

**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): February 22, 2010

**LIXTE BIOTECHNOLOGY HOLDINGS, INC.**

DELAWARE  
(State or other jurisdiction of incorporation)

000-51436  
(Commission File Number)

20-2903526  
(IRS Employer Identification No.)

248 Route 25A, No. 2  
East Setauket, New York 11733  
(Address of principal executive offices)

Registrant's telephone number, including area code: 631 942 7959

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 of 1933 (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(e) under the Exchange Act (17 CFR 240.13e-4(e))
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### Item 3.02 Unregistered Sales of Equity Securities

Effective February 22, 2010, Lixte Biotechnology Holdings, Inc. (the “Company”) sold to one accredited investor 1,000,000 Units, each Unit consisting of (a) one share of its Common Stock (a “Share”), (b) one three year warrant (a “Warrant”) to purchase a Share at an exercise price of \$0.50 per Share and (c) one three year Warrant to purchase a Share at an exercise price of \$0.75 per Share. The purchase price of a Unit was \$0.50 resulting in gross proceeds of \$500,000. There were no commissions paid with respect to the private placement.

The Company has agreed to include the Shares and those issuable upon exercise of the Warrants requested by the holders to be so included in any registration statement with the SEC permitting the resale of such securities subject to customary cutbacks.

The Units sold were not registered under the Securities Act of 1933, as amended (the “Act”) in reliance upon the exemption from registration contained in Section 4(2) of the Act and Regulation D promulgated thereunder. The Shares, Warrants and Shares issuable upon the exercise of the Warrants may not be reoffered or sold in the United States by the holders in the absence of an effective registration statement or exemption from the registration requirements of the Act.

The Company intends to use the net proceeds to pursue development of proprietary compounds for the submission of an IND to the Food & Drug Administration for a Phase I clinical trial, and for working capital.

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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: February 22, 2010

LIXTE BIOTECHNOLOGY HOLDINGS, INC.

By: /s/ John S. Kovach  
John S. Kovach, Chief Executive Officer

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