

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):

October 2, 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 1.01 ENTRY INTO A MATERIAL DEFINITIVE AGREEMENT.

At a meeting of the Board of Directors (the "Board") of the Company held on October 2, 2008, the Board advised Dr. Gianluigi Longinotti-Buitoni, the Company's Chairman, that it will exercise its put option, to the maximum amount, under the Warrant and Put Option Agreement, originally dated as of November 30, 2006, as amended (the "Agreement"), between the Company and Dr. Longinotti-Buitoni. Under the Agreement, the Company is requiring Dr. Longinotti-Buitoni to invest up to \$1,000,000 in the Company for the purchase of up to 1,818,181 units, each unit consisting of one share of the Company's common stock and one warrant, at a purchase price of \$0.55 per unit. Each warrant is exercisable to purchase one share of the Company's common stock at a price of \$0.70 per share and expires in November 2012. The purchase of the units by Dr. Longinotti-Buitoni under the terms of the Agreement is not assured as Dr. Longinotti-Buitoni has indicated that he will reply to the Company's put notice by the end of this week.

ITEM 5.02 DEPARTURE OF DIRECTORS OR PRINCIPAL OFFICERS; ELECTION OF DIRECTORS; APPOINTMENT OF PRINCIPAL OFFICERS; COMPENSATORY ARRANGEMENTS OF CERTAIN OFFICERS.

At the same Board meeting, Dr. Longinotti-Buitoni and the Board agreed that, effective October 3, 2008, Dr. Longinotti-Buitoni would no longer serve in an executive capacity as the Company's Executive Chairman. He will continue to serve as Chairman of the Company's Board of Directors. The Board established an Executive Committee to be chaired by Dr. Kira Sheinerman and constituted with Dr. David Sidransky. It is anticipated that the Executive Committee will meet more frequently than the Board and will act on behalf of the Board between Board meetings to actively exercise oversight responsibility over management and the business and affairs of the Company, and closely monitor the execution of the Company's business plan as defined by the Board. The Committee will focus on management's bringing the Company into an opportune business position and securing long term funding to carry out the company's business plan as it begins

to commercialize its technology. At the same time, the Executive Committee will institute a search for a seasoned Chief Executive Officer with experience relevant to the development and marketing of diagnostic products and tests.

ITEM 8 OTHER EVENTS

At the current time, the Company's financial resources are low and the Company has made a decision to reduce certain laboratory operations. If new capital is not brought into the Company in the near future, the Company's ability to continue as a going concern will be in question. The Company intends to actively work towards improving its financial position and will consider available options to resolve the deficiency and regain the full operational status.

FORWARD LOOKING STATEMENTS

Some of the statements in this Form 8-K constitute "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995. These statements are based on our current expectations, estimates and projections. Words such as "will," "expects," "believes" and similar expressions are used to identify these forward-looking statements. The forward-looking statements in this Form 8-K include, without limitation, the purchase of units by Dr. Longinotti-Buitoni and potential consequences. These statements are only predictions and as such are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Forward-looking statements are based upon assumptions as to future events or our future financial performance that may not prove to be accurate. Actual outcomes and results may differ materially from what is expressed or forecast in these forward-looking statements, including an adverse court determination, changes in law, rules or regulations and other actions of parties adverse to the Company in regard to its rights under its outstanding debt obligations. As a result, these statements speak only as of the date they were made, and the Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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.

XENOMICS, INC.

Date: October 8, 2008

By: /s/Gary Anthony

Gary Anthony, Vice President and Controller

