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Registration No. 333-254975

PROSPECTUS SUPPLEMENT
(To Prospectus dated May 5, 2021)

$80,000,000 and 2,909,091 Shares of

Common Stock

This prospectus supplement relates to the issuance and sale of up to $80,000,000 of shares of our common stock, or Purchase Shares, that we may sell to Lincoln Park Capital Fund, LLC, or Lincoln Park, from time to time pursuant to the purchase agreement, dated as of December 3, 2021, or the Purchase Agreement, that we have entered into with Lincoln Park, and an additional 2,909,091 shares of our common stock issued to Lincoln Park as commitment shares under the Purchase Agreement. This prospectus supplement and the accompanying prospectus also cover the resale of these shares by Lincoln Park to the public. See "Lincoln Park Transaction" for a description of the Purchase Agreement and additional information regarding Lincoln Park. Lincoln Park is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, or the Securities Act.

The purchase price for the Purchase Shares will be based upon formulas set forth in the Purchase Agreement depending on the type of purchase notice we submit to Lincoln Park from time to time. We will pay the expenses incurred in connection with the issuance of the shares of our common stock. See "Plan of Distribution." Our common stock is quoted on The NASDAQ Global Market under the symbol "TNXP."

On December 2, 2021, the last reported sale price of our common stock was $0.44 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-7 of this prospectus supplement and the documents incorporated by reference herein and page 3 of the accompanying prospectus.

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 prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 3, 2021

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PROSPECTUS SUPPLEMENT

PROSPECTUS

A BOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement relates to the offering of our common stock. Before buying any of the common stock that we are offering, we urge you to carefully read this prospectus, together with the accompanying base prospectus and the information incorporated by reference as described under the headings "Where You Can Find More Information" and "Incorporation of Certain Information by Reference" in this prospectus supplement, and any free writing prospectus or prospectus supplement that we have authorized for use in connection with this offering. These documents contain important information that you should consider when making your investment decision.

This prospectus supplement describes the terms of this offering of common stock and also adds to and updates information contained in the documents incorporated by reference into this prospectus. To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference into this prospectus that was filed with the Securities and Exchange Commission, or SEC, before the date of this prospectus, on the other hand, you should rely on the information in this prospectus. 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 into this prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement.

Neither we nor Lincoln Park have authorized anyone to provide you with information different than that contained or incorporated by reference in this prospectus and any free writing prospectus or prospectus supplement that we have authorized for use in connection with this offering. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. You should assume that the information appearing in this prospectus, the documents incorporated by reference herein, and in any free writing prospectus or prospectus supplement that we have authorized for use in connection with this offering is accurate only as of the date of those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus, the documents incorporated by reference herein, and any free writing prospectus or prospectus supplement that we have authorized for use in connection with this offering in their entirety before making an investment decision.

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 into this prospectus supplement or the accompanying prospectus 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 agreement, 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.

We are offering to sell, and are seeking offers to buy, the shares only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus and the offering of the shares in certain jurisdictions or to certain persons within such jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to the offering of the shares and the distribution of this prospectus outside the United States. This prospectus does 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 by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

We own or have rights to various trademarks, service marks and trade names that we use in connection with the operation of our business. This prospectus may also contain trademarks, service marks and trade names of third parties, which are the property of their respective owners. Our use or display of third parties' trademarks, service marks, trade names or products in this prospectus is not intended to, and does not imply a relationship with, or endorsement or sponsorship by us. Solely for convenience, the trademarks, service marks and trade names referred to in this prospectus may appear without the ®, TM or SM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks, service marks and trade names.

N OTE 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

The following summary is qualified in its entirety by, and should be read together with, the more detailed information and financial statements and related notes thereto appearing elsewhere or incorporated by reference in this prospectus. Before you decide to invest in our securities, you should read the entire prospectus carefully, including the risk factors and the financial statements and related notes included or incorporated by reference in this prospectus.

Unless otherwise indicated or unless the context requires otherwise, this prospectus includes the accounts of Tonix Pharmaceuticals Holding Corp., a Nevada corporation and its wholly-owned subsidiaries, collectively referred to as "we", "us", "Tonix" or the "Company".

Company Overview

We are a clinical-stage biopharmaceutical company focused on discovering, licensing, acquiring and developing therapeutics and diagnostics to treat and prevent human disease and alleviate suffering. We are building capabilities in synthetic biology, precision medicine, protein engineering and vaccine manufacturing through internal efforts, collaborations with academic institutions and contract research organizations. The therapeutics under development include small molecules and biologics. All of our drug and diagnostic candidates are still in development. Tonix's portfolio is primarily composed of immunology and central nervous system, or CNS, product candidates. Tonix's immunology portfolio includes a live virus vaccine to prevent COVID-19, a small molecule antiviral to treat acute COVID-19, a centrally acting small molecule to treat Long COVID as well as a synthetic peptide-based skin test to detect and monitor functional T cell immunity to SARS-CoV-2, the virus that causes COVID-19. Tonix's immunology portfolio also includes biologics to address organ transplant rejection, cancer, and autoimmune diseases. The CNS portfolio includes both small molecules and biologics to treat pain, neurologic, psychiatric and addiction conditions. Our most advanced CNS product candidate is a sublingual small molecule drug in mid-Phase 3 development for the management of fibromyalgia, or FM, which is a pain disorder characterized by chronic widespread pain, non-restorative sleep, fatigue and impaired cognition. Our biologic antidote for cocaine intoxication is expected to enter a Phase 2 trial before year end.

Tonix's lead candidate within its immunology portfolio is a vaccine for COVID-19, TNX-1800*. This candidate is a live virus vaccine based on Tonix's recombinant pox vaccine, or "RPV" platform, being developed to protect against COVID-19 primarily by eliciting a T cell response. The COVID-19 vaccines that are approved for use, or have emergency use authorization, or EUA, in the U.S. have provided significant health benefits to the vaccinated population, however, they are showing limitations in the durability of protection conferred and in their ability to block forward transmission. Live virus vaccines that protect against other viral diseases by eliciting T cell responses have shown durability of protection that lasts years to decades and some live virus vaccines have significantly inhibited forward transmission. We reported positive efficacy data from animal challenge studies using live SARS-CoV-2 in the first quarter of 2021. In this study, TNX-1800 vaccinated, SARS-CoV-2 challenged animals had undetectable SARS-CoV-2 in the upper airways, which we believe relates to potential inhibition of forward transmission of this respiratory pathogen. Tonix expects to start a Phase 1 study of TNX-1800 in humans in the second half of 2022. TNX-801*, a live horsepox virus vaccine for percutaneous administration, is in the pre-IND stage of development to protect against smallpox and monkeypox. It is also based on the proprietary RPV platform, which was developed by synthetic biology.

