any amount of money payable or securities deliverable with respect to a warrant will be final and binding in the absence of manifest error.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The applicable prospectus supplement will describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any unit agreement under which the units will be issued;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

The applicable prospectus supplement will describe the terms of any units. The preceding description and any description of units in the applicable prospectus supplement does not purport to be complete and is subject to and is qualified in its entirety by reference to the unit agreement and, if applicable, collateral arrangements and depositary arrangements relating to such units.

PLAN OF DISTRIBUTION

We may sell the securities being offered pursuant to this prospectus through underwriters or dealers, through agents, or directly to one or more purchasers or through a combination of these methods. The applicable prospectus supplement will describe the terms of the offering of the securities, including:

- the name or names of any underwriters, if any, and if required, any dealers or agents;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any underwriting discounts and other items constituting underwriters' compensation;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices; or
- negotiated prices.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. The securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more investment banking firms or others, as designated. If an underwriting syndicate is used, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If underwriters are used in the sale, the offered securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time. Unless otherwise set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent and the underwriters will be obligated to purchase all of the offered securities if any are purchased.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price, with additional underwriting commissions or discounts, as may be set forth in a related prospectus supplement. The terms of any over-allotment option will be set forth in the prospectus supplement for those securities.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus or any prospectus supplement, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities for whom they act as agents in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase securities directly and then resell the securities, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the securities by them may be deemed to be underwriting discounts and commissions under the Securities Act.

We may provide agents and underwriters with indemnification against particular civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

In addition, we may enter into derivative transactions with third parties (including the writing of options), or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such a transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

To facilitate an offering of a series of securities, persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In those circumstances, such persons would cover such over-allotments or short positions by purchasing in the open market or by exercising the over-allotment option granted to those persons. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any agents or underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities. There is currently no market for any of the offered securities, other than our common stock which is listed on The NASDAQ Global Market. We have no current plans for listing of the preferred stock, warrants, units or subscription rights on any securities exchange or quotation system; any such listing with respect to any particular preferred stock, warrants, units or subscription rights will be described in the applicable prospectus supplement or other offering materials, as the case may be. Any underwriters to whom securities are sold by us for public offering and sale may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice.

In order to comply with the securities laws of some states, if applicable, the securities offered pursuant to this prospectus will be sold in those states only through registered or licensed brokers or dealers. In addition, in some states securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

LEGAL MATTERS

The validity of the issuance of the shares of common stock and shares of preferred stock offered hereby will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. Lowenstein Sandler, LLP, New York, New York, will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of Tonix Pharmaceuticals Holding Corp.

EXPERTS

The consolidated balance sheets of Tonix Pharmaceuticals Holding Corp. and subsidiaries as of December 31, 2019 and 2018 and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the years then ended have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference, which report includes explanatory paragraphs about the existence of substantial doubt concerning the Company's ability to continue as a going concern and the change in method of accounting for leases due to the adoption of Accounting Standards Codification Topic 842, Leases. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus constitutes a part of a registration statement on Form S-3 filed under the Securities Act. As permitted by the SEC's rules, this prospectus and any prospectus supplement, which form a part of the registration statement, do not contain all the information that is included in the registration statement. You will find additional information about us in the registration statement. Any statements made in this prospectus or any prospectus supplement concerning legal documents are not necessarily complete and you should read the documents that are filed as exhibits to the registration statement or otherwise filed with the SEC for a more complete understanding of the document or matter.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read, without charge, and copy the documents we file at the SEC's public reference rooms in Washington, D.C. at 100 F Street, NE, Room 1580, Washington, DC 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public at no cost from the SEC's website at http://www.sec.gov.

