
**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): October 9, 2009

STEREOTAXIS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-50884

(Commission File Number)

4320 Forest Park Avenue, Suite 100, St. Louis, Missouri
(Address of Principal Executive Offices)

94-3120386

(IRS Employer Identification No.)

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.

Stereotaxis, Inc. (the "Company"), Alafi Capital Company LLC and certain affiliates of Sanderling Venture Partners (collectively, the "Lenders") have reached agreement on the extension by the Lenders of their obligations under that certain Note and Warrant Purchase Agreement, effective February 7, 2008, by and among the Company and the Lenders, as amended in February 2009.

Under the arrangement, the Lenders have agreed to provide an aggregate of \$10 million of financing, either as direct loans to the Company or as a guarantee of amounts borrowed by the Company under its working capital facility with Silicon Valley Bank (the "Bank"), the Company's primary lending bank. Additionally, the Lenders have extended such guarantees in favor of the Bank. The commitment will now expire on the earlier of March 31, 2011 or the date the Company receives at least \$30 million of third party, non-bank financing. In exchange for the extension of the commitment, the Company has agreed to issue the Lenders warrants to purchase an aggregate of 664,064 shares of common stock at an exercise price of \$4.25 per share. The Lenders are affiliates of Christopher Alafi and Fred A. Middleton, respectively, each of whom is a member of the Company's Board of Directors.

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: October 9, 2009

By: /s/ James M. Stolze

Name: James M. Stolze

Title: Vice President and Chief Financial Officer