
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

**POST-EFFECTIVE
AMENDMENT NO. 3
TO
FORM S-1 ON FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

STEREOTAXIS, INC.

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
(314) 678-6100

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Karen Witte Duros
Sr. Vice President & General Counsel
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(314) 678-6100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to public: From time to time after this registration statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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.

Large accelerated filer

Accelerated filer

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

Smaller reporting company

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the SEC, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

On May 23, 2012, Stereotaxis, Inc. (“Stereotaxis”) filed a registration statement with the Securities and Exchange Commission (the “SEC”) on Form S-1 (Registration No. 333-181618) (as amended, the “Registration Statement” or the “Form S-1”). The Registration Statement was declared effective by the SEC on August 3, 2012 to register for resale by the selling stockholders identified in the prospectus an aggregate of up to 2,819,345 shares of our common stock, par value \$0.001 per share (the “Common Stock”), including 650,618 shares of our common stock issuable to certain of the selling stockholders upon the exercise of warrants to purchase our common stock, by the selling stockholders named herein.

This Post-Effective Amendment No. 3 to Form S-1 on Form S-3 is being filed to update the Registration Statement to include information from our annual report on Form 10-K for the year ended December 31, 2013, filed on March 27, 2014 (including certain portions thereof that are incorporated by reference to our Definitive Proxy Statement on Schedule 14A, filed on April 28, 2014), and our annual report on Form 10-K/A (Amendment No. 1) for the year ended December 31, 2013, filed on May 2, 2014, and to convert the Form S-1 into a registration statement on Form S-3.

All filing fees payable in connection with the registration of the shares of the Common Stock covered by the Registration Statement were paid by the Company at the time of the initial filing of the Form S-1.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

Subject to Completion, dated May 2, 2014

PROSPECTUS



**Common Stock, \$0.001 par value
Up to 2,819,345 Shares**

This prospectus relates to the offer and sale, from time to time, of up to 2,819,345 shares of our common stock, par value \$0.001 per share, of Stereotaxis, Inc. (“Stereotaxis”), which includes 650,618 shares of our common stock issuable to certain of the selling stockholders upon the exercise of warrants to purchase our common stock, by the selling stockholders named herein. The shares and the warrants described herein were issued in connection with that certain Stock and Warrant Purchase Agreement dated as of May 7, 2012 between Stereotaxis and the selling stockholders named herein. We do not know if any or all of the warrants will be exercised or if any or all of the shares will be resold. We will not receive any proceeds from the sale of the shares, but, assuming exercise of all warrants to which the shares relate, we will receive up to \$2,186,727 in proceeds from the exercise of the warrants prior to those sales, which proceeds would be used for general corporate purposes. Please see “Selling Stockholders” and “Plan of Distribution” for information about the selling stockholders and the manner of offering of the common stock.

Our common stock is listed on the Nasdaq Capital Market under the symbol “STXS.” On May 1, 2014, the last reported sale price for our common stock on the Nasdaq Capital Market was \$ _____ per share.

Investing in our common shares involves risks. See “[Risk Factors](#)” beginning on page 3 of this prospectus.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2014.

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PROSPECTUS SUMMARY

This summary highlights selected information about Stereotaxis and a general description of the securities that may be offered for resale by the selling stockholders. This summary is not complete and does not contain all of the information that may be important to you. For a more complete understanding of us and the securities offered by the selling stockholders, you should carefully read this entire prospectus, including the “Risk Factors” section, any applicable prospectus supplement for these securities and the other documents we refer to and incorporate by reference. In particular, we incorporate important business and financial information into this prospectus by reference. On July 10, 2012, we effected a one-for-ten reverse stock split of our common stock. Unless otherwise indicated, all information set forth herein gives effect to such reverse stock split.

The Company

We design, manufacture and market robotic systems and instruments for use primarily by electrophysiologists for the treatment of abnormal heart rhythms known as cardiac arrhythmias. We offer our proprietary *Epoch* Solution, an advanced remote robotic navigation system for use in a hospital’s interventional surgical suite, or “interventional lab”. We believe the *Epoch* Solution revolutionizes the treatment of arrhythmias and coronary artery disease by enabling enhanced safety, efficiency and efficacy for catheter-based, or interventional, procedures. The *Epoch* Solution is comprised of the *Niobe* ES Robotic Magnetic Navigation System (“*Niobe* ES system”), *Odyssey* Information Management Solution (“*Odyssey* Solution”), and the *Vdrive* Robotic Navigation System (“*Vdrive* system”). We believe that our technology represents an important advance in the ongoing trend toward fully digitized, integrated and automated interventional labs and provides substantial, clinically important improvements over manual interventional methods, which often result in long and unpredictable procedure times with suboptimal therapeutic outcomes. We believe that our technology represents an important advance supporting efficient and effective information management and physician collaboration. The core elements of our technology, especially the *Niobe* ES system, are protected by an extensive patent portfolio, as well as substantial expertise and trade secrets.

