

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

**FORM S-3
REGISTRATION STATEMENT UNDER THE
SECURITIES ACT OF 1933**

STEREOTAXIS, INC.

Delaware
(State or other jurisdiction of incorporation or organization)

3845
(Primary Standard Industrial Classification Code number)

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)

**David L. Fischel
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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 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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class Of Securities To Be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Unit(2)	Proposed Maximum Aggregate Offering Price	Amount Of Registration Fee
Common Stock, par value \$0.001 per share	6,585,000	\$ 3.50	\$ 23,047,500.00	\$ 2,793.36
Common Stock, par value \$0.001 per share, underlying Series B Convertible Preferred Stock	5,610,121(3)	\$ 3.50	19,635,423.50	\$ 2,379.82
Total	12,195,121	\$ 3.50	\$ 42,682,923.50	\$ 5,173.18

- (1) This registration statement shall also cover any additional shares of common stock which become issuable by reason of any stock dividend, stock split, recapitalization or other similar transactions effected without the receipt of consideration which results in an increase in the number of outstanding shares of our common stock.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act. The calculation of the fee is based upon the average of the high and low sales prices of our common stock as reported by the NYSE American LLC on September 13, 2019.
- (3) Consists of 100% of the shares of common stock issuable upon conversion of 5,610,121 shares of Series B Convertible Preferred Stock, with each share of Series B Convertible Preferred Stock having a stated value of \$2.05 per share and an initial conversion price into shares of common stock of \$2.05 per share.

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.

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 September 19, 2019

PROSPECTUS



COMMON STOCK, \$0.001 PAR VALUE 12,195,121 SHARES

This prospectus relates to the resale, from time to time, of 12,195,121 shares of our common stock by the selling stockholders named herein. On August 7, 2019, we entered into a securities purchase agreement with the investors listed on the Schedule of Buyers thereto (together the “Buyers”), pursuant to which we sold in a private placement sale to the Buyers an aggregate of 6,585,000 shares of our common stock, \$0.001 par value per share, at a price of \$2.05 per share and 5,610,121 shares of our Series B Convertible Preferred Stock, \$0.001 par value per share (the “Series B Convertible Preferred Stock”), which are convertible into shares of our common stock (the “Conversion Shares”) at a price of \$2.05 per share.

Pursuant to the terms of the Registration Rights Agreement we entered into with the Buyers, we are required to register (a) 100% of the number of shares of common stock and (b) 100% of the number of the Conversion Shares underlying the Series B Convertible Preferred Stock.

We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of shares by any selling stockholder. The selling stockholders may sell their respective shares of common stock described in this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholders may resell their respective shares of our common stock in the section titled “Plan of Distribution” beginning on page 10. We will pay the expenses incurred in registering the shares, including legal and accounting fees.

Our common stock is traded on the NYSE American under the symbol “STXS.” On September 18, 2019, the last reported sale price for our common stock on the NYSE American was \$4.40 per share.

Investing in our securities involves a high degree of risk. Before buying any securities, you should read the discussion of material risks of investing in our common stock under the heading “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 _____, 2019.

TABLE OF CONTENTS

	<u>Page</u>
PROSPECTUS SUMMARY	1
RISK FACTORS	3
FORWARD-LOOKING STATEMENTS	8
USE OF PROCEEDS	8
SELLING STOCKHOLDERS	8
PLAN OF DISTRIBUTION	10
DESCRIPTION OF SECURITIES	13
LEGAL MATTERS	17
EXPERTS	17
WHERE YOU CAN FIND ADDITIONAL INFORMATION	18
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	18

PROSPECTUS SUMMARY

This summary highlights selected information about Stereotaxis, Inc. and a general description of the securities that may be offered for resale or other disposition 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.

