

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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 29, 2008

STEREOTAXIS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-50884

(Commission File Number)

94-3120386

(IRS Employer Identification No.)

4320 Forest Park Avenue, Suite 100, St. Louis, Missouri

(Address of Principal Executive Offices)

63108

(Zip Code)

(314) 678-6100

(Registrant's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

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

On February 29, 2008, Stereotaxis, Inc. (the "Company") entered into a Fifth Loan Modification Agreement (the "Agreement") with Silicon Valley Bank (the "Bank") to modify the terms of that certain Loan and Security Agreement, dated April 30, 2004, by and between the Company and the Bank, as amended (the "Original Agreement").

The Agreement increases the maximum amount of credit that potentially may be extended to the Company by the Bank to \$30 million. The Agreement currently provides for a \$10 million sublimit for funds advanced subject to certain investor guarantees at an interest rate equal to the greater of the prime rate or six percent. Sanderling Venture Partners and Alafi Capital Company, stockholders of the Company, have previously executed a \$20 million unsecured loan commitment to the Company, which may take the form, at the Company's option, of guarantees in favor of the Bank, severally but not jointly and severally, of amounts borrowed by the Company from the Bank.

The interest rate on the Company's revolving line of credit is modified to be the greater of: (i) the prime rate plus one percent or (ii) seven percent. The Agreement also replaces the Company's adjusted quick ratio covenant set forth in the Original Agreement with a requirement that the Company maintain certain amounts of tangible net worth at the end of each month from January 2008 until February 2009.

SIGNATURES

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.

STEREOTAXIS, INC.

Date: March 6, 2008

By: /s/ James M. Stolze
Name: James M. Stolze
Title: Vice President and Chief Financial Officer