Our *Niobe* ES system is the latest generation of the *Niobe* Robotic Magnetic Navigation System (“*Niobe* system”), which allows physicians to more effectively navigate proprietary catheters, guidewires and other delivery devices, both our own and those we are co-developing through strategic alliances, through the blood vessels and chambers of the heart to treatment sites in order to effect treatment. This is achieved using computer-controlled, externally applied magnetic fields that precisely and directly govern the motion of the internal, or working, tip of the catheter, guidewire or other interventional devices. We believe that our *Niobe* ES system represents a revolutionary technology in the interventional lab, bringing precise remote digital instrument control and programmability to the interventional lab, and has the potential to become the standard of care for a broad range of complex cardiology procedures.

The *Niobe* system is designed primarily for use by interventional electrophysiologists in the treatment of arrhythmias and approximately 1% of usage is by interventional cardiologists in the treatment of coronary artery disease. To date the significant majority of the Stereotaxis installations worldwide are intended for use in electrophysiology. The *Niobe* system is designed to be installed in both new and replacement interventional labs worldwide. Current and potential purchasers of our *Niobe* system include leading research and academic hospitals as well as community and regional medical centers around the world.

The *Niobe* system has been used in more than 66,000 procedures and is supported by more than 200 peer-reviewed publications in leading medical journals such as PACE, Europace, the Journal of the American College of Cardiology and the Journal of Interventional Cardiac Electrophysiology. *Niobe* system revenue represented 23%, 26%, and 19% of revenue for the years ended December 31, 2013, 2012, and 2011, respectively.

Stereotaxis has also developed the *Odyssey* Solution which provides an innovative enterprise solution for integrating, recording and networking interventional lab information within hospitals. The *Odyssey* Solution consists of two lab solutions including *Odyssey* Vision and the *Odyssey* Cinema system. *Odyssey* Vision consolidates all of the lab information from multiple sources, freeing doctors from managing complex interfaces during patient therapy for optimal procedural and clinical efficiency. The *Odyssey* Cinema system is an innovative solution delivering synchronized content targeted to improve care, enhance performance, increase referrals and market services. This tool includes an archiving capability that allows clinicians to store and replay entire procedures or segments of procedures. This information can be accessed from locations throughout the hospital local area network and over the Internet from anywhere with sufficient bandwidth. The *Odyssey* Solution may be acquired either as part of the *Epoch* Solution or on a stand-alone basis for installation in interventional labs and other locations where clinicians desire improved clinical workflows and related efficiencies. *Odyssey* system revenue represented 10%, 14%, and 18% of revenue for the years ended December 31, 2013, 2012, and 2011, respectively.

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Our *Vdrive* system provides navigation and stability for diagnostic and therapeutic devices designed to improve interventional procedures. The *Vdrive* system complements the *Niobe* ES system control of therapeutic catheters for fully remote procedures and enables single-operator workflow and is sold as two options, the *Vdrive* system and the *Vdrive Duo* system. In addition to the *Vdrive* system and the *Vdrive Duo* system, we also manufacture and market various disposable components (*V-Loop*, *V-Sono*, *V-CAS*, and *V-CAS Deflect*) which can be manipulated by these systems.

We promote the full *Epoch* Solution in a typical hospital implementation, subject to regulatory approvals or clearances. The full *Epoch* Solution implementation requires a hospital to agree to an upfront capital payment and recurring payments. The upfront capital payment typically includes equipment and installation charges. The recurring payments typically include disposable costs for each procedure, equipment service costs beyond warranty period, and software licenses. In hospitals where the full *Epoch* Solution has not been implemented, equipment upgrade or expansion can be implemented upon purchasing of the necessary upgrade or expansion.

As of December 31, 2013, we had cash and cash equivalents of \$13.8 million and working capital of \$4.4 million. We incurred operating losses of \$8.8 million, \$10.6 million, and \$31.9 million in 2013, 2012 and 2011, respectively. As a result, our auditors have expressed substantial doubt about our ability to continue as a going concern. Our auditors included an explanatory paragraph regarding our ability to continue as a going concern in their auditors' report on our 2011 and 2012 financial statements as well.

We were incorporated in Delaware in June 1990 as Stereotaxis, Inc. Our principal executive offices are located at 4320 Forest Park Avenue, Suite 100, St. Louis, Missouri 63108, and our telephone number is (314) 678-6100. Our website address is www.stereotaxis.com. Information contained on our website is not incorporated by reference into and does not form any part of this prospectus. As used in this prospectus, references to "Company", "we", "our", "us" and "Stereotaxis" refer to Stereotaxis, Inc. unless the context requires otherwise. *Niobe*[®], *Epoch*[™], *Odyssey*[®], *Odyssey Cinema*[™], *Vdrive*[™], *Vdrive Duo*[™], *V-Loop*[™], *V-Sono*[™], *V-CAS*[™], and *V-CAS Deflect*[™] are trademarks of Stereotaxis, Inc. All other trademarks that may appear in this prospectus are the property of their respective owners.

Not all products have and/or require regulatory clearance in all of the markets we serve. Please refer to "Regulatory Approval" in Item 1 of our Annual Report on Form 10-K for the year ended December 31, 2013 for a description of our regulatory clearance, licensing, and/or approvals we currently have or are pursuing.