TNX-2100* is an *in vivo* diagnostic skin test we are developing to measure SARS-CoV-2 exposure and T cell immunity. T cell immunity is more durable than antibody immunity, since serum antibodies wane between six months and one year after vaccination. TNX-2100 is an intradermal test to measure delayed-type hypersensitivity (DTH) response to SARS-CoV-2. The DTH response for other pathogens, notably tuberculosis, can serve as an *in vivo* measure of functional T cell immunity. TNX-2100 is comprised of GMP peptides designed to mimic SARS-CoV-2 proteins and stimulate SARS-CoV-2 specific T cells. We expect to initiate a first-in-human clinical study in the first quarter of 2022 pending clearance of the IND.

TNX-3500* (sangivamycin) is an antiviral inhibitor of SARS-CoV-2. It has demonstrated broad-spectrum activity in laboratory-based assays against the coronaviruses SARS-CoV-2 and MERS-CoV. Tonix licensed this technology from OyaGen, Inc. and intends to develop it as a treatment for COVID-19 and potentially other viral diseases. The active ingredient of TNX-3500 has been studied for safety in humans in prior studies with cancer patients at the U.S. National Cancer Institute but has not been approved for marketing in any jurisdiction. Tonix intends to conduct further animal studies in preparation for filing an IND.

TNX-1500* is a humanized monoclonal antibody, or mAb, directed against CD40-ligand, or CD40L, engineered to modulate binding to Fc receptors, that is being developed to prevent and treat organ transplant rejection as well as to treat autoimmune conditions. In experiments at the Massachusetts General Hospital, a teaching hospital of Harvard Medical School, TNX-1500 is being studied as monotherapy or in combination with mycophenolate mofetil in heart and kidney organ transplants in non-human primates. Preliminary results from an ongoing experiment in heart transplants indicates that TNX-1500 appears to have comparable efficacy to historical experiments using the chimeric mouse/primate version of the anti-CD40L monoclonal antibody (mAb) 5c8. In the non-human primate studies with TNX-1500 no evidence of thrombosis has been observed so far. We expect to start a Phase 1 study of TNX-1500 in the second half of 2022.

As part of our infectious disease research and development programs, we expanded our research collaboration with Columbia University during the third quarter to better understand immune responses to SARS-CoV-2 in healthy individuals who have recovered from COVID-19, which is expected to provide a foundation for tailoring vaccines and therapeutics to appropriate individuals using precision medicine. Our preclinical immunology pipeline also includes TNX-1700* and TNX-

701**. TNX-1700 is a recombinant modified form of Trefoil Family Factor 2, or rTFF2, that was licensed from Columbia University in 2019. TNX-1700 is a biologic being developed to treat gastric and pancreatic cancers by an immune-oncology mechanism. TNX-701 is an undisclosed small molecule, which is being developed to prevent deleterious effects of radiation exposure which has the potential to be used as a medical countermeasure to improve biodefense.

Our most advanced CNSe product candidate is TNX-102 SL**, a proprietary sublingual tablet formulation of cyclobenzaprine, or CBP, designed for bedtime administration. TNX-102 SL has active IND's for FM, posttraumatic stress disorder, or PTSD, agitation in Alzheimer's disease, or AAD, and alcohol use disorder, or AUD. TNX-102 SL is in mid-Phase 3 development for the management of FM which is a pain disorder characterized by chronic widespread pain, non-restorative sleep, fatigue and impaired cognition. In December 2020, we reported positive results from the Phase 3 RELIEF study of TNX-102 SL 5.6 mg for the management of FM. In July 2021, we reported pre-planned interim analysis results from a second Phase 3 study, RALLY. Based on the recommendation from the independent data monitoring committee that the RALLY trial was unlikely to demonstrate a statistically significant improvement in the primary endpoint, we stopped enrollment of new participants but allowed those participants who were currently enrolled to complete the study. We expect to report topline data from the completed RALLY study in the first quarter of 2022 and we intend to initiate a new Phase 3 study for the management of FM in the first half of 2022. Following analysis of the results of the RALLY study, including pharmacogenetic comparison of RELIEF and RALLY, we may modify the new Phase 3 study protocol. The pharmacogenomic techniques we intend to employ to compare the RALLY and RELIEF study populations may provide a path to precision medicine-based companion diagnostics for TNX-102 SL in FM.

For TNX-102 SL in PTSD, we completed the Phase 3 RECOVERY trial and reported topline results in the fourth quarter of 2020 in which TNX-102 SL did not meet the primary efficacy endpoint. PTSD is a serious psychiatric condition that develops in response to experiencing a traumatic event. We subsequently completed a meeting with the U.S. Food and Drug Administration, or FDA, to discuss potential new endpoints for the indication of treatment of PTSD, and we expect to begin enrolling a Phase 2 study of TNX-102 SL in police in Kenya in the first quarter of 2022. The AAD program is Phase 2 ready with an active IND and FDA Fast Track designation. AAD, which includes emotional lability, restlessness, irritability, and aggression, is one of the most distressing and debilitating of the behavioral complications of Alzheimer's disease. The AUD program is also Phase 2 ready with an active IND. AUD is a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and a negative emotional state when not using alcohol.

We also plan to develop TNX-102 SL as a potential treatment for Long COVID Syndrome (Long COVID) which is known officially as Post-Acute Sequelae of COVID-19 (PASC). We met with the FDA in the third quarter of 2021 to seek agreement on the design of a Phase 2 potential pivotal study and the overall clinical development plan to qualify TNX-102 SL as an indicated treatment for Long COVID. We intend to focus our clinical development on the subgroup of Long COVID patients whose symptoms overlap with FM, particularly with respect to widespread pain. We received the official minutes from this meeting in the third quarter of 2021 and intend to initiate a Phase 2 study in the first half of 2022 following IND clearance.

Other CNS candidates in development include TNX-1300* (double-mutant cocaine esterase) is also in Tonix's CNS portfolio and is in Phase 2 development for the treatment of life-threatening cocaine intoxication. TNX-1300 has been granted Breakthrough Therapy designation, or BTD by the FDA. TNX-1300 was licensed from Columbia University in 2019 after a Phase 2 study showed that it rapidly and efficiently disintegrates cocaine in the blood of volunteers who had received intravenous, or *i.v.*, cocaine. We expect to initiate a Phase 2 open-label safety study of TNX-1300 in an emergency room setting in the fourth quarter of 2021.

TNX-601 CR** (tianeptine oxalate and naloxone controlled-release tablets) is a CNS product candidate in development as a treatment for major depressive disorder, or depression, for PTSD, and for neurocognitive dysfunction associated with corticosteroid use. We completed a Phase 1 trial for formulation development outside of the U.S. Based on official minutes from a pre-IND meeting with the FDA, we expect to initiate a Phase 2 study for the treatment of depression in the first half of 2022, pending results of toxicology studies and IND clearance.

