

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (date of earliest event reported): May 2, 2012

TONIX PHARMACEUTICALS HOLDING CORP.

(Exact name of registrant as specified in its charter)

Nevada
(State or Other Jurisdiction
of Incorporation)

333-150419
(Commission
File Number)

26-1434750
(IRS Employer
Identification No.)

509 Madison Avenue, Suite 306, New York, New York 10022
(Address of principal executive offices) (Zip Code)

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

Copy of correspondence to:

Marc J. Ross, Esq.
Harvey Kesner, Esq.
James M. Turner, Esq.
Sichenzia Ross Friedman Ference LLP
61 Broadway, 32nd Floor
New York, New York 10006
Tel: (212) 930-9700 Fax: (212) 930-9725

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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ITEM 7.01 Regulation FD Disclosure.

The Company intends to utilize an updated investor presentation to conduct meetings with investors, stockholders and analysts and at investor conferences, and which the Company intends to place on its website, which may contain non-public information. A copy of the presentation is filed as Exhibit 99.01.

The information contained in Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.1, is furnished pursuant to, and shall not be deemed to be "filed" for the purposes of, Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section. The information contained in Item 7.01 of this Current Report shall not be incorporated by reference into any registration statement or any other document filed pursuant to the Securities Act of 1933, as amended, except as otherwise expressly stated in such filing. By filing this Current Report on Form 8-K and furnishing the information contained in this Item 7.01, including Exhibit 99.01, the Company makes no admission as to the materiality of any such information that it is furnishing.

ITEM 9.01 Financial Statements and Exhibits.

(d) Exhibits.

99.01 Corporate Presentation by the Company *

* Furnished herewith.

SIGNATURE

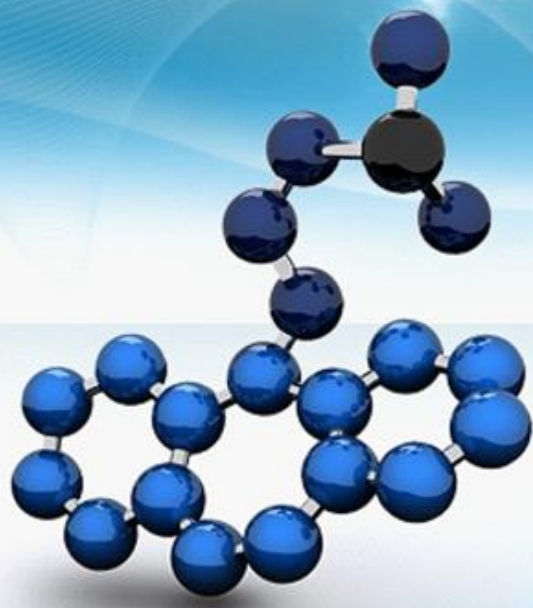
Pursuant to the requirement of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

TONIX PHARMACEUTICALS HOLDING CORP.

Date: May 2, 2012

By: /s/ SETH LEDERMAN
Seth Lederman
President and Chief Executive Officer

TONIX
PHARMACEUTICALS



Corporate Presentation
May 2012

Ticker: TNXP.OB

Disclosures

Forward-looking Statements

The statements and discussions contained in this presentation that are not historical facts constitute forward-looking statements. These can be identified by the use of forward-looking words, such as "believes", "expects", "may", "intends", "anticipates", "plans", "estimates", or any other analogous or similar expressions intended to identify forward-looking statements. These forward-looking statements and estimates as to future performance, estimates as to future valuations, and other statements contained herein regarding matters that are not historical facts, are only predictions and actual events or results may differ materially. We cannot assure or guarantee that any future results described in this presentation will be achieved, and actual results could vary materially from those reflected in such forward-looking statements.

Information contained in this presentation has been compiled from sources believed to be credible and reliable. However, we cannot guarantee such credibility and reliability. The forecasts and projections of events contained herein are based upon subjective valuations, analyses, and personal opinions.

Information Regarding Disclosures

The Common Stock and Warrants have not and will not be registered under the Securities Act of 1933, as amended (the "Act"), or under any state securities laws, nor has the Securities and Exchange Commission (the "Commission") or any state regulatory authority endorsed the Offering. Any representation to the contrary is a criminal offense.