Securities Being Offered

On May 7, 2012, we entered into a Stock and Warrant Purchase Agreement (the "PIPE SPA") with the selling stockholders hereunder pursuant to which we sold an aggregate of approximately 21.7 million shares of our common stock (the "PIPE Common Stock") at a price of \$0.3361 per share, together with six-year warrants at a price of \$0.125 per share to purchase an aggregate of approximately 21.7 million shares of our common stock having an exercise price of \$0.3361 per share (the "PIPE Warrants"), in each case prior to giving effect to the Reverse Stock Split. Each purchaser thereunder received a PIPE Warrant to purchase one share of common stock for every share of PIPE Common Stock purchased. That transaction closed on May 10, 2012. In connection therewith, each of the selling stockholders, as well as certain other of our existing stockholders delivered voting agreements (the "Voting Agreements"), pursuant to which each such stockholder agreed to vote shares beneficially held by the stockholder in favor of certain matters (the "Stockholder Approval Matters") intended to increase the number of the authorized and unissued shares of our common stock, a potential reverse stock split and the transactions described below under "—Concurrent Transactions—Subordinated Convertible Debentures."

As described above, on July 10, 2012, we effected a one-for-ten Reverse Stock Split of our common stock. As a result, the PIPE Common Stock was combined and converted into an aggregate of approximately 2.17 million shares of our common stock, and the PIPE Warrants became exercisable for an aggregate of approximately 2.17 million shares, with an exercise price of \$3.361 per share.

Net proceeds from the sale of the securities under the PIPE SPA were approximately \$9.1 million, after placement agent fees and other offering expenses.

We used the funds to repay \$7 million of the revolving credit facility guaranteed by Alafi Capital Company and affiliates of Sanderling Venture Partners, as described further below, and the balance we plan to use for working capital, and for general corporate purposes.

This prospectus is part of a post-effective amendment to a registration statement being filed pursuant to a registration rights agreement with the purchasers of the PIPE Common Stock (the "PIPE Registration Rights Agreement"), under which we agreed to undertake to file a resale registration statement, on behalf of the selling stockholders, with respect to the resale of the PIPE Common Stock and shares underlying the PIPE Warrants and to use our commercially reasonable efforts to cause such resale registration

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statement to be declared effective by the Securities and Exchange Commission (the “SEC”) not later than 60 calendar days (or, in the event the SEC comments on the Registration Statement, 90 calendar days) following the closing. If we are unable to timely satisfy such deadlines, we could incur penalties of up to 10% of the offering proceeds for such non-compliance. In addition, we expect to register an additional 1,518,109 shares issuable upon exercise of PIPE Warrants and an additional 517,422 shares issuable in connection with amendment two through six of the Note and Warrant Purchase Agreement described below under “Concurrent Transactions – Extension of Silicon Valley Bank Loan and Sanderling/Alafi Credit Support” issued to Alafi Capital Company and the Sanderling Venture Partners’ affiliates. We did not include those shares in the registration statement of which this prospectus is a part because we had insufficient authorized shares of common stock at the time this registration statement was originally filed.

The foregoing description is qualified in its entirety by the terms of the PIPE SPA, PIPE Registration Rights Agreement, Voting Agreements, and PIPE Warrants, the forms of which are incorporated herein by reference.

RISK FACTORS

Investing in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the risks and uncertainties described under “Risk Factors” in our most recent Annual Report on Form 10-K filed for the period ended December 31, 2013 and any updates in our subsequently filed Quarterly Reports on Form 10-Q, together with all other information appearing in or incorporated by reference into this prospectus and any applicable prospectus supplement, in light of your particular investment objectives and financial circumstances. These risks could materially and adversely affect our business, results of operations and financial condition and could result in a partial or complete loss of your investment.

FORWARD-LOOKING STATEMENTS

The prospectus contains “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to, among other things:

- our business strategy;
- our value proposition;
- our ability to fund operations;
- our ability to convert backlog to revenue;
- the ability of physicians to perform certain medical procedures with our products safely, effectively and efficiently;
- the adoption of our products by hospitals and physicians;
- the market opportunity for our products, including expected demand for our products;
- the timing and prospects for regulatory approval of our additional disposable interventional devices;
- the success of our business partnerships and strategic alliances;
- our estimates regarding our capital requirements;
- our plans for hiring additional personnel; and
- any of our other plans, objectives, expectations and intentions contained or incorporated into this prospectus that are not historical facts.

These statements relate to future events or future financial performance, and involve known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “may”, “will”, “should”, “could”, “expects”, “plans”, “intends”, “anticipates”, “believes”, “estimates”, “predicts”, “potential”, or “continue”, or the negative of such terms or other comparable terminology. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. These statements are only predictions.

Factors that may cause our actual results to differ materially from our forward-looking statements include, among others, changes in general economic and business conditions and the risks and other factors set forth in “Item 1A—Risk Factors” and elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2013.

Our actual results may be materially different from what we expect. We undertake no duty to update these forward-looking statements after the date of this prospectus, even though our situation may change in the future. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We did not receive any proceeds from the selling stockholders' sales of our common stock. We could receive up to a maximum of approximately \$2,186,727 in proceeds from the cash exercise of all the warrants held by the selling stockholders and covered by this prospectus, which proceeds would be used for working capital and general corporate purposes.