TNX-1900** (intranasal potentiated oxytocin) is in development as a candidate for prophylaxis of chronic migraine and for the treatment of craniofacial pain, insulin resistance and related conditions. TNX-1900 was acquired from Trigemina, Inc. in 2020 and licensed from Stanford University in 2020. The potentiated formulation includes magnesium, which has been shown in animals to potentiate binding of oxytocin to the oxytocin receptor in the trigeminal ganglion. We intend to initiate a Phase 2 study in migraine in the second half of 2022. Tonix also licensed technology to use TNX-1900 for the treatment of insulin resistance from the University of Geneva. TNX-2900** is another intranasal oxytocin-based therapeutic in development for the treatment of Prader-Willi syndrome, or PWS. The technology for TNX-2900 was licensed from the French National Institute of Health and Medical Research. PWS, an orphan condition, is a rare genetic disorder of failure to thrive in infancy, associated with uncontrolled appetite beginning in childhood with complications of obesity and diabetes.

Finally, our preclinical CNS pipeline includes TNX-1600** which is an inhibitor of the reuptake of neurotransmitters serotonin, norepinephrine and dopamine, or a triple reuptake inhibitor. TNX-1600 was licensed from Wayne State University in 2019 and is being developed as a treatment for PTSD, depression and attention-deficit/hyperactivity disorder, or ADHD.

Relating to our COVID-19 and other infectious disease development programs, we are developing the resources necessary to enable internal research, development and manufacturing capabilities necessary to meet the goal of producing new vaccine candidates within 100 days and new diagnostics within weeks of obtaining sequence information. As articulated in the American Pandemic Preparedness Plan, or AP3 released by the U.S. Office of Science and Technology Policy, this 100-day goal for vaccines is a key component of preparedness for future pandemics. We are establishing the infrastructure necessary to support the pandemic preparedness goals established in the AP3, specifically with respect to our RPV vaccine and skin test platforms and potentially to other vaccine, diagnostic and therapeutic platforms. This infrastructure consists of (i) our infectious disease R&D Center or "RDC", (ii) our Advanced Development Center or ADC, and (iii) our Commercial Manufacturing Center or CMC. We acquired the infectious disease RDC in Frederick, Maryland consisting of two buildings totaling approximately 48,000 square feet. The acquisition closed in October 2021 and was operational at closing. The RDC facility will focus on our development of vaccines and antiviral drugs against COVID-19, its variants, and other infectious diseases. The RDC facility is currently biosafety level 2 (BSL-2) but we intend to upgrade components to BSL-3. We are in the process of a substantial renovation of the ADC located in the New Bedford business park in Dartmouth, Massachusetts. This facility is intended to accelerate development and clinical scale manufacturing of live-virus vaccines to support Phase 1 and Phase 2 clinical trials. It is currently under construction and will be an approximately 45,000 square foot BSL-2 facility, once completed. It is expected to be operational in the first half of 2022. We also intend to build the CMC in Hamilton, Montana where we purchased approximately 44 acres of land. The CMC will focus on developing and manufacturing commercial scale live-virus vaccines and is also intended to be BSL-2. Construction is expected to be initiated for the CMC in 2022. Together, we expect these facilities may qualify the RPV vaccine and skin test platforms for programs that are designed to carry out the goals of AP3.

*TNX-1800, TNX-801, TNX-2100, TNX-1300, TNX-1500 and TNX-1700 are investigational new biologics and have not been approved for any indication.

**TNX-102 SL, TNX-601 CR, TNX-1600, TNX-1900, TNX-2900, TNX-3500 and TNX-701 are investigational new drugs and have not been approved for any indication.

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, 2020 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021, June 30, 2021 and September 30, 2021, which are 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, Suite 101, 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 the Company	2,909,091 shares of our common stock issued to Lincoln Park as consideration for its commitment to purchase shares of our common stock under the Purchase Agreement, or the Commitment Shares, and up to $80.0 million of shares of common stock that we may sell to Lincoln Park, from time to time at our sole discretion over the next 36 months in accordance with the Purchase Agreement. We will not receive any cash proceeds from the issuance of the Commitment Shares.
Common stock to be outstanding after this offering	565,558,375 shares, assuming sale of 91,311,360 shares at a price of $0.44 per share, which was the closing price of our common stock on Nasdaq on December 2, 2021, and the issuance of 2,909,091 shares of our common stock issued to Lincoln Park as Commitment Shares. The actual number of shares issued will vary depending on the sales prices in this offering, but will not be greater than, 94,220,451 shares representing 19.99% of the shares of our common stock outstanding on the date of the Purchase Agreement, in accordance with Nasdaq Market rules.
Use of proceeds	We intend to use the net proceeds from this offering, if any, for general corporate purposes. Our management will retain broad discretion over the allocation of the net proceeds from the sale of the common stock. See "Use of Proceeds" on page S-7.
NASDAQ Global Market Symbol	TNXP
Risk Factors	Investing in our common stock involves significant risks. See "Risk Factors" beginning on page S-7 of this prospectus and other information included or incorporated by reference into this prospectus for a discussion of factors you should carefully consider before investing in our securities.

The number of shares of our common stock outstanding after this offering is based on 471,337,924 shares of common stock outstanding as of December 2, 2021, and excludes:

- 638,991 shares of common stock issuable upon the exercise of a warrants outstanding as of December 2, 2021 at a weighted average exercise price of $27.00 per share;

- 25,780,349 shares of Common stock issuable upon the exercise of options outstanding as of December 2, 2021 at a weighted average exercise price of $1.84 per share;

- 16,214,844 shares of Common stock available for future issuance as of December 2, 2021 under the Tonix Pharmaceuticals Holding Corp Amended and Restated 2020 Stock Incentive Plan and the Tonix Pharmaceuticals Holding Corp 2020 Employee Stock Purchase Plan.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise of outstanding options or warrants described above.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Prior to making a decision about investing in our common stock, 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, 2020 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.

Risks Relating to this Offering

We may allocate the net proceeds from this offering in ways that you or other stockholders may not approve.

We currently intend to use the net proceeds of this offering, if any, for working capital and general corporate purposes, which may include capital expenditures, research and development and manufacturing expenditures, regulatory affairs expenditures, clinical trial expenditures, acquisitions of new technologies and investments, and the financing of possible acquisitions or business expansions. This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from clinical trials, as well as any third party intellectual property or other assets that we may opportunistically identify and seek to license or acquire or any collaborations that we may enter into with third parties for our product candidates, and any unforeseen cash needs. Because the number and variability of factors that will determine our use of the proceeds from this offering, their ultimate use may vary substantially from their currently intended use. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our common stock. See "Use of Proceeds."

The sale or issuance of our common stock to Lincoln Park may cause dilution and the sale of the shares of common stock by Lincoln Park that it acquires pursuant to the Purchase Agreement, or the perception that such sales may occur, could cause the price of our common stock to decrease.

