

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

STEREOTAXIS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

94-3120386
(I.R.S. Employer
Identification No.)

4320 Forest Park Avenue, Suite 100
St. Louis, Missouri 63108
(Address of Principal Executive Offices, including zip code)

Stereotaxis, Inc. 2002 Stock Incentive Plan
Stereotaxis, Inc. 2009 Employee Stock Purchase Plan
(Full title of the plans)

Michael P. Kaminski
President and Chief Executive Officer
Stereotaxis, Inc.
4320 Forest Park Avenue, Suite 100
St. Louis, Missouri 63108
(Name and address of agent for service)
(314) 678-6100
(Telephone number, including area code, of agent for service)

Copies to:
James L. Nouss, Jr., Esq.
Robert J. Endicott, Esq.
Bryan Cave LLP
211 North Broadway, Suite 3600
St. Louis, Missouri 63102-2750
(314) 259-2000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, \$0.001 par value	2,500,000	\$6.52(2)	\$16,296,487(2)	\$910
Common Stock, \$0.001 par value	250,000	\$4.63(3)	\$1,157,500(3)	\$65

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock, par value \$0.001 per share (the "Common Stock"), that becomes issuable under the 2002 Stock Incentive Plan (the "2002 Plan") and the 2009 Employee Stock Purchase Plan by reason of any stock splits, stock dividends, recapitalization or other similar transactions.
- (2) This estimate is made pursuant to Rule 457(c) and (h) of the Securities Act solely for purposes of calculating the registration fee, and is determined according to the following information: (a) for the 1,858,853 shares of Common Stock reserved for issuance upon the exercise of outstanding options granted under the 2002 Plan, the proposed maximum offering price per share is \$7.17 per share, which is the weighted average exercise price of the options granted under the 2002 Plan as of July 31, 2009 and (b) for the 641,147 shares of Common Stock available for future grants under the 2002 Plan, the average of the high and low prices for the Registrant's Common Stock reported by the NASDAQ Global Market on August 3, 2009.
- (3) This estimate is made pursuant to Rule 457(c) and (h) of the Securities Act solely for purposes of calculating the registration fee, and is determined

according to the average of the high and low prices for the Registrant's Common Stock reported by the NASDAQ Global Market on August 3, 2009.

PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be sent or given to participants in the Stereotaxis, Inc. 2002 Stock Incentive Plan (the "2002 Plan") and the Stereotaxis, Inc. 2009 Employee Stock Purchase Plan (the "2009 Plan") as specified in Rule 428(b)(1) under the Securities Act of 1933, as amended (the "Securities Act"). In accordance with the instructions to Part I, those documents are not filed with the Securities and Exchange Commission (the "Commission") as part of this Registration Statement or a prospectus under Rule 424 of the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by Stereotaxis, Inc. (the "Registrant" or "Company") with the Commission (File No. 000-50884) are hereby incorporated by reference:

- (a) The Registrant's Annual Report filed on Form 10-K for the fiscal year ended December 31, 2008;
- (b) The Registrant's Quarterly Report filed on Form 10-Q for the fiscal quarter ended March 31, 2009;
- (c) The Registrant's Current Reports on Form 8-K filed with the Commission on January 8, 2009, February 24, 2009, February 26, 2009 (regarding Item 3.02), February 27, 2009, March 16, 2009, April 10, 2009 and August 6, 2009 (regarding Item 5.02) (other than the portions of those documents not deemed to be filed);
- (d) The description of the Registrant's common stock contained in the Registrant's Registration Statement on Form 8-A dated August 2, 2004, registering the Registrant's common stock under Section 12(g) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including any amendments or reports filed for the purpose of updating such description; and
- (e) The Registrant's Current Report on Form 8-K filed on August 6, 2009, which updated certain information in the Registrant's Annual Report filed on Form 10-K for the fiscal year ended December 31, 2008.

In addition, all documents subsequently filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents (but this shall not include any information that is merely furnished to the Commission). These documents include periodic reports, such as Proxy Statements, Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K (other than the portions of those documents not deemed to be filed, which are deemed not to be incorporated by reference in this Registration Statement). Any statement contained herein, in an amendment hereto, or in any document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified

or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document incorporated or deemed to be incorporated herein by reference, which statement is also incorporated herein by reference, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

The securities to be offered are registered under Section 12 of the Exchange Act.

Item 5. Interests of Named Experts and Counsel.

The validity of the securities offered hereby has been passed upon for us by Bryan Cave LLP, St. Louis, Missouri. James L. Nouss, Jr., a partner of our legal counsel Bryan Cave LLP, beneficially owns 11,727 shares of our common stock, and is also our corporate secretary.