SELLING STOCKHOLDERS

As described above, on May 7, 2012, we entered into the PIPE SPA with Alafi Capital Company LLC, certain affiliates of Sanderling Venture Partners, and certain affiliates of the Franklin Templeton funds and identified below whereby we sold an aggregate of approximately 21.7 million shares of PIPE Common Stock at a price of \$0.3361 per share, together with PIPE Warrants to purchase an aggregate of approximately 21.7 million shares of common stock at a price of \$0.125 per share having an exercise price of \$0.3361 per share, in each case prior to giving effect to the Reverse Stock Split. Each purchaser thereunder received a PIPE Warrant to purchase one share of common stock for every share of PIPE Common Stock purchased.

On July 10, 2012, we effected a one-for-ten Reverse Stock Split of our common stock. As a result, the PIPE Common Stock was combined and converted into an aggregate of approximately 2.17 million shares of our common stock, and the PIPE Warrants became exercisable for approximately 2.17 million shares, with an exercise price of \$3.361 per share. All of the information has been adjusted to reflect the Reverse Stock Split, except where indicated.

This prospectus relates to the sale or other disposition of 2,168,727 shares of PIPE Common Stock and 650,618 shares of common stock underlying the PIPE Warrants issued to the affiliates of Franklin Templeton described below, or their respective transferees. The issuance of the shares upon exercise of PIPE Warrants is not covered by this prospectus; only the resale of the shares underlying warrants are covered. The shares issuable upon exercise of the PIPE Warrants issued to Alafi Capital Company LLC and the Sanderling Venture Partners affiliates is also not covered by this prospectus. The average weighted exercise price of the warrants is \$3.361 per share.

In addition, under the terms of the PIPE Warrants, a selling stockholder may not exercise the PIPE Warrants to the extent such selling stockholder or any of its affiliates would beneficially own more than 19.999% of our common stock. The numbers of shares set forth in the table below, however, do not reflect this limitation.

We have filed with the SEC, under the Securities Act, a registration statement on Form S-1, of which this prospectus forms a part, with respect to the resale of the shares issuable upon exercise of the warrants from time to time on the Nasdaq Capital Market, in privately-negotiated transactions, or otherwise. We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

The following table sets forth the name of each selling stockholder, the number of shares of our common stock known by us, based on information available to us, including publicly available information, to be beneficially owned by each selling stockholder as of the most recent date practicable, the number of shares of our common stock that may be offered for resale for the account of each selling stockholder pursuant to this prospectus and the number of shares of our common stock to be held by each selling stockholder after the sale of all of the shares covered by this prospectus by that selling stockholder. The selling stockholders may offer all, some or none of the common stock. Because the selling stockholders may offer all or some portion of the common stock, we cannot estimate the amount of the common stock that will be held by the selling stockholders upon termination of any of these sales. In addition the selling stockholders identified below may have sold, transferred or otherwise disposed of all or a portion of their common stock since the date on which they provided the information regarding their common stock in transactions exempt from the registration requirements of the Securities Act. Percentage ownership is based on 19,308,125 shares of common stock outstanding as of February 28, 2014.

The selling stockholders may sell all, some or none of the common stock being offered. This information is based upon our review of public filings, our stockholder, optionholder and warrant holder registers and information furnished by the selling stockholders.

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<u>Selling Stockholder</u>	<u>Shares Beneficially Owned Prior to the Offering (1)(2)</u>	<u>Shares Offered by This Prospectus</u>	<u>Shares Beneficially Owned Subsequent to the Offering (1)(2)(3)</u>	
			<u>Shares</u>	<u>Percent</u>
Alafi Capital Company LLC	2,473,405	867,491	1,605,914 (4)	8.3%
Sanderling Venture Partners VI Co-Investment Fund, L.P. (5)	1,643,811 (6)	624,112	1,019,699 (6)	5.3%
Sanderling Ventures Management VI (5)	113,566 (7)	26,506	87,060 (7)	*
Franklin Strategic Series – Franklin Small-Mid Cap Growth Fund (8)	1,296,152	1,031,152 (9)	265,000	1.4%
Franklin Templeton Variable Insurance Products Trust – Franklin Small-Mid Cap Growth Securities Fund (8)	308,827	245,687 (10)	63,140	*
Franklin Templeton Investment Funds – Franklin U.S. Small-Mid Cap Growth Fund (8)	30,667	24,397 (11)	6,270	*
Total Number of Shares Offered		2,819,345		