INCORPORATION OF DOCUMENTS BY REFERENCE

We have filed a registration statement on Form S-3 with the Securities and Exchange Commission under the Securities Act. This prospectus is part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. The Securities and Exchange Commission permits us to "incorporate by reference" the information contained in documents we file with the Securities and Exchange Commission, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus. Information that is incorporated by reference is considered to be part of this prospectus and you should read it with the same care that you read this prospectus. Information that we file later with the Securities and Exchange Commission will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed. We have filed with the Securities and Exchange Commission, and incorporate by reference in this prospectus:

- Annual Report on Form 10-K for the year ended December 31, 2019, filed on March 24, 2020;
- Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020, filed with the SEC on May 12, 2020, June 30, 2020, filed with the SEC on August 10, 2020, and September 30, 2020, filed with the SEC on November 9, 2020;
- Definitive Proxy Statements on Schedule 14A, filed on March 30, 2020 and May 15, 2020, as subsequently amended on June 29, 2020, July 21, 2020 and July 21, 2020;
- Current Reports on Form 8-K, filed on January 6, 2020, January 13, 2020, January 16, 2020, January 23, 2020, January 24, 2020, January 29, 2020, February 5, 2020, February 7, 2020, February 10, 2020, February 11, 2020, February 26, 2020, February 28, 2020, March 3, 2020, March 20, 2020, March 24, 2020, April 8, 2020, April 13, 2020, April 20, 2020, April 22, 2020, April 24, 2020, May 1, 2020, May 7, 2020, May 8, 2020, May 12, 2020, May 15, 2020, May 19, 2020, May 21, 2020, June 1, 2020, June 5, 2020, June 10, 2020, June 11, 2020, June 18, 2020, June 19, 2020, June 22, 2020, June 29, 2020, July 7, 2020, July 10, 2020, July 13, 2020, July 14, 2020, July 15, 2020, July 16, 2020, August 3, 2020, August 4, 2020, August 6, 2020, August 10, 2020, August 17, 2020, August 28, 2020, August 31, 2020, September 3, 2020, September 4, 2020, September 15, 2020, September 16, 2020, September 29, 2020, October 2, 2020, October 15, 2020, October 15, 2020, November 2, 2020, November 9, 2020, November 10, 2020, November 12, 2020, November 16, 2020, December 4, 2020 December 7, 2020, December 8, 2020 and December 14, 2020 (other than any portions thereof deemed furnished and not filed); and

- The description of our common stock contained in our Form 8-A, filed on July 23, 2013.

We also incorporate by reference all additional documents that we file with the Securities and Exchange Commission under the terms of Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, that are made after the initial filing date of the registration statement of which this prospectus is a part until the offering of the particular securities covered by a prospectus supplement or term sheet has been completed. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with Securities and Exchange Commission rules.

You may request, and we will provide you with, a copy of these filings, at no cost, by contacting us at:

Tonix Pharmaceuticals Holding Corp.
26 Main Street, Suite 101
Chatham, New Jersey 07928
Attention: Investor Relations
Telephone (212) 980-9155

PROSPECTUS

$150,000,000

Common Stock
Preferred Stock
Warrants
Units

We may offer and sell, from time to time in one or more offerings, any combination of common stock, preferred stock, warrants, or units having an aggregate initial offering price not exceeding $150,000,000. The preferred stock, warrants, and units may be convertible or exercisable or exchangeable for common stock or preferred stock or other securities of ours and have not been approved for listing on any market or exchange, and we have not made any application for such listing.

Each time we sell a particular class or series of securities, we will provide specific terms of the securities offered in a supplement to this prospectus. The prospectus supplement may also add, update or change information in this prospectus. You should read this prospectus and any prospectus supplement, as well as the documents incorporated by reference or deemed to be incorporated by reference into this prospectus, carefully before you invest in any securities.

This prospectus may not be used to offer or sell our securities unless accompanied by a prospectus supplement relating to the offered securities.