In making an investment decision, investors must rely upon their own examination of the company and the terms of the Offering, including the merits and risks involved. The acquisition of the Stock, if offered, should be considered only by persons who can bear the economic risk of their investment of an indefinite period of time and can afford a total loss of their investment. Each prospective investor in the Offering should, prior to purchasing any Stock, consult his own attorney and business advisor as to the legal, business, tax, and related matters concerning its investment and is urged to ask questions of, and receive answers from, the Company concerning the terms and conditions of the Offering and request any additional information they may consider Necessary in making an informed investment decision.

This presentation does not constitute an offer to sell or a solicitation of an offer to purchase any securities of any nature whatsoever, nor do the contents of the presentation constitute legal, tax, or business advice.

This presentation and the offering of the Company's Stock shall be kept confidential. The recipient agrees not to disclose to any third party any information contained herein, or any terms, conditions, or other facts with respect to the Offering, including, without limitation, that the Company is or may be contemplating the Offering.

Information included herewith has been obtained from the Company and other sources believed to be reliable, but the accuracy or completeness of such information is not guaranteed by, and should not be construed as a representation by the Company. Any representations and warranties will be contained only in a definitive agreement signed by the investor and the Company.

TONIX Summary

- **Specialty pharmaceutical company**
 - Non-addictive treatments for chronic pain syndromes
 - Capital-efficient development strategy
- **Innovative products for high-value central nervous system (CNS) indications:**
 - Fibromyalgia Syndrome (FM)
 - Three FDA approvals validate condition
 - Expect to follow successes of Lyrica® and Cymbalta® in FM
 - Post Traumatic Stress Disorder (PTSD)
 - Significant interest from Department of Defense
- **FM Phase 2a study demonstrated statistically significant improvement in core symptoms**

Experienced Leadership

Management Team

Seth Lederman, MD

Founder, CEO, Chairman
Vela, Targent, Valldus, Fontus

Benjamin Selzer

Chief Operating Officer
Aton, Reliant, investment banking (Lehman Brothers & Banc of America Securities)

Leland Gershell, MD, PhD

Chief Financial Officer
Cowen, Apothecary Capital, Favus Institutional Research, Madison Williams

Bruce Daugherty, PhD, MBA

Senior Director, Drug Development
Merck, Roche Institute

Accomplished Independent Board

Board of Directors

Seth Lederman, MD
Founder, CEO, Chairman

Stuart Davidson
Former CEO of Alkermes & Combion

Patrick Grace
WR Grace, Chemed, Grace Institute

Donald W. Landry, MD, PhD
Columbia Chair of Medicine

Ernest Mario, PhD
Former CEO of Glaxo, Alza & Reliant

Charles Mather
Janney Montgomery Scott Securities, Cowen, Smith Barney

John Rhodes
Former Partner at Booz Allen Hamilton

Fibromyalgia Market Opportunity

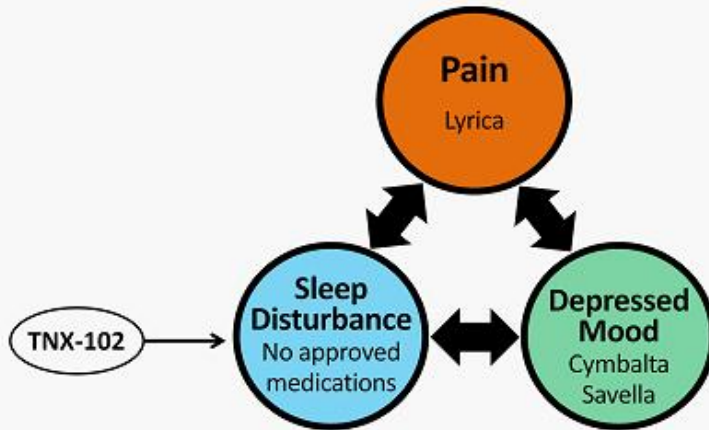
- **Approximately 5 million U.S. patients***
- **U.S. drug market estimated at \$1.2 billion****
 - 2007-2010 CAGR of 18.4%**
- **Until 2007, there were no FDA approved drugs**
 - Lyrica (Pfizer) approved 2007: replacing off-label generic analgesics
 - Cymbalta (Lilly) approved 2008, Savella® (Forest) approved 2009: replacing off-label generic anti-depressants
- **TNX-102 is seeking FDA approval as a first-in-class drug**
 - Expect to replace off-label generic muscle relaxants in FM

* National Institutes of Health, U.S. Department of Health and Human Services

** Source: Frost & Sullivan Fibromyalgia Market Study, December 2010

Fibromyalgia: Vicious Cycle

- Medications that target pain or depressed mood are approved for the management of FM
- TNX-102 will be a first-in-class medication targeting disturbed or non-restorative sleep in FM