On December 3, 2021, we entered into the Purchase Agreement with Lincoln Park, pursuant to which Lincoln Park has committed to purchase up to $80.0 million of our common stock. Upon the execution of the Purchase Agreement, we issued 2,909,091 Commitment Shares to Lincoln Park as a fee for its commitment to purchase shares of our Common stock under the Purchase Agreement. The shares of our common stock that may be issued under the Purchase Agreement may be sold by us to Lincoln Park at our sole discretion from time to time over a 36-month period commencing after the satisfaction of certain conditions set forth in the Purchase Agreement. The purchase price for the shares that we may sell to Lincoln Park under the Purchase Agreement will fluctuate based on the trading price of our common stock. Depending on market liquidity at the time, sales of such shares may cause the trading price of our common stock to decrease. We generally have the right to control the timing and amount of any future sales of our shares to Lincoln Park. Additional sales of our common stock, if any, to Lincoln Park will depend upon market conditions and other factors to be determined by us. We may ultimately decide to sell to Lincoln Park all, some or none of the additional shares of our common stock that may be available for us to sell pursuant to the Purchase Agreement. If and when we do sell shares to Lincoln Park, after Lincoln Park has acquired the shares, Lincoln Park may resell all, some or none of those shares at any time or from time to time in its discretion. Therefore, sales to Lincoln Park by us could result in substantial dilution to the interests of other holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock to Lincoln Park, or the anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

The terms of the Purchase Agreement limit the amount of share of common stock we may issue to Lincoln Park, which may have an adverse effect on our liquidity.

The Purchase Agreement includes restrictions on our ability to sell shares of our common stock to Lincoln Park, including, subject to specified limitations, (x) if a sale would cause us to issue, in the aggregate, a number of shares greater 19.99% of our outstanding common stock immediately prior to the execution of the Purchase Agreement, or the Exchange Cap, or (y) if a sale would cause Lincoln Park and its affiliates to beneficially own more than 4.99% (which Lincoln Park may increase to up to 9.99% upon 61 days' prior written notice to us) of our issued and outstanding common stock, or the Beneficial Ownership Cap. Accordingly, we cannot guarantee that we will be able to sell all $80.0 million of shares of common stock in this offering. If we cannot sell the full amount of the shares that Lincoln Park has committed to purchase because of these limitations, we may be required to utilize more costly and time-consuming means of accessing the capital markets, which could materially adversely affect our liquidity and cash position.

USE OF PROCEEDS

We may receive up to $80.0 million in aggregate gross proceeds under the Purchase Agreement from any sales we make to Lincoln Park pursuant to the Purchase Agreement after the date of this prospectus supplement. We estimate that the net proceeds to us from the sale of our common stock to Lincoln Park pursuant to the Purchase Agreement will be up to $79.9 million over up to an approximately 36-month period, assuming that we sell the full amount of our common stock that we have the right, but not the obligation, to sell to Lincoln Park under the Purchase Agreement, and after other estimated fees and expenses. We may sell fewer than all of the shares offered by this prospectus supplement, in which case our net offering proceeds will be less. Because we are not obligated to sell any shares of our common stock under the Purchase Agreement, the actual total offering amount and proceeds to us, if any, are not determinable at this time. See "Plan of Distribution" elsewhere in this prospectus supplement for more information.

We currently intend to use the net proceeds from this offering, if any, for working capital and general corporate purposes.

The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. As a result, our management will have broad discretion regarding the timing and application of the net proceeds from this offering. Pending their ultimate use, we intend to invest the net proceeds in short-term,

investment-grade, interest-bearing instruments.

MARKET PRICE OF OUR COMMON STOCK

Our common stock is presently listed on The NASDAQ Global Market under the symbol "TNXP". On December 2, 2021, the last reported sale price of our common stock was $0.44.

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.

LINCOLN PARK TRANSACTION

General

On December 3, 2021, we entered into the Purchase Agreement with Lincoln Park. In connection with the Purchase Agreement, on December 3, 2021, we also entered into a registration rights agreement, or the Registration Rights Agreement, with Lincoln Park, pursuant to which we agreed to take specified actions to maintain the registration of the shares of our common stock subject to the offering described in this prospectus supplement and accompanying prospectus. Pursuant to the terms of the Purchase Agreement, Lincoln Park has agreed to purchase from us up to $80,000,000 of our common stock (subject to certain limitations) from time to time during the term of the Purchase Agreement. Pursuant to the terms of the Purchase Agreement and Registration Rights Agreement, we have filed with the SEC this prospectus supplement regarding the sale under the Securities Act of the shares issuable to Lincoln Park under the Purchase Agreement. Pursuant to the terms of the Purchase Agreement, on the date of this prospectus, we are issuing 2,909,091 Commitment Shares to Lincoln Park as consideration for its commitment to purchase shares of our common stock under the Purchase Agreement.

We may, from time to time and at our sole discretion, direct Lincoln Park to purchase shares of our common stock upon the satisfaction of certain conditions set forth in the Purchase Agreement at a purchase price per share based on the market price of our common stock at the time of sale as computed under the Purchase Agreement. Lincoln Park may not assign or transfer its rights and obligations under the Purchase Agreement.

Under applicable rules of the Nasdaq Global Market, in no event may we issue or sell to Lincoln Park under the Purchase Agreement shares of our common stock in excess of 94,220,451 shares (including the Commitment Shares), which represents 19.99% of the shares of our common stock outstanding immediately prior to the execution of the Purchase Agreement, or the Exchange Cap, unless (i) we obtain stockholder approval to issue shares of our common stock in excess of the Exchange Cap or (ii) the average price of all applicable sales of our common stock to Lincoln Park under the Purchase Agreement equals or exceeds $0.4540 per share (which represents the lower of (A) the official closing price of our common stock on Nasdaq on the trading day immediately preceding the date of the Purchase Agreement and (B) the average official closing price of our common stock on Nasdaq for the five consecutive trading days ending on the trading day immediately preceding the date of the Purchase Agreement, adjusted such that the transactions contemplated by the Purchase Agreement are exempt from the Exchange Cap limitation under applicable Nasdaq rules. In any event, the Purchase Agreement specifically provides that we may not issue or sell any shares of our common stock under the Purchase Agreement if such issuance or sale would breach any applicable rules or regulations of the Nasdaq Global Market.

The Purchase Agreement also prohibits us from directing Lincoln Park to purchase any shares of our common stock if those shares, when aggregated with all other shares of our common stock then beneficially owned by Lincoln Park, would result in Lincoln Park and its affiliates exceeding the Beneficial Ownership Cap.

Purchase of Shares under the Purchase Agreement

Regular Purchases

Under the Purchase Agreement, on any business day selected by us on which the closing sale price of our common stock on Nasdaq is not below $0.10 (and provided that all shares subject to all prior Regular Purchases have theretofore been properly delivered to Lincoln Park), we may direct Lincoln Park to purchase up to 1,000,000 shares of our common stock on such business day (the "purchase date"), which we refer to as a Regular Purchase, provided, however, that (i) a Regular Purchase may be increased to up to 1,250,000 shares, if the closing sale price of our common stock on Nasdaq is not below $1.00 on the applicable purchase date; and (ii) a Regular Purchase may be increased to up to 1,500,000 shares, if the closing sale price of our common stock on Nasdaq is not below $1.25 on the applicable purchase date, provided that Lincoln Park's maximum purchase commitment under any single Regular Purchase may not exceed 10,000,000 shares. The foregoing share amounts and per share prices will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction occurring after the date of the Purchase Agreement.