The Company

Stereotaxis designs, manufactures, and markets an advanced robotic navigation system for use in a hospital’s interventional surgical suite or “interventional lab”, that we believe revolutionizes the treatment of arrhythmias and coronary artery disease by enabling enhanced safety, efficiency, and efficacy for catheter-based or interventional procedures. Our products include the Genesis® Robotic Magnetic Navigation System (“Genesis System”), Niobe® ES Magnetic Navigation System (“Niobe ES System”), Odyssey® Information Management Solution (“Odyssey Solution”), the Vdrive® Robotic Navigation System (“Vdrive System”), Stereotaxis Imaging Model S x-ray system, and related devices.

Both the *Genesis* System and the *Niobe* ES System are designed to enable physicians to complete more complex interventional procedures by providing image-guided delivery of catheters and guidewires through the blood vessels and chambers of the heart to treatment sites. This is achieved using externally applied magnetic fields that govern the motion of the working tip of the catheter or guidewire, resulting in improved navigation, efficient procedures, and reduced X-ray exposure.

In addition to the robotic navigation systems and their components, Stereotaxis has also developed the *Odyssey* Solution, which consolidates all lab information, enabling doctors to focus on the patient for optimal procedure efficiency. The platform also features a remote viewing and recording capability called the Odyssey Cinema™ System, an innovative system delivering synchronized content for optimized workflow, advanced care, and improved productivity. 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’s local area network and over the global *Odyssey* Network, providing physicians with a tool for clinical collaboration, remote consultation, and training.

Our *Vdrive* System provides navigation and stability for diagnostic and therapeutic devices designed to improve interventional procedures. The *Vdrive* System complements the magnetic navigation systems’ control of therapeutic catheters for fully remote procedures and enables single-operator workflow. It 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 which can be manipulated by these systems.

We promote our full suite of products in a typical hospital implementation, subject to regulatory approvals or clearances. This 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 the warranty period, and software licenses. In hospitals where our full suite of products has not been implemented, equipment upgrade or expansion may be implemented upon purchase of the necessary components.

The *Niobe* System, *Odyssey Workstation*, *Cardiodrive*, and various disposable interventional devices have received regulatory clearance in the United States, European Union, Canada, China, Japan and various other countries. We have received regulatory clearance, licensing and/or CE Mark approvals necessary for us to market the *Vdrive* and *Vdrive Duo* systems with the *V-CAS*, *V-Loop* and *V-Sono* devices in the U.S., Canada and European Union. The *Genesis* system and the *V-CAS* Deflect Catheter Advancement System have been CE Marked for sale in the European Union. Stereotaxis Imaging Model S is CE marked and FDA cleared.

We have strategic relationships with technology leaders in the global interventional market. Through these strategic relationships we provide compatibility between our robotic magnetic system and digital imaging and 3D catheter location sensing technology, as well as disposable interventional devices, in order to continue to develop new solutions in the interventional lab. The maintenance of these strategic relationships, or the establishment of equivalent alternatives, is critical to our commercialization efforts. The commercial availability of currently compatible digital imaging fluoroscopy systems is unlikely to continue and efforts are being made to ensure the availability of integrated next generation systems and/or equivalent alternatives; however, we cannot provide assurance as to the timeline of the ongoing availability of such compatible systems or our ability to obtain equivalent alternatives on competitive terms or at all.

Since our inception, we have generated significant losses. As of June 30, 2019, we have incurred cumulative net losses of approximately \$480.3 million. We expect to continue to incur operating losses and negative cash flows until revenues reach a level sufficient to support ongoing operations. During 2019, we will continue to monitor operating expenses and make additional investments in certain targeted areas.

We were incorporated in Delaware in June 1990. 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. Epoch®, Genesis®, Niobe®, Odyssey®, Odyssey Cinema™, Vdrive®, Vdrive Duo™, V-CAS™, V-Loop™, V-Sono™, V-CAS Deflect™, QuikCAS™, and Cardiodrive® are trademarks of Stereotaxis, Inc. All other trademarks that may appear in this prospectus are the property of their respective owners.