Our common stock is presently listed on The NASDAQ Global Market under the symbol "TNXP". On April 7, 2020, the last reported sale price of our common stock was $0.70. Each prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

These securities may be sold directly by us, through dealers or agents designated from time to time, to or through underwriters or dealers or through a combination of these methods on a continuous or delayed basis. See "Plan of Distribution" in this prospectus. We may also describe the plan of distribution for any particular offering of our securities in a prospectus supplement. If any agents, underwriters or dealers are involved in the sale of any securities in respect of which this prospectus is being delivered, we will disclose their names and the nature of our arrangements with them in a prospectus supplement. The net proceeds we expect to receive from any such sale will also be included in a prospectus supplement.

Investing in our securities involves various risks. See "Risk Factors" beginning on page 2 of this prospectus and in the applicable prospectus supplement, and in the risks discussed in the documents incorporated by reference in this prospectus and in the applicable prospectus supplement, as they may be amended, updated or modified periodically in our reports filed with the Securities and Exchange Commission. You should carefully read and consider these risk factors before you invest in our securities.

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

This prospectus is dated April 17, 2020

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ABOUT THIS PROSPECTUS

This prospectus is part of a shelf registration statement that we filed with the Securities and Exchange Commission (the "SEC") using a "shelf" registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings from time to time having an aggregate initial offering price of $150,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, we will provide you with a prospectus supplement that describes the specific amounts, prices and terms of the securities we offer. The prospectus supplement also may add, update or change information contained in this prospectus. You should read carefully both this prospectus and any prospectus supplement together with additional information described below under the caption "Where You Can Find More Information."

This prospectus does not contain all the information provided in the registration statement we filed with the SEC. You should read both this prospectus, including the section titled "Risk Factors," and the accompanying prospectus supplement, together with the additional information described under the heading "Where You Can Find More Information."

You should rely only on the information contained or incorporated by reference in this prospectus or a prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or any prospectus supplement, as well as information we have previously filed with the SEC and incorporated by reference, is accurate as of the date on the front of those documents only. Our business, financial condition, results of operations and prospects may have changed since those dates.

OUR BUSINESS

Except where the context otherwise requires, the terms, "we," "us," "our" or "the Company," refer to the business of Tonix Pharmaceuticals Holding Corp., a Nevada corporation and its wholly-owned subsidiaries.

Overview

We are a clinical-stage biopharmaceutical company focused on discovering, licensing, acquiring and developing drugs and biologics to treat and prevent human disease and alleviate suffering. Our current portfolio includes biologics to prevent infectious diseases and small molecules and biologics to treat pain, psychiatric and addiction conditions. In February 2020, we announced a program to develop a potential vaccine, TNX-1800 (live modified horsepox virus vaccine for percutaneous administration) to protect against the novel coronavirus disease emerging in 2019, or COVID-19. TNX-1800 is based on our proprietary horsepox vaccine platform and is molecularly designed to express the Spike protein of the SARS-CoV-2 virus that causes COVID-19. TNX-801 (live horsepox virus vaccine for percutaneous administration) is in development to protect against smallpox and monkeypox. Our most advanced drug development programs are focused on delivering safe and effective long-term treatments for fibromyalgia, or FM, and posttraumatic stress disorder, or PTSD. Our most advanced product candidate, TNX-102 SL, is in Phase 3 development as a bedtime treatment for fibromyalgia and PTSD. We are enrolling participants in the Phase 3 RELIEF trial in fibromyalgia and expect results from an unblinded interim analysis in the third quarter of 2020 and topline data in the first half of 2021, however, we cannot predict whether the global COVID-19 pandemic will impact the timing of topline results. The Phase 3 RECOVERY trial (P302) for TNX-102 SL (trade name Tonmya) in PTSD has stopped enrollment based on the Independent Data Monitoring Committee's recommendation to stop the study for futility following an interim analysis of the first 50% of enrolled participants. Topline data for RECOVERY is expected in the second quarter of 2020, however, we cannot predict whether the global COVID-19 pandemic will impact the timing of topline results. TNX-102 SL for PTSD has U.S. Food and Drug Administration (FDA) Breakthrough Therapy Designation. TNX-102 SL is also in development for agitation in Alzheimer's disease and alcohol use disorder (AUD). The agitation in Alzheimer's disease program is Phase 2 ready with FDA Fast Track designation, and the development program for AUD is in the pre-Investigational New Drug (IND) application stage. Our programs for treating addiction conditions also include TNX-1300 (T172R/G173Q double-mutant cocaine esterase 200 mg, i.v. solution), which is in Phase 2 development for the treatment of cocaine intoxication and has FDA Breakthrough Therapy Designation. TNX-601 CR (tianeptine oxalate controlled-release tablets) is in development as a daytime treatment for depression as well as PTSD and corticosteroid-induced cognitive dysfunction. The first efficacy study in depression will be performed outside the U.S. TNX-1600 (a triple reuptake inhibitor) is a pre-clinical new molecular entity (NCE) being developed as a treatment for PTSD. Our preclinical pipeline includes TNX-1500 (anti-CD154), a monoclonal antibody being developed to prevent and treat organ transplant rejection and autoimmune conditions and TNX-1700 (rTFF2), a biologic being developed to treat gastric and pancreatic cancers. TNX-1200 (live vaccinia virus vaccine for percutaneous administration) is in development to protect against smallpox and monkeypox. Finally, TNX-701 (undisclosed small molecule) to prevent radiation effects is being advanced as a medical countermeasure to improve biodefense.