The purchase price per share for each such Regular Purchase will be equal to the lesser of:

- the lowest sale price for our common stock on Nasdaq during the purchase date of such shares; or
- the average of the three lowest closing sale prices for our common stock on Nasdaq during the 10 consecutive business days prior to the purchase date of such shares.

We and Lincoln Park may mutually agree to increase the number of shares to be purchased by Lincoln Park pursuant to any Regular Purchase, provided that Lincoln Park's maximum purchase commitment under any single Regular Purchase may not exceed 10,000,000 shares.

Accelerated Purchases

We also have the right to direct Lincoln Park, on any business day on which we have properly submitted to Lincoln Park a Regular Purchase notice for the maximum amount of shares we are then permitted to sell in a Regular Purchase, provided the closing sale price of our common stock on Nasdaq on such business day is not below $0.20

(and provided that all shares subject to all prior Regular Purchases, Accelerated Purchases and Additional Accelerated Purchases (defined below) have theretofore been properly delivered to Lincoln Park), to purchase an additional amount of our common stock, which we refer to as an Accelerated Purchase, of up to the lesser of:

- 300% of the number of shares to be purchased pursuant to such Regular Purchase; and
- 30% of the aggregate shares of our common stock traded on Nasdaq during the period on the trading day immediately following the purchase date for such Regular Purchase, which we refer to as the "Accelerated Purchase Date," beginning at the commencement of regular trading on Nasdaq (or such later time on such Accelerated Purchase Date as mutually agreed by us and Lincoln Park specified in the Accelerated Purchase notice for such Accelerated Purchase), and ending at the close of regular trading on Nasdaq on such Accelerated Purchase Date, or, if certain trading volume or market price thresholds specified in the Purchase Agreement are crossed prior to the close of regular trading on Nasdaq on the applicable Accelerated Purchase Date, ending at such earlier time that any one of such thresholds is crossed, which period of time on the applicable Accelerated Purchase Date we refer to as the "Accelerated Purchase Measurement Period."

The purchase price per share for each such Accelerated Purchase will be equal to 97% of the lesser of:

- the volume-weighted average price of our common stock on Nasdaq during the applicable Accelerated Purchase Measurement Period on the applicable Accelerated Purchase date; and
- the closing sale price of our common stock on the applicable Accelerated Purchase Date.

We and Lincoln Park may mutually agree to increase the number of shares to be purchased by Lincoln Park pursuant to any Accelerated Purchase.

Additional Accelerated Purchases

We also have the right to direct Lincoln Park, prior to 1:00 p.m., Eastern time, on an Accelerated Purchase Date for an Accelerated Purchase for which the applicable Accelerated Purchase Measurement Period has theretofore ended and all of the shares subject thereto have been properly delivered to Lincoln Park, to purchase additional shares of our common stock in another Accelerated Purchase, which we refer to as an Additional Accelerated Purchase, on the same business day, which in reference to an Additional Accelerated Purchase we refer to as an Additional Accelerated Purchase Date, of up to the lesser of:

- 300% of the number of shares purchased pursuant to the applicable corresponding Regular Purchase; and
- 30% of the aggregate shares of our common stock traded on Nasdaq during the period on the applicable Additional Accelerated Purchase Date beginning at the time mutually agreed by us and Lincoln Park and specified in the Additional Accelerated Purchase notice for such Additional Accelerated Purchase, and ending at the close of regular trading on Nasdaq on such Additional Accelerated Purchase Date, or, if certain trading volume or market price thresholds specified in the Purchase Agreement are crossed prior to the close of regular trading on Nasdaq on such date, ending at such earlier time that any one of such thresholds is crossed, which period of time on the applicable Additional Accelerated Purchase Date we refer to as the "Additional Accelerated Purchase Measurement Period".

We may, in our sole discretion, submit multiple Additional Accelerated Purchase notices to Lincoln Park on a single Additional Accelerated Purchase Date, provided that (i) such Additional Accelerated Purchase notice is received by Lincoln Park prior to 1:00 p.m., Eastern time, on such Additional Accelerated Purchase Date and (ii) all prior Accelerated Purchases and Additional Accelerated Purchases (including those that have occurred earlier on the same trading day) have been completed and all of the shares to be purchased thereunder have theretofore been properly delivered to Lincoln Park in accordance with the Purchase Agreement.

The purchase price per share for each such Additional Accelerated Purchase will be equal to 97% of the lower of:

- the volume-weighted average price of our common stock on Nasdaq during the applicable Additional Accelerated Purchase Measurement Period on the applicable Additional Accelerated Purchase date; and
- the closing sale price of our common stock on Nasdaq on the applicable Additional Accelerated Purchase Date.

We and Lincoln Park may mutually agree to increase the number of shares to be purchased by Lincoln Park pursuant to any Additional Accelerated Purchase.

In the case of Regular Purchases, Accelerated Purchases and Additional Accelerated Purchases, the purchase price per share will be equitably adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction occurring during the business days used to compute the purchase price.

Other than as described above, there are no trading volume requirements or restrictions under the Purchase Agreement, and we will control the timing and amount of any sales of our common stock to Lincoln Park.

Events of Default

Events of default under the Purchase Agreement include the following:

- the effectiveness of the registration statement of which this prospectus supplement and accompanying prospectus form a part lapses for any reason (including, without limitation, the issuance of a stop order by the SEC), or any required prospectus supplement and accompanying prospectus are unavailable for the resale by Lincoln Park of our common stock offered hereby, and such lapse or unavailability continues for a period of 10 consecutive business days or for more than an aggregate of 30 business days in any 365-day period;
- suspension by the principal market of our common stock from trading or failure of the common stock to be listed on the Nasdaq for a period of one business day;
- the de-listing of our common stock from the Nasdaq Global Market, our principal market, unless our common stock is immediately thereafter trading on the Nasdaq Global Select Market, the Nasdaq Capital Market, the New York Stock Exchange, the NYSE American, the NYSE Arca, the OTCQX or OTCQB operated by the OTC Markets Group, Inc. (or any other comparable market) (or any nationally recognized successor thereto);
- the failure for any reason by our transfer agent to issue Purchase Shares to Lincoln Park within two business days after any purchase date, Accelerated Purchase date or Additional Accelerated Purchase date, as applicable, on which Lincoln Park is entitled to receive such Purchase Shares;
- any breach of the representations, warranties, covenants or other terms or conditions contained in the Purchase Agreement or Registration Rights Agreement that has or could have a Material Adverse Effect (as defined in the Purchase Agreement) and, in the case of a breach of a covenant that is reasonably curable, that is not cured within a period of at least five business days;
- our common stock ceases to be DTC authorized and ceases to participate in the DWAC/FAST systems or if we fail to maintain the service of our transfer agent (or a successor transfer agent) with respect to the issuance of Purchase Shares under the Purchase Agreement;

- if at any time the Exchange Cap (to the extent applicable under the terms of the Purchase Agreement) is reached and our stockholders have not approved the issuance of common stock in excess of the Exchange Cap in accordance with the applicable rules of the Nasdaq Global Market; or

- any voluntary or involuntary participation or threatened participation in insolvency or bankruptcy proceedings by or against us.