Securities Being Offered

This prospectus relates to the offer, resale or other disposition of 6,585,000 shares of our common stock and 5,610,121 shares of our common stock issuable upon the conversion of our Series B Convertible Preferred Stock (as defined below). The shares of common stock and the shares of Series B Convertible Preferred Stock were issued in the transactions described below, and the selling stockholders are identified in the section entitled “Selling Stockholders” on page 8, below. We are registering the offer, resale or other disposition of these securities by the selling stockholders or their transferees. We will not receive any proceeds from the sale of the shares of common stock by the selling stockholders. The registration of these shares of common stock does not necessarily mean that any of them will be offered or sold by the selling stockholders. The securities may be sold directly or through brokers, dealers or agents in private or market transactions. In connection with any sales, the selling stockholders and any brokers, dealers or agents participating in such sales may be deemed to be “underwriters” within the meaning of the Securities Act of 1933, as amended (the “Securities Act”), and the rules and regulations thereunder. See “Plan of Distribution.”

On August 7, 2019, we entered into a Securities Purchase Agreement (the “SPA”) with the investors listed on the Schedule of Buyers thereto (together the “Buyers”), pursuant to which we sold in a private placement to the Buyers, an aggregate of 6,585,000 shares of our common stock, \$0.001 par value per share, at a price of \$2.05 per share and 5,610,121 shares of our Series B Convertible Preferred Stock, \$0.001 par value per share (the “Series B Convertible Preferred Stock”), which are convertible into shares of our common stock (the “Conversion Shares”) at a price of \$2.05 per share. This transaction (the “Private Placement”) closed on August 7, 2019.

Net proceeds from the sale of the securities under the SPA were approximately \$23.1 million, after offering expenses. The Company plans to use the funds for general corporate purposes.

In connection with the Private Placement, we entered into a registration rights agreement with the Buyers (the “Registration Rights Agreement”), under which we agreed to undertake to file one or more registration statements on behalf of the selling stockholders with respect to the offer, resale or other disposition of the common stock and the Conversion Shares issuable upon the conversion of the Series B Convertible Preferred Stock.

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 described in, or incorporated by reference in, this prospectus, including the risks described below and under the caption “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018, and in any other reports that we file with the Securities and Exchange Commission (the “SEC”), along with the other information included or incorporated by reference in this prospectus, in evaluating an investment in our common stock. The information included or incorporated by reference in this prospectus may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. For a description of these reports and documents, and information about where you can find them, see the sections entitled “Where You Can Find Additional Information” and “Incorporation of Certain Documents by Reference” in this prospectus.

The risks and uncertainties described in this prospectus and the documents incorporated by reference in this prospectus represent all the material risks known to us, but they are not the only ones facing us. Additional risks and uncertainties that we do not presently know about or that we currently believe are not material may also adversely affect our business. If any of the risks and uncertainties described in this prospectus or the documents incorporated by reference herein actually occur, our business, financial condition and results of operations could be adversely affected in a material way. As a result, the trading price of our common stock and/or the value of any other securities we may issue may decline, and you might lose part or all of your investment.

We may not generate cash from operations or be able to raise the necessary capital to continue operations.

We may require additional funds to meet our operational, working capital and capital expenditure needs in the future. We cannot be certain that we will be able to obtain additional funds on favorable terms or at all. If we cannot raise capital on acceptable terms, we will not be able to, among other things:

- maintain customer and vendor relationships;
- hire, train and retain employees;
- maintain or expand our operations;
- enhance our existing products or develop new ones;
- respond to competitive pressures; or
- service our debt obligations and meet our financial covenants.

Our failure to do any of these things could result in lower revenue and adversely affect our financial condition and results of operations, and we may have to curtail or cease operations.

We may not be able to comply with debt covenants and may have to repay outstanding indebtedness.