* Less than 1%

- (1) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.
- (2) Under the terms of the PIPE Warrants, a selling stockholder may not exercise such PIPE Warrant to the extent that such selling stockholder or any of its affiliates would beneficially own more than 19.999% of our common stock. For purposes of completing the Selling Stockholder table above, we have disregarded this limitation.
- (3) Assumes for each stockholder the exercise in full of the warrant held by such stockholder and the sale of all shares offered hereby.
- (4) Includes warrants to purchase an aggregate of 1,206,777 shares of our common stock.
- (5) Mr. Fred A. Middleton, one of our directors, is affiliated with Sanderling Venture Partners VI Co-Investment Fund, L.P. and Sanderling Ventures Management VI. These funds (and their affiliates) have waived our obligation to reserve shares for issuance under warrants held by such entities. Middleton, McNeil, Mills & Associates, VI, LLC is the Investment General Partner of Sanderling Venture Partners VI Co-Investment Fund, L.P. and has voting and dispositive power over the shares owned by such entity. Sanderling Venture Partners VI Co-Investment Fund, L.P. is managed by its managing directors, Fred A. Middleton, Robert G. McNeil, Timothy C. Mills and Timothy J. Wollaeger. Such individuals disclaim beneficial ownership of all such shares held by the foregoing funds, except to the extent of their proportionate pecuniary interests therein. Sanderling Ventures Management VI is managed by Fred A. Middleton, Robert G. McNeil, Timothy C. Mills and Timothy J. Wollaeger, the individuals who have invested under the d/b/a Sanderling Ventures Management VI, which individuals have voting and dispositive power over the shares owned by Sanderling Ventures Management VI. Such individuals disclaim beneficial ownership of all such shares held by the foregoing funds, except to the extent of their proportionate pecuniary interests therein. In addition to the securities being registered herein, affiliates of Sanderling Venture Partners hold (i) 219,560 shares of our common stock and (ii) warrants to purchase up to 14,658 shares of our common stock. Mr. Middleton is also a managing director of such affiliated entities and shares voting and dispositive power with such shares. Mr. Middleton disclaims beneficial ownership of all such shares held by such affiliated funds, except to the extent of his proportionate pecuniary interests therein.

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- (6) Includes warrants to purchase an aggregate 387,409 shares of our common stock.
- (7) Includes warrants to purchase an aggregate of 72,893 shares of our common stock.
- (8) Edward Jamieson, Michael McCarthy and James Cross have the power to vote or dispose of the securities offered for resale under this prospectus and may be deemed to be the beneficial owner or control person for such shares.
- (9) The number of shares offered includes 515,576 shares of common stock and 515,576 shares of common stock issuable upon exercise of a PIPE Warrant purchased at the closing of the private placement.
- (10) The number of shares offered includes 122,843 shares of common stock and 122,843 shares of common stock issuable upon exercise of a PIPE Warrant purchased at the closing of the private placement.
- (11) The number of shares offered includes 12,199 shares of common stock and 12,199 shares of common stock issuable upon exercise of a PIPE Warrant purchased at the closing of the private placement.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date the Registration Statement is declared effective by the SEC;
- broker-dealers may agree with a selling securityholder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

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In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, we are authorized to issue up to 310,000,000 shares of capital stock, par value \$.001 per share, divided into two classes designated, respectively, “common stock” and “preferred stock.” Of such shares authorized, 300 million shares are designated as common stock, and 10 million shares are designated as preferred stock.

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The following is a summary of the material terms of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws. Since the terms of our amended and restated certificate of incorporation and amended and restated bylaws, and Delaware law, are more detailed than the general information provided below, you should only rely on the actual provisions of those documents and Delaware law. If you would like to read our amended and restated certificate of incorporation or amended and restated bylaws, they are on file with the SEC, as described under the heading “Where You Can Find Additional Information” below.

Common Stock

As of March 31, 2014, there were 19,407,255 shares of common stock outstanding that were held of record by approximately 292 stockholders. The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a majority of the shares voting are able to elect all of the directors. Subject to preferences that may be granted to any then outstanding preferred stock, holders of common stock are entitled to receive ratably only those dividends as may be declared by the board of directors out of funds legally available therefor, as well as any distributions to the stockholders. In the event of our liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in all of our assets remaining after we pay our liabilities and distribute the liquidation preference of any then outstanding preferred stock. Holders of common stock have no preemptive or other subscription or conversion rights. There are no redemption or sinking fund provisions applicable to the common stock.

Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of Stereotaxis. We have no present plan to issue any shares of preferred stock.

Anti-Takeover Provisions of Delaware Law and Charter Provisions

Interested Stockholder Transactions. We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a Delaware corporation from engaging in any “business combination” with any “interested stockholder” for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the number of shares outstanding those shares owned by persons who are directors and also officers and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of assets with a value of 10% or more of either the total assets or all outstanding stock of the corporation;

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- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines “interested stockholder” as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation or any entity or person affiliated with or controlling or controlled by such entity or person.

In addition, some provisions of our amended and restated certificate of incorporation and amended and restated bylaws may be deemed to have an anti-takeover effect and may delay or prevent a tender offer or takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for the shares held by stockholders.

Cumulative Voting. Our amended and restated certificate of incorporation expressly denies stockholders the right to cumulative voting in the election of directors.

Classified Board of Directors. Our board of directors is divided into three classes of directors serving staggered three-year terms. As a result, approximately one-third of the board of directors is elected each year, which has the effect of requiring at least two annual stockholder meetings, instead of one, to replace a majority of the members of the board. These provisions, when coupled with the provision of our amended and restated certificate of incorporation authorizing only the board of directors to fill vacant directorships or increase the size of the board of directors, may deter a stockholder from removing incumbent directors and simultaneously gaining control of the board of directors by filling the vacancies created by such removal with its own nominees. The certificate of incorporation also provides that directors may be removed by stockholders only for cause. Since the board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management.

