

Stereotaxis, Inc.  
4320 Forest Park Avenue, Suite 100  
St. Louis, MO 63108  
(314) 678-6100  
(314) 678-6300 Fax

July 6, 2012

**VIA EDGAR**

U.S. Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549  
Attention: Russell Mancuso and Tom Jones

**Re: Stereotaxis, Inc.  
Registration Statement on Form S-1  
Filed June 11, 2012  
File No. 333-182053**

Dear Mr. Mancuso and Mr. Jones:

I am writing this letter on behalf of Stereotaxis, Inc. (the "Company") in response to the letter, dated June 28, 2012, of the Staff (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission") regarding the above-referenced filing. This letter sets forth the comment of the Staff in the comment letter (italicized and numbered in accordance with the comment letter) and, following the comment, sets forth the Company's response.

- 1. Please confirm that you do not intend to seek acceleration of the effective date of this registration statement until after shareholders have authorized the shares offered in the registered transaction. Also, confirm that you will file exhibit 5.1 before you seek acceleration of the effective date.*

We confirm that we do not intend to seek acceleration of the effective date of this registration statement until after shareholders have authorized the shares offered in the registered transaction at which time we will also file exhibit 5.1.

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- 2. Please address in this filing the applicable comments in our letter to you dated June 15, 2012 regarding your registration statement on Form S-1, file no. 333-181618.*

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We acknowledge the Staff's comment and confirm that we will address the applicable comments from your June 15, 2012 letter regarding our registration statement on Form S-1, file no. 333-181618 in the same manner when we file an amendment to the above-captioned registration statement.

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In connection with responding to the Staff's comments, the Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

We appreciate the Staff's continued review and look forward to hearing from you with respect to these comment responses. If you require any additional information on these issues, or if we can provide you with any other information which will facilitate your continued review of this filing, please advise us at your earliest convenience. You may reach me at (314) 678-6138 or by fax at (314) 667-3448.

Sincerely,

/s/ Karen W. Duros

Karen W. Duros  
Sr. VP and General Counsel

cc: Samuel W. Duggan II (Stereotaxis, Inc.)  
James L. Nouss, Jr.  
Robert J. Endicott

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