Lincoln Park does not have the right to terminate the Purchase Agreement upon any of the events of default set forth above, however, the Purchase Agreement will automatically terminate upon initiation of insolvency or bankruptcy proceedings by or against us. During an event of default, all of which are outside of Lincoln Park's control, we are not permitted to direct Lincoln Park to purchase any shares of our common stock under the Purchase Agreement.

Our Termination Rights

We have the unconditional right, at any time, for any reason and without any payment or liability to us, to give one business day notice to Lincoln Park to terminate the Purchase Agreement.

No Short-Selling or Hedging by Lincoln Park

Lincoln Park has agreed that neither it nor any of its affiliates shall engage in any direct or indirect short-selling or hedging of our common stock during any time prior to the termination of the Purchase Agreement.

Prohibitions on Variable Rate Transactions

Subject to specified exceptions included in the Purchase Agreement, we are limited in our ability to enter into specified variable rate transactions until the later of (i) the thirty-six month anniversary of the date of the Purchase Agreement and, (ii) thirty-six month anniversary of the commencement date of the Purchase Agreement. Such transactions include, among others, the issuance of convertible securities with a conversion or exercise price that is based upon or varies with the trading price of our common stock after the date of issuance, the issuance of securities with embedded anti-dilution provisions, the issuance of securities with an embedded put or call right or at a price subject to being reset after the initial issuance contingent on our business or market performance or entry into any new "equity line of credit."

Effect of Performance of the Purchase Agreement on our Stockholders

All shares registered in this offering that have been or may be issued or sold by us to Lincoln Park under the Purchase Agreement are expected to be freely tradable. Shares registered in this offering may be sold over a period of up to 36 months commencing on the date of this prospectus supplement. The sale by Lincoln Park of a significant amount of shares registered in this offering at any given time could cause the market price of our common stock to decline and to be highly volatile. Sales of our common stock to Lincoln Park, if any, will depend upon market conditions and other factors to be determined by us, in our sole discretion. We may ultimately decide to sell to Lincoln Park all, some or none of the additional shares of our common stock that may be available for us to sell pursuant to the Purchase Agreement. If and when we do sell shares to Lincoln Park, after Lincoln Park has acquired the shares, Lincoln Park may resell all, some or none of those shares at any time or from time to time in its discretion. Therefore, sales to Lincoln Park by us under the Purchase Agreement may result in substantial dilution to the interests of other holders of our common stock. In addition, if we sell a substantial number of shares to Lincoln Park under the Purchase Agreement, or if investors expect that we will do so, the actual sales of shares or the mere existence of our arrangement with Lincoln Park may make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect such sales. However, we have the right to control the timing and amount of any additional sales of our shares to Lincoln Park and the Purchase Agreement may be terminated by us at any time at our discretion without any cost to us.

Pursuant to the terms of the Purchase Agreement, we have the right, but not the obligation, to direct Lincoln Park to purchase up to $80,000,000 of our common stock, exclusive of the 2,909,091 Commitment Shares issued to Lincoln Park as consideration for its commitment to purchase shares of our common stock under the Purchase Agreement. The Purchase Agreement prohibits us from issuing or selling to Lincoln Park under the Purchase Agreement (i) shares of our common stock in excess of the Exchange Cap, unless we obtain stockholder approval to issue shares in excess of the Exchange Cap or the average price of all applicable sales of our common stock to Lincoln Park under the Purchase Agreement equals or exceeds $0.4540 per share, such that the transactions contemplated by the Purchase Agreement are exempt from the Exchange Cap limitation under applicable Nasdaq rules and (ii) any shares of our common stock if those shares, when aggregated with all other shares of our common stock then beneficially owned by Lincoln Park, would exceed the Beneficial Ownership Cap.

The following table sets forth the amount of gross proceeds we would receive from Lincoln Park from our sale of shares to Lincoln Park under the Purchase Agreement at varying purchase prices:

Assumed Average Purchase Price Per Share	Number of Registered Shares to be Issued if Full Purchase (1)	Percentage of Outstanding Shares After Giving Effect to the Issuance to Lincoln Park (2)	Proceeds from the Sale of Shares to Lincoln Park Under the $80M Purchase Agreement
$ 0.44 (3)	91,311,360	16.1	$ 40,176,998
$ 1.00	80,000,000	14.4	$ 80,000,000
$ 2.00	40,000,000	7.8	$ 80,000,000
$ 3.00	26,666,667	5.3	$ 80,000,000
$ 4.00	20,000,000	4.0	$ 80,000,000

(1) Includes the total number of Purchase Shares that we would have sold under the Purchase Agreement at the corresponding assumed average purchase price set forth in the first column, up to the aggregate purchase price of $80,000,000, if available, while giving effect to the Exchange Cap and without regard for the Beneficial Ownership Cap, and excludes the Commitment Shares.

(2) The denominator is based on 471,337,924 shares outstanding as of December 2, 2021 adjusted to include the issuance of (i) 2,909,091 Commitment Shares issued to Lincoln Park as consideration for its commitment to purchase shares of our common stock under the Purchase Agreement and (ii) the number of shares set forth in the adjacent column that we would have sold to Lincoln Park, assuming the average purchase price in the first column. The numerator is based on the number of shares issuable under the Purchase Agreement (that are the subject of this offering) at the corresponding assumed average purchase price set forth in the first column.

(3) The closing sale price of our common stock on Nasdaq on December 2, 2021.

PLAN OF DISTRIBUTION

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering up to $80.0 million in shares of our common stock and 2,909,091 shares of our common stock issued to Lincoln Park as Commitment Shares pursuant to the Purchase Agreement. This prospectus supplement and the accompanying prospectus also cover the resale of these shares by Lincoln Park to the public.

We may, from time to time and at our sole discretion, direct Lincoln Park to purchase shares of our common stock in amounts up to 1,000,000 shares on any single business day from and after the date of this prospectus supplement, which amounts may be increased to up to 1,500,000 shares of our common stock depending on the market price of our common stock at the time of sale, subject to, upon the parties mutual agreement, an increase of up to 10,000,000 shares per purchase, which share amounts and related market prices will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction occurring after the date of the Purchase Agreement. In addition, upon notice to Lincoln Park, we may, from time to time and at our sole discretion, direct Lincoln Park to purchase additional shares of our common stock in "accelerated purchases," and/or "additional accelerated purchases" as set forth in the Purchase Agreement. The purchase price per share is based on the market price of our common stock at the time of sale as computed under the Purchase Agreement. Lincoln Park may not assign or transfer its rights and obligations under the Purchase Agreement. See "Lincoln Park Transaction-Purchases of Shares under the Purchase Agreement."

Lincoln Park is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act.

We have agreed to indemnify Lincoln Park and certain other persons against certain liabilities in connection with the offering of shares of our common stock offered. The Company has agreed to reimburse Lincoln Park for certain of its expenses in connection with the offering.