Stockholder Action; Special Meeting of Stockholders. Our amended and restated certificate of incorporation and bylaws do not permit stockholders to act by written consent. They provide that special meetings of our stockholders may be called only by the chairman of our board of directors, our chief executive officer or a majority of our directors. Further, our amended and restated certificate of incorporation provides that the stockholders may amend bylaws adopted by the board of directors or specified provisions of the certificate of incorporation by the affirmative vote of at least 66 2/3% of our capital stock.

Advance Notice Requirements for Stockholder Proposals and Directors Nominations. Our amended and restated bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders, must provide timely notice in writing. To be timely, a stockholder’s notice must be delivered to or mailed and received at our principal executive offices not more than 120 days or less than 90 days prior to the anniversary date of the immediately preceding annual meeting of stockholders. However, in the event that the annual meeting is called for a date that is not within 30 days before or after such anniversary date, notice by the stockholder in order to be timely must be received not later than the close of business on the 10th day following the date on which notice of the date of the annual meeting was mailed to stockholders or made public, whichever first occurs. Our amended and restated bylaws also specify requirements as to the form and content of a stockholder’s notice. These provisions may preclude stockholders from bringing matters before an annual meeting of stockholders or from nominating directors at an annual meeting of stockholders.

Authorized But Unissued Shares. Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of Stereotaxis by means of a proxy contest, tender offer, merger or otherwise.

Amendments; Supermajority Vote Requirements. The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation’s certificate of incorporation or bylaws, unless either a corporation’s certificate of incorporation or bylaws require a greater percentage. Our amended and restated certificate of incorporation will impose supermajority vote requirements of 66 2/3% of the voting power of our capital stock in connection with the amendment of certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, including those provisions relating to the classified board of directors, action by written consent and the ability of stockholders to call special meetings.

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Nasdaq Capital Market Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol “STXS”.

Transfer Agent And Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc. Its address is 1717 Arch St., Suite 130, Philadelphia, PA 10103, and its telephone number is (215) 553-5400.

LEGAL MATTERS

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 1,172 shares of our common stock.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our financial statements and schedule included in our Annual Report on Form 10-K for the year ended December 31, 2013, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company’s ability to continue as a going concern as described in Note 1 to the financial statements), which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP’s report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC’s website at <http://www.sec.gov>. The SEC’s website contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC. You may also read and copy any document we file with the SEC at the SEC’s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room.

We have filed with the SEC a registration statement under the Securities Act of 1933 that registers the distribution of these securities. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can get a copy of the registration statement, at prescribed rates, from the SEC at the address listed above. The registration statement and the documents referred to below under “Incorporation of Certain Documents by Reference” are also available on our Internet website, <http://www.stereotaxis.com>, under “Investors—All SEC Filings.” We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means we can disclose important information to you by referring you to other documents that we filed separately with the SEC. You should consider the incorporated information as if we reproduced it in this prospectus, except for any information directly superseded by information subsequently filed with the SEC and incorporated in this prospectus.

We incorporate by reference into this prospectus the following documents (SEC File No. 001-36159), which contain important information about us and our business and financial results:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 (including certain portions thereof that are incorporated by reference to our Definitive Proxy Statement on Schedule 14A, filed on April 28, 2014);
- our Annual Report on Form 10-K/A (Amendment No. 1) for the year ended December 31, 2013, filed on May 2, 2014;
- our Current Reports on Form 8-K filed February 14, 2014, February 25, 2014 (regarding Items 8.01 and 9.01), March 31, 2014 and April 10, 2014 (except, in any such case, the portions furnished and not filed pursuant to Item 2.02, Item 7.01 or otherwise); and
- the description of our common stock contained in our Registration Statement on Form 8-A filed August 2, 2004.

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We incorporate by reference any additional documents that we may file with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (other than the portions of those made pursuant to Item 2.02 or Item 7.01 of Form 8-K or other information “furnished” to the SEC) between the date we filed the registration statement to which this prospectus supplement relates, and before the termination of the offering of the securities. These documents may include periodic reports, like Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as Proxy Statements. Any material that we subsequently file with the SEC will automatically update and replace the information previously filed with the SEC.

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

You may get copies of any of the document incorporated by reference (excluding exhibits, unless the exhibits are specifically incorporated) at no charge to you by writing or calling the investor relations department at Stereotaxis, Inc. 4320 Forest Park Avenue, Suite 100, St. Louis, Missouri 63108, telephone (314) 678-6100.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuances and Distribution.

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by Stereotaxis in connection with the issuance and distribution of the securities being registered. All amounts are estimates except the SEC registration fee, which has been previously paid.

Securities and Exchange Commission filing fee	\$ 936.98
Legal fees and expenses	\$15,000.00
Accounting fees and expenses	\$25,000.00
Printing expenses	\$ 4,000.00
Total expenses	<u>\$44,936.98</u>

Item 15. Indemnification of Directors and Officers.