Corporate Information

We were incorporated on November 16, 2007 under the laws of the State of Nevada as Tamandare Explorations Inc. On October 11, 2011, we changed our name to Tonix Pharmaceuticals Holding Corp. Our principal executive offices are located at 509 Madison Avenue, Suite 306, New York, New York 10022, and our telephone number is (212) 980-9155. Our website addresses are *www.tonixpharma.com, www.tonix.com,* and *www.krele.com*. The information on our websites is not part of this prospectus. We have included our website addresses as a factual reference and do not intend them to be active links to our websites.

Risks Associated with Our Business and this Offering

Our business and our ability to implement our business strategy are subject to numerous risks, as more fully described in the section of this prospectus entitled "Risk Factors." You should read these risks before you invest in our securities. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy. In particular, risks associated with our business include:

- There is substantial doubt about our ability to continue as a going concern, which may affect our ability to obtain future financing and may require us to curtail our operations. We will need to raise additional capital to support our operations.
- We have incurred losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future, and our future profitability is uncertain.
- Our product candidates must undergo rigorous clinical testing. Such clinical testing may fail to demonstrate safety and efficacy and any of our product candidates could cause undesirable side effects, which would substantially delay or prevent regulatory approval or commercialization.
- We are dependent on patents and proprietary technology. If we fail to adequately protect this intellectual property or if we otherwise do not have exclusivity for the marketing of our products, our ability to commercialize products could suffer.
- If our competitors are able to develop and market products that are more effective, safer or more affordable than ours are, or obtain marketing approval before we do, our commercial opportunities may be limited.
- We may not be able to manufacture, or otherwise secure the manufacture of, sufficient amounts of our product candidates for our preclinical studies and clinical trials.
- We may be unable to achieve and maintain effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act.
- If you purchase our securities in this offering, you may incur dilution.
- We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.
- Our ability to advance our clinical development programs could be impacted by the COVID-19 pandemic.

RISK FACTORS

Investing in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the specific risk factors discussed in the sections entitled "Risk Factors" contained in our annual report on Form 10-K for the fiscal year ended December 31, 2019 under the heading "Item 1A. Risk Factors," and as described or may be described in any subsequent quarterly report on Form 10-Q under the heading "Item 1A. Risk Factors," as well as in any applicable prospectus supplement and contained or to be contained in our filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, or any applicable prospectus supplement. For a description of these reports and documents, and information about where you can find them, see "Where You Can Find More Information" and "Incorporation of Certain Information by Reference." If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected.

