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): April 5, 2012

TONIX PHARMACEUTICALS HOLDING CORP.

(Exact name of registrant as specified in its charter)

Nevada	**333-150419**	**26-1434750**
(State or Other Jurisdiction of Incorporation)	**(Commission File Number)**	**(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 Anslow LLP
61 Broadway
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):

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

ITEM 8.01 Other Events.

On April 5, 2012, Tonix Pharmaceuticals Holding Corp. (the "Company"), issued a press release announcing that it has completed a pharmacokinetic study of the first formulation of its lead drug, TNX-102, for the treatment of fibromyalgia syndrome.

A copy of the press release that discusses this matter is filed as Exhibit 99.1 to, and incorporated by reference in, this report. The information in this Current Report is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that Section. The information in this Current Report shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, except as shall be expressly set forth by specific reference in any such filing.

ITEM 9.01 Financial Statements and Exhibits.

(d) Exhibits.

99.1 Press Release, dated April 5, 2012, issued by Tonix Pharmaceuticals Holding Corp.

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: April 5, 2012

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

Exhibit 99.1

Contacts:
TONIX Pharmaceuticals Holding Corp.
Benjamin Selzer, Chief Operating Officer
(212) 980-9155 x106

Porter, LeVay & Rose, Inc.
Sharon Weinstein, Investor Relations
Bill Gordon, Media Relations
(212) 564-4700

FOR IMMEDIATE RELEASE

TONIX PHARMACEUTICALS COMPLETES PHARMACOKINETIC STUDY ON NEW FORMULATION OF TNX-102 FOR FIBROMYALGIA

-Results Justify Further Development of TNX-102 as Potential Bedtime Treatment for Fibromyalgia -

New York, NY – April 5, 2012 – Tonix Pharmaceuticals Holding Corp. (OTCBB:TNXP) ("TONIX" or the "Company"), a specialty pharmaceutical company developing therapies for challenging disorders of the central nervous system ("CNS") completed a pharmacokinetic (PK) study of the first formulation of its lead drug, TNX-102, for the treatment of fibromyalgia syndrome ("FM"). The study results support further development of TNX-102 as a product that can potentially deliver benefits similar to those observed in FM patients treated with very low dose cyclobenzaprine in the Company's dose-escalating Phase 2a study. This research was published in the December 2011 edition of the Journal of Rheumatology and can be viewed by accessing the following link: http://jrheum.org/content/early/2011/08/30/jrheum.110194.full.pdf+html.

TONIX is developing new formulations of cyclobenzaprine that are designed for bedtime use. The Company is investigating different technologies to improve the absorption of cyclobenzaprine. The technology applied in this study involves a mixture of cyclobenzaprine and lipids that the Company obtained from Lipocine, Inc. and is designated TNX-102 2.4 mg promicellar gelatin capsules, or gelcaps.

The PK study was conducted on healthy subjects in Canada under a U.S. Investigational New Drug Application, or IND, and a Canadian Clinical Trial Application, or CTA. This cross-over randomized study assessed the blood levels of cyclobenzaprine in approximately 30 healthy adult volunteers after they ingested either a TNX-102 2.4 mg promicellar gelcap or a marketed, generic version of Flexeril® 5 mg immediate release cyclobenzaprine. Circulating blood levels of cyclobenzaprine after oral administration of the TNX-102 2.4 mg promicellar gelcap in a fed or fasting state were determined and compared to the blood levels resulting from oral administration of the currently marketed 5 mg immediate release tablet ("tablet") in a fasting state. The clinical portion of this study was completed at the end of 2011 and analyses of the data were completed during the first quarter of 2012.

Both TNX-102 2.4 mg promicellar gelcaps and the cyclobenzaprine 5 mg immediate release tablet were well-tolerated in this PK study. There were no serious and/or unexpected adverse events, which was consistent with TONIX's expectations and the marketing experience with cyclobenzaprine, a widely used treatment for muscle spasm.