Our 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, our directors shall not be liable to the Company or our stockholders for monetary damages for breach of fiduciary duty as a director. In addition, our amended and restated certificate of incorporation provides that we 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.

Our amended and restated bylaws provide that the Company shall indemnify our directors and officers to the fullest extent not prohibited by the Delaware General Corporation Law or any other law. We are not required to indemnify any director or officer in connection with a proceeding brought by such director or officer unless (i) such indemnification is expressly required by law; (ii) the proceeding was authorized by our 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, our amended and restated 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.

We have also entered into separate indemnification agreements with our directors and officers that require us, 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 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 us to pay the expenses (including attorneys' fees) incurred in defending any such proceeding in advance of its final disposition in certain circumstances.

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The Delaware General Corporation Law provides that indemnification is permissible only when the director, officer, employee, or agent acted in good faith and in a manner 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 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.

We have agreed to indemnify the underwriters and their controlling persons, and the underwriters have agreed to indemnify us and our controlling persons, against certain liabilities, including liabilities under the Securities Act. Reference is made to the Underwriting Agreement filed as part of the exhibits hereto.

See Item 17 for information regarding our undertaking to submit to adjudication the issue of indemnification for violation of the securities laws.

Stereotaxis maintains insurance policies that provide coverage to its directors and officers against certain liabilities.

Item 16. Exhibits and Financial Statement Schedules.

The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this Registration Statement.

Item 17. 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 (the "Securities Act");

(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 SEC 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; and

(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), (a)(1)(ii) and (a)(1)(iii) 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 registrant pursuant to Section 13 and Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, 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.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) of the Securities Act shall be deemed to be part of the Registration Statement as of the date the filed prospectus was deemed part of and included in the Registration Statement; and

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(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7), (b)(5), or (b)(7) of the Securities Act as part of this registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act shall be deemed to be part of and included in this registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in this registration statement or prospectus that is part of this registration statement or made in a document incorporated or deemed incorporated by reference into this registration statement or prospectus that is part of this registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in this registration statement or prospectus that was part of this registration statement or made in any such document immediately prior to such effective date;

(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 section 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.

Insofar as indemnification for liabilities arising under the Securities Act 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 SEC such indemnification is against public policy as expressed in the Securities Act 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 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-3 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 May 2, 2014.

STEREOTAXIS, INC.

By: /s/ William C. Mills III
William C. Mills III
Chairman and Chief Executive Officer

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

<u>Signature</u>	<u>Title(s)</u>	<u>Date</u>
<u>/s/ William C. Mills III</u> William C. Mills III	Chairman and Chief Executive Officer (principal executive officer)	May 2, 2014
<u>/s/ Martin C. Stammer</u> Martin C. Stammer	Chief Financial Officer (principal financial officer and principal accounting officer)	May 2, 2014
<u>*</u> David W. Benfer	Director	May 2, 2014
<u>*</u> Joseph D. Keegan	Director	May 2, 2014
<u>*</u> Robert J. Messey	Director	May 2, 2014
<u>*</u> Fred A. Middleton	Director	May 2, 2014

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* _____ Eric N. Prystowsky	Director	May 2, 2014
_____ Euan S. Thomson	Director	May 2, 2014

*By: _____ /s/ Karen W. Duros
Karen W. Duros
Attorney-in-fact

EXHIBIT INDEX

Number	Description
3.1	Amended and Restated Certificate of Incorporation of Stereotaxis, incorporated by reference to Exhibit 3.1 of Stereotaxis' Form 10-Q (File No. 000-50884) for the fiscal quarter ended September 30, 2004.
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation, incorporated by reference to Exhibit 3.1 of Stereotaxis' Form 8-K (File No. 000-50884) filed on July 10, 2012.
3.3	Restated Bylaws of Stereotaxis, incorporated by reference to Exhibit 3.2 of Stereotaxis' Form 10-Q (File No. 000-50884) for the fiscal quarter ended September 30, 2004.
4.1	Form of Specimen Stock Certificate, incorporated by reference to the Registration Statement on Form S-1 (File No. 333-115253) originally filed with the Commission on May 7, 2004, as amended thereafter, at Exhibit 4.1.
4.2	Form of PIPE Warrant issued pursuant to that certain Stock and Warrant Purchase Agreement dated May 7, 2012, between the Company and certain purchasers named therein, incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K (File No. 000-50884) filed on May 8, 2012.
4.3	Form of Subordinated Convertible Debenture issued pursuant to that certain Securities Purchase Agreement dated May 7, 2012, between the Company and each purchaser identified on the signature page thereto, incorporated by reference to Exhibit 4.2 of the Registrant's Current Report on Form 8-K (File No. 000-50884) filed on May 8, 2012.
4.4	Form of Convertible Debt Warrant issued pursuant to that certain Securities Purchase Agreement dated May 7, 2012, between the Company and each purchaser identified on the signature page thereto, incorporated by reference to Exhibit 4.3 of the Registrant's Current Report on Form 8-K (File No. 000-50884) filed on May 8, 2012.
4.5a	Form of Warrant issued pursuant to that certain Note and Warrant Purchase Agreement effective February 7, 2008, between the Registrant and certain investors named therein (included in Exhibit 10.21a, which is incorporated by reference to Exhibit 10.31 of the Registrant's Form 10-K (File 000-50884) for the fiscal year ending December 31, 2007).
4.5b	Form of Warrant issued pursuant to that certain First Amendment to Note and Warrant Purchase Agreement effective December 29, 2008, between the Registrant and the investors named therein (included in Exhibit 10.21b, which is incorporated by reference to Exhibit 10.32 of the Registrant's Form 10-K (File No. 000-50884) for the fiscal year ended December 31, 2008).
4.5c	Form of Warrant issued pursuant to that certain Second Amendment to Note and Warrant Purchase Agreement effective October 9, 2009, between the Registrant and certain investors named therein (included in Exhibit 10.21c, which is incorporated by reference to Exhibit 10.31c of the Registrant's Form 10-K (File No. 000-50884) for the fiscal year ended December 31, 2009).