In that case, the trading price of our securities could decline and you might lose all or part of the value of your investment.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as “expects,” “anticipates,” “intends,” “estimates,” “plans,” “believes,” “seeks,” “may,” “should”, “could” or the negative of such terms or other similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties that could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus.

You should read this prospectus and any accompanying prospectus supplement and the documents that we reference herein and therein and have filed as exhibits to the registration statement, of which this prospectus is part, completely and with the understanding that our actual future results may be materially different from what we expect. You should assume that the information appearing in this prospectus and any accompanying prospectus supplement is accurate as of the date on the front cover of this prospectus or such prospectus supplement only. Because the risk factors referred to above, as well as the risk factors referred to on page 2 of this prospectus and incorporated herein by reference, could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements made by us or on our behalf, you should not place undue reliance on any forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. We qualify all of the information presented in this prospectus and any accompanying prospectus supplement, and particularly our forward-looking statements, by these cautionary statements.

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities offered by this prospectus for working capital and general corporate purposes.

The intended application of proceeds from the sale of any particular offering of securities using this prospectus will be described in the accompanying prospectus supplement relating to such offering. The precise amount and timing of the application of these proceeds will depend on our funding requirements and the availability and costs of other funds.

THE SECURITIES WE MAY OFFER

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize all the material terms and provisions of the various types of securities that we may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement information, where applicable, about material United States federal income tax considerations relating to the securities, and the securities exchange, if any, on which the securities will be listed.

We may sell from time to time, in one or more offerings:

- shares of our common stock;
- shares of our preferred stock;
- warrants to purchase any of the securities listed above; and/or
- units consisting of any of the securities listed above.

The terms of any securities we offer will be determined at the time of sale. We may issue securities that are exchangeable for or convertible into common stock or any of the other securities that may be sold under this prospectus. When particular securities are offered, a supplement to this prospectus will be filed with the SEC, which will describe the terms of the offering and sale of the offered securities.

DESCRIPTION OF COMMON STOCK

The following is a summary of all material characteristics of our common stock as set forth in our articles of incorporation and bylaws. The summary does not purport to be complete and is qualified in its entirety by reference to our articles of incorporation and bylaws, each as amended, and to the provisions of Chapters 78 and 92A of the Nevada Revised Statutes, as amended ("NRS").

Common Stock

We are authorized to issue up to 150,000,000 shares of our common stock, par value $0.001 per share. As of April 7, 2020, there were 49,353,134 shares of our common stock issued and outstanding. The outstanding shares of our common stock are validly issued, fully paid and nonassessable.

Holders of our common stock are entitled to one vote for each share on all matters submitted to a stockholder vote. Holders of our common stock do not have cumulative voting rights. Therefore, holders of a majority of the shares of our common stock voting for the election of directors collectively hold the voting power to elect all of the directors. Holders of our common stock representing a majority of the voting power of our capital stock issued, outstanding and entitled to vote, represented in person or by proxy, are necessary to constitute a quorum at any meeting of stockholders. A vote by the holders of a majority of our outstanding shares is required to effectuate certain fundamental corporate changes such as dissolution, merger or an amendment to our articles of incorporation. However, a two-thirds vote is required for stockholders to amend our bylaws.

Subject to the rights of holders of shares of our preferred stock, if any, the holders of our common stock are entitled to share in all dividends that our board of directors, in its discretion, declares on our common stock from legally available funds. In the event of a liquidation, dissolution or winding up, each outstanding share of our common stock entitles its holder to participate pro rata in all assets that remain after payment of liabilities and after providing for each class of stock, if any, having preference over our common stock. Our common stock has no pre-emptive, subscription or conversion rights and there are no redemption provisions applicable to our common stock.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is vStock Transfer, LLC, 18 Lafayette Place, Woodmere, NY 11598.

