

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):

November 14, 2008

XENOMICS, INC.
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

FLORIDA
(STATE OR OTHER JURISDICTION OF INCORPORATION)

333-103083
(COMMISSION FILE NUMBER)

04-3721895
(I.R.S. EMPLOYER IDENTIFICATION NO.)

One Deer Park Drive, Suite F
Monmouth Junction, NJ 08852
(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)

(732) 438-8290
(REGISTRANT'S TELEPHONE NUMBER, INCLUDING AREA CODE)

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))

Item 2.04 Triggering Events That Accelerate or Increase a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement.

As previously reported in the Xenomics, Inc. (the "Company") Form 8-K filing dated November 20, 2006, the Company entered into security purchase agreements with various purchasers for the sale of \$2.225 million aggregate principal amount of 6% convertible debentures (the "Debentures") and warrants to purchase shares of the Company's common stock. The description of the Debentures and related transaction documents herein is qualified in its entirety by the transaction documents filed with the Securities and Exchange Commission as exhibits to the Company's Form 8-K filed November 20, 2006.

On November 14, 2008, which was the maturity date of the Debentures, the Company did not pay amounts due the Debenture holders in the aggregate principal amount of approximately \$2,170,500, plus interest and penalties. Such failure to pay represents an Event of Default under the Debentures.

As previously reported in the Company's Form 8-Ks, dated February 28, 2008 and July 14, 2008, the Company has been seeking to restructure the debt owed to holders of the Debentures following various possible previous events of default and covenant breaches, including events of default under the transaction documents related to the purchase of the Debentures. Such previous defaults pertain to the Company's failures to maintain its listing on the OTCBB, file a registration statement and pay interest on the Debentures when due.

As a consequence of the Events of Default, the Company is subject to increases in amounts due upon redemption, an increase in the annual rate of interest, late fees and liquidated damages under a registration rights agreement.

Accordingly, the Company has been negotiating a forbearance agreement with a majority of the Debenture holders.

The Company believes that the failure of Company to negotiate a satisfactory restructuring or forbearance agreement with some or all of the Debenture holders could have a material adverse affect on the Company.

SIGNATURE

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

Date: November 20, 2008

XENOMICS, INC.

By: /s/ Gary Anthony

Gary Anthony
Vice President and Controller