Comparison of Fibromyalgia Drugs

- Patient dissatisfaction high: physicians often switch drugs
- TNX-102 is a first-in-class bedtime treatment
 - Not expected to compete with approved treatments

Pipeline Treatments

TNX-102

- Non-restorative sleep category
- Taken 1 time per day at bedtime
- No DEA scheduling

*Northera™
droxidopa*

- Targeting indication of low-blood pressure in FM patients

Approved Treatments

LYRICA
pregabalin

- Analgesic category
- DEA scheduled
- Taken 2 times a day

Cymbalta
duloxetine HCl

- Antidepressant category
- Suicidality warning
- Taken 1-2 times a day
- Interferes with sleep

Savella
milnacipran

- Antidepressant category
- Suicidality warning
- Taken 1-2 times a day
- Interferes with sleep

Drugs Used to Treat Fibromyalgia

- **Off-label drugs dominate the sleep quality market**
 - Approved as “muscle relaxants”
- **TNX-102 to be first-in-class sleep quality treatment**

	Non-restorative Sleep	Analgesic / Pain Killers	Anti-depressant	Muscle Relaxants
FDA Approved		<ul style="list-style-type: none"> • Lyrica (<i>pregabalin</i>) 	<ul style="list-style-type: none"> • Cymbalta (<i>duloxetine</i>) • Savella (<i>milnacipran</i>) 	
In Development	<ul style="list-style-type: none"> • TNX-102 (<i>VLD-cyclobenzaprine</i>) 			
Development Abandoned	<ul style="list-style-type: none"> • Rekinla (<i>sodium oxybate</i>) 			
Off Label	<ul style="list-style-type: none"> • Xyrem (<i>sodium oxybate</i>) 	<ul style="list-style-type: none"> • Neurontin (<i>gabapentin</i>) • Opiates 	<ul style="list-style-type: none"> • (<i>venlafaxine</i>) • (<i>bupropion</i>) 	<ul style="list-style-type: none"> • (<i>cyclobenzaprine</i>) • (<i>tizanidine</i>) • (<i>baclofen</i>) • (<i>carisoprodol</i>) • (<i>metaxalone</i>)

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Cyclobenzaprine Has an Impressive Safety Record and is Widely Used

- **Off-label Cyclobenzaprine: third most widely prescribed medication for FM***
- **1977: FDA approved Flexeril® (Merck)**
- **1990's: Extensive safety & efficacy studies (Merck)**
- **2007: FDA approved controlled release formulations (15/30 mg)**
- **2010: > One billion tablets prescribed**
- **No DEA scheduling, no recognized addictive potential**

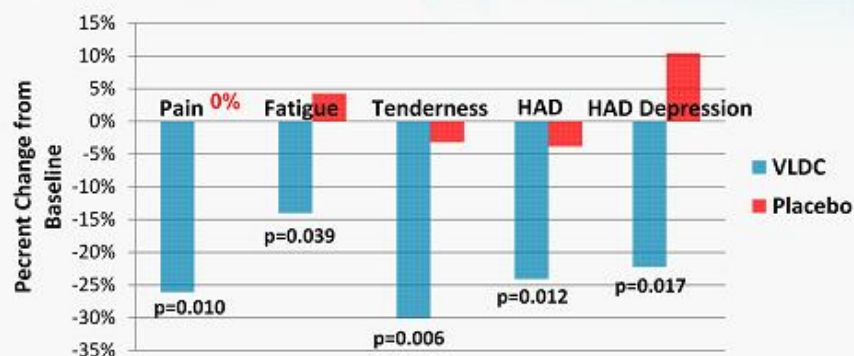
* Source: Frost & Sullivan Fibromyalgia Market Study, December 2010

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VLDC FM Pilot Study Results: Symptom Measures*

- Published in Journal of Rheumatology in Dec. 2011
- Harvey Moldofsky, thought leader and lead investigator



Change from Baseline (week 8): tenderness measured by dolorimetry; HAD is the Hospital Anxiety and Depression Scale; HAD Depression is the HAD depression subscale

* Moldofsky et al., J. Rheum. December 2011: <http://jrheum.org/content/early/2011/08/30/jrheum.110194.full.pdf+html>

TNX-102: VLDC New Formulation

- **Specifically designed for the treatment of FM**
 - Fast absorption
 - Elevated blood levels during the night to improve sleep quality
 - Low next-day blood levels to minimize morning somnolence
- **Differentiated from, but not competitive with, other FM therapies**
 - First-in-class sleep quality treatment
 - Indicated for bedtime treatment
 - Patient dissatisfaction high: physicians often switch drugs
- **With a unique formulation and new indication, reimbursement coverage is expected**