Item 6. Indemnification of Directors and Officers.

The Company's amended and restated certificate of incorporation provides that, to the fullest extent permitted by the Delaware General Corporation Law as the same exists or may hereafter be amended, its directors shall not be liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director. In addition, the Company's certificate of incorporation provides that it may, to the fullest extent permitted by law, indemnify any person made or threatened to be made a party to an action, suit or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that such person or his or her testator or intestate is or was a director, officer or employee of the Company, or any predecessor of the Company, or serves or served at any other enterprise as a director, officer or employee at the request of the Company or any predecessor to the Company.

The Company's amended and restated bylaws provide that the Company shall indemnify its directors and officers to the fullest extent not prohibited by the Delaware General Corporation Law or any other applicable law. The Company is not required to indemnify any director or officer in connection with a proceeding (or part thereof) brought by such director or officer unless (i) such indemnification is expressly required by law; (ii) the proceeding was authorized by the Company's board of directors; or (iii) such indemnification is provided by the Company, in its sole discretion, pursuant to the powers vested in the Company under the Delaware General Corporation Law or any other applicable law. In addition, the Company's bylaws provide that the Company may indemnify its employees and other agents as set forth in the Delaware General Corporation Law or any other applicable law.

The Company has also entered into separate indemnification agreements with its directors that require it, among other things, to indemnify each of them against certain liabilities that may arise by reason of their status or service with the Company or on behalf of the Company, other than liabilities arising from willful misconduct of a culpable nature. The Company is not required to indemnify under the agreement for (i) actions initiated by the director without the authorization or consent of the Company's board of directors; (ii) actions initiated to enforce the indemnification agreement unless the director is successful; (iii) actions resulting from violations of Section 16 of the Exchange Act in which a final judgment has been rendered against the director; and (iv) actions to enforce any non-compete or non-disclosure provisions of any agreement.

The indemnification provided for above provides for reimbursement of all losses of the indemnified party including expenses, judgment, fines and amounts paid in settlement. The right to indemnification set forth above includes the right for the Company to pay the expenses (including attorneys' fees) incurred in defending any such proceeding in advance of its final disposition in certain circumstances.

The Delaware General Corporation Law provides that indemnification by a Delaware corporation is permissible only when the director, officer, employee or agent of the corporation acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The Delaware General Corporation Law also precludes indemnification in respect of any claim, issue or matter as to which an officer, director, employee or agent shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine that, despite such adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court deems proper.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

The Exhibits to this Registration Statement are listed in the Exhibit Index to this Registration Statement, which Index is incorporated herein by reference.

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that Paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of St. Louis, State of Missouri, on this 6th day of August, 2009.

Stereotaxis, Inc.

By: /s/ Michael P. Kaminski
Michael P. Kaminski
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints each of Michael P. Kaminski and James M. Stolze, his true and lawful attorneys in fact and agents for him and on his behalf and in his name, place and stead, in any and all capacities to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with exhibits and any and all other documents filed with respect thereto, with the Securities and Exchange Commission (or any other governmental or regulatory authority), granting unto said attorneys, and each of them, full power and authority to do and to perform each and every act and thing requisite and necessary to be done in and about the premises in order to effectuate the same as fully to all intents and purposes as he might or could do if personally present, hereby ratifying and confirming all that said attorneys in fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Michael P. Kaminski</u> Michael P. Kaminski	President, Chief Executive Officer and Director (Principal Executive Officer)	July 31, 2009
<u>/s/ James M. Stolze</u> James M. Stolze	Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	July 31, 2009

Signature	Title	Date
/s/ Fred A. Middleton Fred A. Middleton	Chairman of the Board of Directors	July 31, 2009
/s/ Christopher Alafi, Ph.D. Christopher Alafi, Ph.D.	Director	July 31, 2009
/s/ David W. Benfer David W. Benfer	Director	July 31, 2009
/s/ Bevil J. Hogg Bevil J. Hogg	Director	July 31, 2009
/s/ William M. Kelley William M. Kelley	Director	July 31, 2009
/s/ Abhijeet J. Lele Abhijeet J. Lele	Director	July 31, 2009
/s/ Robert J. Messey Robert J. Messey	Director	July 31, 2009
/s/ William C. Mills III William C. Mills III	Director	July 31, 2009
/s/ Eric N. Prystowsky, M.D. Eric N. Prystowsky, M.D.	Director	July 31, 2009