DESCRIPTION OF PREFERRED STOCK

The following is a summary of all material characteristics of our preferred stock as set forth in our articles of incorporation and bylaws. The summary does not purport to be complete and is qualified in its entirety by reference to our articles of incorporation and bylaws, each as amended, and to the provisions of Chapter 78 and 92A of the NRS.

Preferred Stock

We are authorized to issue up to 5,000,000 shares of preferred stock, par value $0.001 per share, none of which are currently outstanding. Shares of our preferred stock may be issued in series, and each such series shall have such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, as shall be stated and expressed in the certificate of designation relating to such series, as approved by our board of directors and filed with the Nevada Secretary of State. The board of directors is expressly vested with the authority to determine and fix in the resolution or resolutions providing for the issuances of preferred stock the voting powers, designations, preferences and rights, and the qualifications, limitations or restrictions thereof, of each such series to the full extent now or hereafter permitted by the laws of the State of Nevada.

Terms of the Preferred Stock That We May Offer and Sell to You

We summarize below some of the provisions that will apply to the preferred stock that we may offer to you unless the applicable prospectus supplement provides otherwise. This summary may not contain all information that is important to you. You should read the prospectus supplement, which will contain additional information and which may update or change some of the information below. Prior to the issuance of any new series of preferred stock, we will further amend our articles of incorporation, as amended, by way of a certificate of designation designating such series and setting forth its terms. We will file the certificate of designation that contains the terms of each new series of preferred stock with the Nevada Secretary of State, and we will file a copy of the certificate of designation with the SEC, each time we designate a new series of preferred stock. Each certificate of designation will establish the number of shares included in a designated series and fix the designation, powers, privileges, preferences and rights of the shares of each series as well as any applicable qualifications, limitations or restrictions. You should refer to our articles of incorporation, as amended, including the applicable certificate of designation relating to such series of preferred stock and all other then-effective certificates of designation, before deciding to buy shares of any series of our preferred stock as described in the applicable prospectus supplement.

Our board of directors has the authority, without further action by the stockholders, to issue preferred stock in one or more series and to fix the number of shares, dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking funds, and any other rights, preferences, privileges and restrictions applicable to each such series of preferred stock.

The issuance of any preferred stock could adversely affect the rights of the holders of common stock and, therefore, reduce the value of the common stock. The ability of our board of directors to issue preferred stock could discourage, delay or prevent a takeover or other corporate action.

The terms of any particular series of preferred stock will be described in the prospectus supplement relating to that particular series of preferred stock, including, where applicable:

- the designation, stated value and liquidation preference of such preferred stock;
- the number of shares within the series;
- the offering price;
- the dividend rate or rates (or method of calculation), the date or dates from which dividends shall accrue, and whether such dividends shall be cumulative or noncumulative and, if cumulative, the dates from which dividends shall commence to cumulate;
- any redemption or sinking fund provisions;
- the amount that shares of such series shall be entitled to receive in the event of our liquidation, dissolution or winding-up;
- the terms and conditions, if any, on which shares of such series shall be convertible or exchangeable for shares of our stock of any other class or classes, or other series of the same class;
- the voting rights, if any, of shares of such series; the status as to reissuance or sale of shares of such series redeemed, purchased or otherwise reacquired, or surrendered to us on conversion or exchange;
- the conditions and restrictions, if any, on the payment of dividends or on the making of other distributions on, or the purchase, redemption or other acquisition by us or any subsidiary, of the common stock or of any other class of our shares ranking junior to the shares of such series as to dividends or upon liquidation;
- the conditions and restrictions, if any, on the creation of indebtedness by us or by any subsidiary, or on the issuance of any additional stock ranking on a parity with or prior to the shares of such series as to dividends or upon liquidation; and
- any additional dividend, liquidation, redemption, sinking or retirement fund and other rights, preferences, privileges, limitations and restrictions of such preferred stock.

The description of the terms of a particular series of preferred stock in the applicable prospectus supplement will not be complete. You should refer to our articles of incorporation, as amended, including the applicable certificate of designation relating to such series of preferred stock and all other then-effective certificates of designation, for complete information regarding a series of our preferred stock.