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- 4.5d Form of Warrant issued pursuant to that certain Third Amendment to Note and Warrant Purchase Agreement effective November 10, 2010, between the Registrant and certain investors named therein, (included in Exhibit 10.21d, which is incorporated by reference to Exhibit 10.21d of the Registrant's Form 10-K (File No. 001-36159) filed March 27, 2014).
- 4.5e Form of Warrant Issued Pursuant to that Certain Fourth Amendment to Note and Warrant Purchase Agreement dated March 30, 2012, incorporated by reference to Exhibit 4.1 of the Registrant's Form 10-Q (File No. 000-50884) for the fiscal quarter ended March 31, 2012.
- 4.5f Form of Warrant issued pursuant to that certain Fifth Amendment to Note and Warrant Purchase Agreement, dated May 1, 2012, between the Company and certain investors named therein (included in Exhibit 10.3 of the Registrant's Current Report on Form 8-K (File No. 000-50884) filed on May 2, 2012).
- 4.5g Form of Warrant issued pursuant to that certain Sixth Amendment to Note and Warrant Purchase Agreement, dated May 7, 2012, between the Company and certain investors named therein (included in Exhibit 10.77 of the Registrant's Registration Statement on Form S-1 (File No. 000-50884) filed May 23, 2012).
- 4.5h Amendment to Warrants of Stereotaxis, Inc., dated May 10, 2012, by and between the Company and the Warrant Holders, incorporated by reference to Exhibit 4.7 of the Registrant's Registration Statement on Form S-1 (File No. 000-50884) filed May 23, 2012.
- 4.5i Form of Warrant issued pursuant to that certain Seventh Amendment to Note and Warrant Purchase Agreement dated March 29, 2013, between the Company and certain investors named therein, incorporated by reference to Exhibit 4.5i of the Registrant's Form 10-K (File No. 001-36159) filed March 27, 2014.
- 4.5j Form of Warrant issued pursuant to that certain Eighth Amendment to Note and Warrant Purchase Agreement dated June 28, 2013, between the Company and certain investors named therein, incorporated by reference to Exhibit 4.1 of the Registrant's Form 10-Q (File No. 001-36159) filed for the fiscal quarter ended June 30, 2013.
- 4.5k Form of Warrant issued to certain investors in connection with extensions of loan guarantees by such investors, incorporated by reference to Exhibit 4.5k of the Registrant's Form 10-K (File No. 001-36159) filed March 27, 2014.
- 4.6 Form of Series A Warrant, issued pursuant to that certain Securities Purchase Agreement, dated December 29, 2008, incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K (File No. 000-50884) filed December 29, 2008.
- 4.7 Form of Warrant, issued pursuant to that certain Securities Purchase Agreement, dated December 29, 2008, incorporated by reference to Exhibit 4.3 of the Registrant's Current Report on Form 8-K (File No. 000-50884) filed December 29, 2008.
- 4.8 Warrant to Purchase Stock pursuant to that certain Loan and Security Agreement, dated December 17, 2010, between Silicon Valley Bank and the Company incorporated by reference to Exhibit 4.10 of the Registrant's Form 10-K (File No. 000-50884) for the fiscal year ended December 31, 2010).

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- 4.9 Form of Warrant issued pursuant to that certain Exchange Agreement, dated August 7, 2013, incorporated by reference to Exhibit 10.2 of Registrant's Current Report on Form 8-K (File No. 000-50884) filed on August 8, 2013.
- 5.1 Opinion of Bryan Cave LLP (previously filed).
- 23.1 Consent of Ernst & Young LLP.
- 23.2 Consent of Bryan Cave LLP (included in Exhibit 5.1) (previously filed).
- 24.1 Power of Attorney, incorporated by reference to Exhibit 24.1 of the Registrant's Form S-1 (File No. 333-181618).

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Post-Effective Amendment No. 3 to Form S-1 on Form S-3, No. 333-181618) and related Prospectus of Stereotaxis, Inc. for the registration of up to 2,819,345 shares of its common stock, \$0.001 par value and to the incorporation by reference therein of our reports dated March 27, 2014, with respect to the financial statements and schedule of Stereotaxis, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2013, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

St. Louis, Missouri
May 2, 2014