Lincoln Park has represented to us that at no time prior to the Purchase Agreement has Lincoln Park or its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any short sale (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of our common stock or any hedging transaction, which establishes a net short position with respect to our common stock. Lincoln Park agreed that during the term of the Purchase Agreement, it, its agents, representatives or affiliates will not enter into or effect, directly or indirectly, any of the foregoing transactions.

We have advised Lincoln Park that it is required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes Lincoln Park, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the securities offered by this prospectus supplement.

This offering will terminate on the date that all shares offered by this prospectus supplement have been sold by us to Lincoln Park and subsequently resold by Lincoln Park.

Our common stock is listed on the Nasdaq Global Market under the symbol "TNXP." Our transfer agent is VStock Transfer, LLC.

L EGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Las Vegas, Nevada. Lincoln Park is being represented by Dorsey & Whitney LLP, New York, New York.

E XPERTS

The consolidated balance sheets of Tonix Pharmaceuticals Holding Corp. and subsidiaries as of December 31, 2020 and 2019 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.

W HERE 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 prospectus. This prospectus supplement and the accompanying prospectus 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 prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus supplement and the accompanying prospectus 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, Suite 101, Chatham, New Jersey or calling us at (862) 904-8182.

I NCORPORATION 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, 2020;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021, June 30, 2021 and September 30, 2021, filed with the SEC on May 10, 2021, August 9, 2021 and November 8, 2021, respectively;
- our definitive Proxy Statements on Schedule 14A, filed on March 31, 2021;

- our Current Reports on Form 8-K, filed on March 15, 2021, March 15, 2021, March 17, 2021, March 19, 2021, March 22, 2021, March 26, 2021, April 19, 2021, April 19, 2021, April 19, 2021, May 3, 2022, May 7, 2021, May 10, 2021 May 14, 2021, June 3, 2021, June 21, 2021, June 22, 2021, June 24, 2021, June 28, 2021, July 19, 2021, July 23, 2021, July 27, 2021, August 2, 2021, August 9, 2021, August 24, 2021, August 27, 2021, September 7, 2021, September 13, 2021, September 21, 2021, September 23, 2021, October 4, 2021, October 12, 2021, October 15, 2021, November 8, 2021, November 9, 2021, November 15, 2021, November 22, 2021, November 23, 2021, and December 3, 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.

$500,000,000

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 $500,000,000. 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 22, 2021, the last reported sale price of our common stock was $1.03. Our common stock has recently experienced extreme volatility in price and trading volume. For example, on February 1, 2021 and February 11, 2021, the closing price of our common stock on The NASDAQ Global Market was $0.97 and $2.00, respectively, and daily trading volume on these days was approximately 20.2 million and 128.0 million shares, respectively. During this time, we made announcements regarding the addition of product candidates to our pipeline, and completed a $70.0 million public offering of our common stock at $1.20 per share. Investors that purchase shares of our common stock may lose a significant portion of their investments if the price of our common stock declines. Please see the section of this prospectus supplement titled "Risk Factors." 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 3 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 May 5, 2021

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 $500,000,000. 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 small molecules and biologics to treat and prevent human disease and alleviate suffering. Tonix's portfolio is primarily composed of central nervous system, or CNS, and immunology product candidates. The CNS portfolio includes both small molecules and biologics to treat pain, neurologic, psychiatric and addiction conditions. The immunology portfolio includes vaccines to prevent infectious diseases and biologics to address organ rejection, cancer, and autoimmune diseases. Our lead programs are TNX-102 SL*, a sublingual tablet for the management of fibromyalgia, or FM, and TNX-1800**, a live replicating virus vaccine to protect against COVID-19.

Our most advanced CNS product candidate is TNX-102 SL*, a proprietary sublingual tablet formulation of cyclobenzaprine, or CBP, designed for bedtime administration. TNX-102 SL has active investigational new drug applications, or INDs, for FM, posttraumatic stress disorder, or PTSD, agitation in Alzheimer's disease, or AAD, and alcohol use disorder, or AUD. TNX-102 SL is in mid-Phase 3 development for the management of FM which is a pain disorder characterized by chronic widespread pain, non-restorative sleep, fatigue and impaired cognition. We reported positive results from its Phase 3 RELIEF study in December 2020 and expect interim analysis data from a second Phase 3 study, RALLY, in the third quarter of 2021 [1], followed by topline data in the fourth quarter of 2021. We completed enrollment of 50% of participants in the RALLY study in March 2021. For TNX-102 SL in PTSD, we completed the Phase 3 RECOVERY trial and reported topline results in the fourth quarter of 2020 in which TNX-102 SL did not meet the primary efficacy endpoint. As a next step, we intend to meet with the U.S. Food and Drug Administration, or FDA, to discuss potential new endpoints for the indication of treatment of PTSD. PTSD is a serious psychiatric condition that develops in response to experiencing a traumatic event. The AAD program is Phase 2 ready with an active IND and FDA Fast Track designation. AAD, which includes emotional lability, restlessness, irritability, and aggression, is one of the most distressing and debilitating of the behavioral complications of Alzheimer's disease. The AUD program is also Phase 2 ready with an active IND. AUD is a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and a negative emotional state when not using alcohol.

Other CNS candidates in development include TNX-1900* (intranasal potentiated oxytocin), which is in development as a candidate for prophylaxis of chronic migraine and for the treatment of craniofacial pain, insulin resistance and related conditions. TNX-1900 was acquired from Trigemina, Inc. in 2020 and licensed from Stanford University in 2020. We intend to submit an IND to the FDA in the third quarter of 2021 and initiate a Phase 2 study in migraine in the third quarter of 2021. Tonix also licensed technology to use TNX-1900 for the treatment of insulin resistance from the University of Geneva. TNX-2900* is another intranasal oxytocin-based therapeutic in development for the treatment of Prader-Willi syndrome, or PWS. The technology for TNX-2900 was licensed from the French National Institute of Health and Medical Research. PWS, an orphan condition, is a rare genetic disorder of failure to thrive in infancy, associated with uncontrolled appetite later in life.

TNX-601 CR* (tianeptine oxalate and naloxone controlled-release tablets) is another CNS product candidate in development as a treatment for major depressive disorder, or depression, as well as for PTSD and neurocognitive dysfunction associated with corticosteroid use. We completed a Phase 1 trial for formulation development outside of the U.S. Based on official minutes from a pre-IND meeting with the FDA, we expect to be in a position to initiate a Phase 2 study for the treatment of depression in the fourth quarter of 2021, pending results of toxicology studies.

TNX-1300** (double-mutant cocaine esterase) is also in Tonix's CNS portfolio and is in Phase 2 development for the treatment of life-threatening cocaine intoxication. TNX-1300 has been granted Breakthrough Therapy designation, or BTD by the FDA. TNX-1300 was licensed from Columbia University in 2019 after a Phase 2 study showed that it rapidly and efficiently disintegrates cocaine in the blood of volunteers who had received intravenous, or *i.v.*, cocaine. We expect to initiate a Phase 2 open-label safety study of TNX-1300 in an emergency room setting in the second quarter of 2021.