The preferred stock will, when issued against payment of the consideration payable therefor, be fully paid and nonassessable.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. If there are differences between that prospectus supplement and this prospectus, the prospectus supplement will control. Thus, the statements we make in this section may not apply to a particular series of warrants. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement which includes this prospectus.

General

We may issue warrants for the purchase of common stock and/or preferred stock in one or more series. We may issue warrants independently or together with common stock and/or preferred stock, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we may issue under a separate agreement. We may enter into the warrant agreement with a warrant agent. Each warrant agent may be a bank that we select which has its principal office in the United States and a combined capital and surplus of at least $50,000,000. We may also choose to act as our own warrant agent. We will indicate the name and address of any such warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the warrant agreement under which the warrants will be issued;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- anti-dilution provisions of the warrants, if any;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire or, if the warrants are not continuously exercisable during that period, the specific date or dates on which the warrants will be exercisable;
- the manner in which the warrant agreement and warrants may be modified;
- the identities of the warrant agent and any calculation or other agent for the warrants;
- federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants;

- any securities exchange or quotation system on which the warrants or any securities deliverable upon exercise of the warrants may be listed; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 p.m. Eastern Time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate, and in the applicable prospectus supplement, the information that the holder of the warrant will be required to deliver to the warrant agent.

Until the warrant is properly exercised, no holder of any warrant will be entitled to any rights of a holder of the securities purchasable upon exercise of the warrant.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights By Holders of Warrants

Any warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants in accordance with their terms.

Calculation Agent

Calculations relating to warrants may be made by a calculation agent, an institution that we appoint as our agent for this purpose. The prospectus supplement for a particular warrant will name the institution that we have appointed to act as the calculation agent for that warrant as of the original issue date for that warrant. We may appoint a different institution to serve as calculation agent from time to time after the original issue date without the consent or notification of the holders.

The calculation agent's determination of any amount of money payable or securities deliverable with respect to a warrant will be final and binding in the absence of manifest error.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The applicable prospectus supplement will describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any unit agreement under which the units will be issued;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

The applicable prospectus supplement will describe the terms of any units. The preceding description and any description of units in the applicable prospectus supplement does not purport to be complete and is subject to and is qualified in its entirety by reference to the unit agreement and, if applicable, collateral arrangements and depositary arrangements relating to such units.

PLAN OF DISTRIBUTION

We may sell the securities being offered pursuant to this prospectus through underwriters or dealers, through agents, or directly to one or more purchasers or through a combination of these methods. The applicable prospectus supplement will describe the terms of the offering of the securities, including:

- the name or names of any underwriters, if any, and if required, any dealers or agents;
- the purchase price of the securities and the proceeds we will receive from the sale;
- any underwriting discounts and other items constituting underwriters' compensation;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to such prevailing market prices; or
- negotiated prices.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. The securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more investment banking firms or others, as designated. If an underwriting syndicate is used, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If underwriters are used in the sale, the offered securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time. Unless otherwise set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent and the underwriters will be obligated to purchase all of the offered securities if any are purchased.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price, with additional underwriting commissions or discounts, as may be set forth in a related prospectus supplement. The terms of any over-allotment option will be set forth in the prospectus supplement for those securities.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus or any prospectus supplement, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The names of the dealers and the terms of the transaction will be specified in a prospectus supplement.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities for whom they act as agents in the form of discounts, concessions or commissions. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase securities directly and then resell the securities, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the securities by them may be deemed to be underwriting discounts and commissions under the Securities Act.