TNX-102: Development Plan

- **Formulation and PK trials**

- PK Study on first version completed: 30 subjects; three week study
- PK Study on second version: completion expected in September 2012
- Pharmacodynamic study contemplated by year-end

- **Pivotal Efficacy Trial**

- 2-arm, 12-week study; 150 patients per arm
- Study design, endpoints to mirror those used by Lyrica and Cymbalta
 - Pain and a composite endpoint of other FM symptoms
- Results expected early 2014

- **Partnership for second pivotal and commercialization**

TNX-105: VLDC for PTSD

- **3.5% of U.S. adult population will have suffered from PTSD in past 12 months***
 - Any trauma can lead to PTSD
- **Unsatisfied market**
 - Only Zoloft® and Paxil® have FDA approval
- **Widespread painkiller abuse and addiction**
- **Leverage formulation/clinical work of TNX-102 to advance TNX-105**

* National Institutes of Mental Health & National Institutes of Health

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FM and PTSD - Related Conditions

- **Overlap of PTSD and FM symptoms**

- PTSD is thought to be exacerbated by non-restorative sleep
- Some are believed to suffer from both conditions simultaneously
- Some patients with FM meet PTSD criteria, and *vice versa*

- **PTSD has both combat and civilian forms**

- Zoloft and Paxil are approved for PTSD; market unsatisfied
- Brand prescriptions filled by generic sertraline and paroxetine
- DOD has a strong interest in promoting research on therapeutics

TONIX Pharmaceuticals Pipeline

- **TONIX has a comprehensive pipeline of CNS products**

Product	Indication	Status
TNX-102	Fibromyalgia	<ul style="list-style-type: none">• Very low dose cyclobenzaprine in novel formulation• Phase 2a successfully completed• Completing formulation to take into first pivotal trial• Trial expected to begin Q1 2013
TNX-105	Post-Traumatic Stress Disorder	<ul style="list-style-type: none">• Low dose cyclobenzaprine in novel formulation• Will leverage data from TNX-102 PK trial• Pivotal trials anticipated to start 2013• Applied for Department of Defense funding
TNX-201	Headache	<ul style="list-style-type: none">• NDA process for existing grandfathered, or DESI, product• Potentially shortened process for FDA approval• DESI to NDA switch products enjoy mandated exclusivity
TNX-301	Alcoholism	<ul style="list-style-type: none">• US patent allowed• Potential for government funding

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Intellectual Property

- **Active patenting strategy to extend exclusivity**

- Plan to file patents around TONIX products' unique PK profiles, which are a difficult patent class to circumvent

- **TNX-102**

- Methods of Use patents for use of VLDC in treatment of FM issued; expiration mid-2020
- Two formulation patents issued; expiration in mid-2021
- PK patents expected to be filed near term

- **TNX-105**

- Methods of Use patent for use of VLDC in treatment of PTSD filed
- Two formulation patents issued; expiration in mid-2021

Upcoming Milestones

- **Short and intermediate term value inflection milestones**

Timing	Milestones Related to TNX-102
Q2 2012	<ul style="list-style-type: none">• PK study on second formulation
Q3 2012	<ul style="list-style-type: none">• PK/PD on “commercial” formulation and dose
Q1 2013	<ul style="list-style-type: none">• Commencement of initial pivotal trial
Q3 2013	<ul style="list-style-type: none">• Interim look at initial pivotal trial data
Q1-Q2 2014	<ul style="list-style-type: none">• Completion of initial pivotal trial• Partnering

Why Invest in TONIX?

- **Capital efficient drug development strategy focused on high-value, first-in-class products**
- **FM and PTSD are significant unmet needs with large market opportunities**
- **TNX-102 is expected to be a first-in-class treatment for FM and differentiated from generic cyclobenzaprine**
- **Low risk, low-cost development pathway**
- **Near-term value inflection point**
- **Experienced management and board**

Financial Information

Ticker	TNXP:OTCQB
Shares Outstanding (in millions)	34.3
Cash Balance at 12/31/11 (in millions)*	\$4.0
52 Week Trading Range (as of 4/30/12)**	\$0.99 - \$2.06

* Pro-forma for the closing of a PIPE financing with net proceeds of \$3.9 million in Q1 2012

** Stock first traded in February 2012

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