Our immunology portfolio includes vaccines to prevent infectious diseases and biologics to address organ rejection, cancer, and autoimmune diseases. Our lead vaccine candidate, TNX-1800**, is a live replicating vaccine based on the horsepox viral vector platform to protect against COVID-19, primarily by eliciting a T cell immune response. We reported positive immune response data in non-human primates in the fourth quarter of 2020 and reported positive efficacy data from animal challenge studies using live SARS-CoV-2 in the first quarter of 2021. TNX-801**, a live horsepox virus vaccine for percutaneous administration, is in the pre-IND stages of development to protect against smallpox and monkeypox. Both TNX-1800 and TNX-801 are based on the proprietary horsepox viral vector platform. We expect to initiate a Phase 1 safety study of TNX-1800 for COVID-19 in the second half of 2021.

TNX-2100** is a skin test we are developing to measure SARS-CoV-2 exposure and T cell immunity. It is an intradermal test to measure delayed-type hypersensitivity (DTH) response to SARS-CoV-2. We have manufactured GMP peptides designed to stimulate SARS-CoV-2 specific T cells and expect to submit an IND to the FDA in the second quarter of 2021 and initiate clinical trials in the second half of 2021.

TNX-3500* (sangivamycin) is an antiviral inhibitor of SARS-CoV-2. It has demonstrated broad-spectrum activity in laboratory-based assays against the coronaviruses

SARS-CoV-2 and MERS-CoV. Tonix licensed this compound from OyaGen, Inc. and intends to develop it as a treatment for COVID-19 and potentially other viral disorders. The active ingredient of TNX-3500 has been studied for safety in humans in prior studies on cancer patients at the U.S. National Cancer Institute but has not been approved for marketing in any jurisdiction. Tonix intends to conduct further animal studies and submit an IND in the second half of 2021.

TNX-1500** is monoclonal antibody, or mAb, directed against CD40-ligand, or CD40L, engineered to modulate binding to Fc receptors, that is being developed to prevent and treat organ transplant rejection and autoimmune conditions. We expect to have GMP product ready in the third quarter of 2021 for TNX-1500.

Finally, our preclinical pipeline includes TNX-1600*, TNX-1700**, TNX-701* and TNX-2300**. TNX-1600 is an inhibitor of the reuptake of neurotransmitters serotonin, norepinephrine and dopamine (a triple reuptake inhibitor). TNX-1600 was licensed from Wayne State University in 2019 and is being developed as a treatment for PTSD, depression and attention-deficit/hyperactivity disorder, or ADHD. TNX-1700 is a recombinant modified form of Trefoil Family Factor 2, or rTFF2, that was licensed from Columbia University in 2019, and is a biologic being developed to treat gastric and pancreatic cancers. TNX-701 is an undisclosed small molecule, which is being developed to prevent deleterious effects of radiation exposure which has the potential to be used as a medical countermeasure to improve biodefense. Tonix is also developing TNX-2300** as a second COVID-19 vaccine under an option agreement with Kansas State university. TNX-2300 is a live replicating viral vector based on the bovine parainfluenza virus.

[1]Pending agreement from FDA on statistical analysis plan.

*TNX-102 SL, TNX-601 CR, TNX-1600, TNX-1900, TNX-2900, TNX-3500 and TNX-701 are investigational new drugs and have not been approved for any indication.

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

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 common stock is listed on The NASDAQ Global Market under the symbol "TNXP". Our principal executive offices are located at 26 Main Street, Suite 101, 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.

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 negatively 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 risk factors set forth below and 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, 2020 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.

The market price of our common stock has been extremely volatile and may continue to be volatile due to numerous circumstances beyond our control.

The market price of our common stock has fluctuated, and may continue to fluctuate, widely, due to many factors, some of which may be beyond our control. These factors include, without limitation:

- "short squeezes";
- comments by securities analysts or other third parties, including blogs, articles, message boards and social and other media;

- large stockholders exiting their position in our common stock or an increase or decrease in the short interest in our common stock;
- actual or anticipated fluctuations in our financial and operating results;
- risks and uncertainties associated with the ongoing COVID-19 pandemic;
- the timing and allocations of new product candidates;
- public perception of our product candidates and competitive products; and
- overall general market fluctuations.

Stock markets in general and our stock price in particular have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies and our company. For example, on February 1, 2021 and February 11, 2021, the closing price of our common stock on The NASDAQ Global Market was $0.97 and $2.00, respectively, and daily trading volume on these days was approximately 20.2 million and 128.0 million shares, respectively. During this time, we made announcements regarding the addition of product candidates to our pipeline, and completed a $70.0 million public offering of our common stock at $1.20 per share. These broad market fluctuations may adversely affect the trading price of our common stock. In particular, a proportion of our common stock has been and may continue to be traded by short sellers which may put pressure on the supply and demand for our common stock, further influencing volatility in its market price. Additionally, these and other external factors have caused and may continue to cause the market price and demand for our common stock to fluctuate, which may limit or prevent investors from readily selling their shares of common stock and may otherwise negatively affect the liquidity of our common stock.

A "short squeeze" due to a sudden increase in demand for shares of our common stock that largely could lead to extreme price volatility in shares of our common stock.

Investors may purchase shares of our common stock to hedge existing exposure or to speculate on the price of our common stock. Speculation on the price of our common stock may involve long and short exposures. To the extent aggregate short exposure exceeds the number of shares of our common stock available for purchase on the open market, investors with short exposure may have to pay a premium to repurchase shares of our common stock for delivery to lenders of our common stock. Those repurchases may in turn, dramatically increase the price of our common stock until additional shares of our common stock are available for trading or borrowing. This is often referred to as a "short squeeze." A proportion of our common stock has been and may continue to be traded by short sellers which may increase the likelihood that our common stock will be the target of a short squeeze. A short squeeze could lead to volatile price movements in shares of our common stock that are unrelated or disproportionate to our operating performance or prospectus and, once investors purchase the shares of our common stock necessary to cover their short positions, the price of our common stock may rapidly decline. Investors that purchase shares of our common stock during a short squeeze may lose a significant portion of their 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 3 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 800,000,000 shares of our common stock, par value $0.001 per share. As of April 22, 2021, there were 326,509,139 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 its subsidiaries as of December 31, 2020 and 2019 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 an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. 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, 2020, filed on March 15, 2021;
- Definitive Proxy Statement on Schedule 14A, filed on March 31, 2021;
- Current Reports on Form 8-K, filed on, March 15, 2021, March 15, 2021, March 17, 2021, March 19, 2021, March 22, 2021, March 26, 2021, April 19, 2021, April 19, 2021 and April 19, 2021 (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 (862) 904-8182

$80,000,000 and 2,909,091 Shares of

Common Stock

PROSPECTUS SUPPLEMENT

The date of this prospectus supplement is December 3, 2021