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Exhibit</u>
4.1	2002 Stock Incentive Plan, incorporated by reference to Exhibit E to the Registrant's Revised Definitive Proxy Statement filed with the Commission on April 27, 2009
4.2	2009 Employee Stock Purchase Plan, incorporated by reference to Exhibit D to the Registrant's Revised Definitive Proxy Statement filed with the Commission April 27, 2009
5.1	Opinion of Bryan Cave LLP
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accountants
23.2	Consent of Bryan Cave LLP (contained in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)



August 6, 2009

Stereotaxis, Inc.
4320 Forest Park Avenue, Suite 100
St. Louis, Missouri 63108

Ladies and Gentlemen:

We have acted as special counsel to Stereotaxis, Inc., a Delaware corporation (the "Company"), in connection with the registration under the Securities Act of 1933, as amended, by means of a registration statement on Form S-8 (the "Registration Statement") of an aggregate of 2,750,000 shares of the Company's common stock, par value \$0.001 per share (the "Shares"), which may be issued pursuant to the Stereotaxis, Inc. 2002 Stock Incentive Plan or the Stereotaxis, Inc. 2009 Employee Stock Purchase Plan (each, a "Plan").

In connection herewith, we have examined:

- (1) the Amended and Restated Certificate of Incorporation of the Company;
- (2) the Amended and Restated Bylaws of the Company;
- (3) each Plan; and
- (4) the Registration Statement.

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such other corporate records, agreements and instruments of the Company, statements and certificates of public officials and officers of the Company, and such other documents, records and instruments, and we have made such legal and factual inquiries as we have deemed necessary or appropriate as a basis for us to render the opinions hereinafter expressed. In our examination of the foregoing, we have assumed the genuineness of all signatures, the legal competence and capacity of natural persons, the authenticity of documents submitted to us as originals and the conformity with authentic original documents of all documents submitted to us as copies. When relevant facts were not independently established, we have relied without independent investigation as to matters of fact upon statements of governmental officials and upon representations made in or pursuant to the certificates and statements of appropriate representatives of the Company.

In connection herewith, we have assumed that, other than with respect to the Company, all of the documents referred to in this opinion letter have been duly authorized by, have been duly executed and delivered by, and constitute the valid, binding and enforceable obligations of, all of the parties to such documents, all of the signatories to such documents have been duly authorized and all such parties are duly organized and validly existing and have the power and authority (corporate or other) to execute, deliver and perform such documents.

Bryan Cave LLP
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Suite 3600
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Based upon the foregoing and in reliance thereon, and subject to the assumptions, comments, qualifications, limitations and exceptions set forth herein, we are of the opinion that the Shares have been duly and validly authorized for issuance, and when issued, delivered and paid for in accordance with the applicable Plan, the Shares will be legally issued, fully paid and non-assessable.

This opinion is not rendered with respect to any laws other than the General Corporation Law of the State of Delaware. The opinions set forth herein are made as of the date hereof and are subject to, and may be limited by, future changes in the factual matters set forth herein, and we undertake no duty to advise you of the same. The opinions expressed herein are based upon the law in effect (and published or otherwise generally available) on the date hereof, and we assume no obligation to revise or supplement these opinions should such law be changed by legislative action, judicial decision or otherwise. In rendering our opinions, we have not considered, and hereby disclaim any opinion as to, the application or impact of any laws, cases, decisions, rules or regulations of any other jurisdiction, court or administrative agency.

This opinion is being delivered by us solely for your benefit in connection with the filing of the Registration Statement with the SEC. We do not render any opinions except as set forth above. We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the use of our name under the caption "Legal Matters" in the prospectus filed as a part thereof. We also consent to your filing copies of this opinion as an exhibit to the Registration Statement with such agencies of such states as you deem necessary in the course of complying with the laws of such states regarding the offering and sale of the securities addressed herein. In giving such consent, we do not thereby concede that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC promulgated thereunder.

Very truly yours,

/s/ Bryan Cave LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-00000) pertaining to the Stereotaxis, Inc. 2002 Stock Incentive Plan and Stereotaxis, Inc. 2009 Employee Stock Purchase Plan of our report dated March 12, 2009, except Note 19, as to which the date is August 6, 2009, with respect to the financial statements and schedule of Stereotaxis, Inc. for the year ended December 31, 2008, included in its Current Report on Form 8-K, filed with the Securities and Exchange Commission and of our report dated March 12, 2009 with respect to the effectiveness of internal control over financial reporting of Stereotaxis, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2008, filed with the Securities and Exchange Commission.

/s/ Ernst & Young, LLP

St. Louis, Missouri
August 6, 2009