We may provide agents and underwriters with indemnification against particular civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

In addition, we may enter into derivative transactions with third parties (including the writing of options), or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such a transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

To facilitate an offering of a series of securities, persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In those circumstances, such persons would cover such over-allotments or short positions by purchasing in the open market or by exercising the over-allotment option granted to those persons. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any agents or underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities. There is currently no market for any of the offered securities, other than our common stock which is listed on The NASDAQ Global Market. We have no current plans for listing of the preferred stock, warrants, units or subscription rights on any securities exchange or quotation system; any such listing with respect to any particular preferred stock, warrants, units or subscription rights will be described in the applicable prospectus supplement or other offering materials, as the case may be. Any underwriters to whom securities are sold by us for public offering and sale may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice.

In order to comply with the securities laws of some states, if applicable, the securities offered pursuant to this prospectus will be sold in those states only through registered or licensed brokers or dealers. In addition, in some states securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

LEGAL MATTERS

The validity of the issuance of the shares of common stock and shares of preferred stock offered hereby will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. Lowenstein Sandler, LLP, New York, New York, will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of Tonix Pharmaceuticals Holding Corp.

EXPERTS

The consolidated balance sheets of Tonix Pharmaceuticals Holding Corp. and subsidiaries as of December 31, 2019 and 2018 and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the years then ended have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report which is incorporated herein by reference, which report includes explanatory paragraphs about the existence of substantial doubt concerning the Company's ability to continue as a going concern and the change in method of accounting for leases due to the adoption of Accounting Standards Codification Topic 842, Leases. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus constitutes a part of a registration statement on Form S-3 filed under the Securities Act. As permitted by the SEC's rules, this prospectus and any prospectus supplement, which form a part of the registration statement, do not contain all the information that is included in the registration statement. You will find additional information about us in the registration statement. Any statements made in this prospectus or any prospectus supplement concerning legal documents are not necessarily complete and you should read the documents that are filed as exhibits to the registration statement or otherwise filed with the SEC for a more complete understanding of the document or matter.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read, without charge, and copy the documents we file at the SEC's public reference rooms in Washington, D.C. at 100 F Street, NE, Room 1580, Washington, DC 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public at no cost from the SEC's website at http://www.sec.gov.

INCORPORATION OF DOCUMENTS BY REFERENCE

We have filed a registration statement on Form S-3 with the Securities and Exchange Commission under the Securities Act. This prospectus is part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. The Securities and Exchange Commission permits us to "incorporate by reference" the information contained in documents we file with the Securities and Exchange Commission, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus. Information that is incorporated by reference is considered to be part of this prospectus and you should read it with the same care that you read this prospectus. Information that we file later with the Securities and Exchange Commission will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus, and will be considered to be a part of this prospectus from the date those documents are filed. We have filed with the Securities and Exchange Commission, and incorporate by reference in this prospectus:

- Annual Report on Form 10-K for the year ended December 31, 2019, filed on March 24, 2020;
- Definitive Proxy Statement on Schedule 14A, filed on March 30, 2020;
- Current Reports on Form 8-K, filed on January 6, 2020, January 13, 2020, January 16, 2020, January 23, 2020, January 24, 2020, January 29, 2020, February 5, 2020, February 7, 2020, February 10, 2020, February 11, 2020, February 26, 2020, February 28, 2020, March 3, 2020, March 20, 2020, March 24, 2020 and April 8, 2020 (other than any portions thereof deemed furnished and not filed); and

- The description of our common stock contained in our Form 8-A, filed on July 23, 2013.

We also incorporate by reference all additional documents that we file with the Securities and Exchange Commission under the terms of Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, that are made after the initial filing date of the registration statement of which this prospectus is a part until the offering of the particular securities covered by a prospectus supplement or term sheet has been completed. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with Securities and Exchange Commission rules.

You may request, and we will provide you with, a copy of these filings, at no cost, by contacting us at:

Tonix Pharmaceuticals Holding Corp.
509 Madison Avenue, Suite 1608
New York, New York 10022
Attention: Investor Relations
Telephone (212) 980-9155

58,333,334 Shares of Common Stock

PROSPECTUS SUPPLEMENT

Sole Placement Agent

A.G.P.

The date of this prospectus is February 8, 2021