The new formulation preserved fundamental properties of the tablet including the rate of absorption and elimination of cyclobenzaprine. Absorption was measured by the time to peak plasma concentration, or T_{max}, and elimination was measured by the half-life, or $T_{½}$. The finding that the TNX-102 2.4 mg promicellar gelcap formulation did not change the T_{max}, or the $T_{½}$ of cyclobenzaprine delivered by the 5 mg immediate release tablets suggests that the new formulation will maintain clinical effects of immediate release cyclobenzaprine such as the beneficial effects on FM patients observed in our dose-escalating Phase 2a study.

When compared to the generic cyclobenzaprine 5 mg immediate release tablet administered under fasting conditions, the TNX-102 2.4 mg promicellar gelcap has a lower extent and rate of absorption, as measured by the "area under the curve" or "AUC" of the time and concentration data and also by the maximum concentration or C_{max}. The finding demonstrates that TNX-102 2.4 mg promicellar gelcap is clearly differentiated and not bioequivalent to generic cyclobenzaprine 5 mg immediate release tablet, and suggests that a commercial product based on the new formulation would be protected from substitution by pharmacists with generic cyclobenzaprine.

No food effect was observed in the comparison of TNX-102 2.4 mg promicellar gelcaps between fed and fasting states, indicating this formulation provides dosing precision. TONIX plans to conduct at least one additional pharmacokinetic study before selecting a final formulation for clinical development that will be tested on FM patients. TONIX is on track to initiate a pivotal efficacy study with the final formulation of TNX-102 in the first quarter of 2013.

Seth Lederman, M.D., Chairman and President of TONIX said, “We are pleased to have completed the pharmacokinetic study on the first TNX-102 formulation, which represents an important milestone for our company. The results of this study provide us with valuable insights which will enable us to further advance our development programs targeting Fibromyalgia and other challenging disorders of the central nervous system. The core technology underlying TNX-102 improves the quality of sleep in patients with fibromyalgia and perhaps other chronic pain syndromes. We are developing TNX-102 to be a fundamental advance in sleep hygiene and pain management and to be safer and more effective than currently available treatments.”

About Fibromyalgia

Fibromyalgia Syndrome (FM) is a central nervous system (CNS) condition characterized by diffuse musculoskeletal pain, increased pain sensitivity, fatigue and disturbed sleep. According to the National Institutes of Health, scientists estimate that FM affects 5 million Americans age 18 or older. There are currently three drugs approved for the indication of FM: Lyrica®, an analgesic; Cymbalta® an antidepressant and Savella®, whose active ingredient is marketed as an antidepressant in Europe. No medicine from the “muscle relaxant” category has been approved for FM. Lyrica, Cymbalta and Savella are all daytime treatments; and no bedtime medication has been approved for this indication.

About TONIX

TONIX Pharmaceuticals is developing new therapies for challenging disorders of the central nervous system. The Company targets conditions characterized by significant unmet medical need, inadequate existing treatment options, and high dissatisfaction among both patients and physicians. TONIX reformulates approved pharmaceutical active ingredients to design products with optimal safety, efficacy and predictability. Its most advanced product candidates, TNX-102 for FM and TNX-105 for PTSD, are novel dosage formulation of cyclobenzaprine, the active ingredient in two U.S. FDA-approved muscle relaxants. To learn more about the Company and its pipeline of treatments for CNS conditions, please visit www.tonixpharma.com.

Certain statements in this press release are forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. These statements may be identified by the use of forward-looking words such as "anticipate," "believe," "forecast," "estimated" and "intend," among others. These forward-looking statements are based on TONIX’s current expectations and actual results could differ materially. There are a number of factors that could cause actual events to differ materially from those indicated by such forward-looking statements. These factors include, but are not limited to, substantial competition; our ability to continue as a going concern; our need for additional financing; uncertainties of patent protection and litigation; uncertainties of government or third party payer reimbursement; limited sales and marketing efforts and dependence upon third parties; and risks related to failure to obtain FDA clearances or approvals and noncompliance with FDA regulations. As with any pharmaceutical under development, there are significant risks in the development, regulatory approval and commercialization of new products. TONIX does not undertake an obligation to update or revise any forward-looking statement. Investors should read the risk factors set forth in the Annual report on Form 10-K filed with the SEC on March 30, 2012 and future periodic reports filed with the Securities and Exchange Commission. All of the Company's forward-looking statements are expressly qualified by all such risk factors and other cautionary statements. The information set forth herein speaks only as of the date hereof.

###