Our current borrowing agreement contains various covenants, including financial covenants under our credit agreement with our primary lender. If we violate our covenants, it could impact our ability to borrow and we could be required to repay any related outstanding debt. We could be unable to make these payments, which could lead to insolvency. Even if we are able to make these payments, it will lead to the lack of availability for additional borrowings under our bank loan agreement due to our borrowing capacity. There can be no assurance that we will be able to maintain compliance with these covenants or that we could replace this source of liquidity if these covenants were to be violated and our loans and other borrowed amounts were forced to be repaid.

Our principal stockholders continue to own a large percentage of our voting stock, and they have the ability to substantially influence matters requiring stockholder approval.

Certain of our directors and individuals or entities affiliated with them as well as other principal stockholders beneficially own or control a substantial percentage of the outstanding shares of our common stock. Accordingly, these stockholders acting as a group, will have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transaction. These stockholders may also delay or prevent a change of control, even if such a change of control would benefit our other stockholders. This significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

Future issuances of our securities could dilute current stockholders' ownership.

We are registering for offer, resale or other disposition 12,195,121 shares of our common stock, 5,610,121 shares of which are issuable upon the conversion of our Series B Convertible Preferred Stock, in each case held by the selling stockholders identified in this prospectus or their transferees.

In addition, as of June 30, 2019, we had 42.8 million shares of our common stock issuable upon conversion of our Series A Convertible Preferred Stock bearing dividends at a rate of six percent (6.0%) per annum, which are cumulative and accrue daily from the date of issuance on the \$1,000 stated value. Such dividends will not be paid in cash, except in connection with any liquidation, dissolution or winding up of the Company or any redemption of the Series A Convertible Preferred Stock. Instead, the value of the accrued dividends is added to the liquidation preference of the Series A Convertible Preferred Stock and will increase the number of shares of common stock issuable upon conversion, which will dilute the ownership of our common stockholders.

Moreover, a significant number of shares of our common stock are subject to stock options and stock appreciation rights, and we may request the ability to issue additional such securities to our employees. We may also decide to raise additional funds through public or private debt or equity financing to fund our operations. While we cannot predict the effect, if any, that future sales of debt, our common stock, other equity securities or securities convertible into our common stock or other equity securities or the availability of any of the foregoing for future sale, will have on the market price of our common stock, it is likely that sales of substantial amounts of our common stock (including shares issued upon the exercise of stock options, stock appreciation rights or the conversion of any convertible securities outstanding now or in the future, including the Series A Convertible Preferred Shares) will dilute the ownership interest of our existing stockholders and that the perception that such sales could occur could adversely affect prevailing market prices for our common stock.

Further, the Series A Convertible Preferred Shares rank senior to our common stock and our Series B Convertible Preferred Stock as to distributions and payments upon the liquidation, dissolution and winding up of the Company. No such distributions or payments upon the liquidation, dissolution or winding up of the Company may be made to holders of common stock or holders of the Series B Convertible Preferred Stock unless and until the holders of the Series A Convertible Preferred Shares have received the stated value of \$1,000 per share plus any accrued and unpaid dividends. Until all Series A Convertible Preferred Shares have been converted or redeemed, no dividends may be paid on the common stock or the Series B Convertible Preferred Stock without the express written consent of the holders of a majority of the outstanding Series A Convertible Preferred Shares. In the event that dividends or other distributions of assets are made or paid by the Company to the holders of the common stock or the holders of the Series B Convertible Preferred Stock, the holders of Series A Convertible Preferred Shares are entitled to participate in such dividend or distribution on an as-converted basis. Any such distributions or payments upon the liquidation, dissolution or winding up of the Company may dilute the ownership interests of our existing stockholders.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date and we currently intend to retain our future earnings to fund the development and growth of our business. In addition, the terms of our loan agreement prohibit us from declaring dividends without the prior consent of our lender. As a result, capital appreciation, if any, of our common stock will be an investor's sole source of gain for the foreseeable future.

Our certificate of incorporation and bylaws, Delaware law, and one of our collaboration agreements contain provisions that could discourage a takeover.

Our certificate of incorporation and bylaws and Delaware law contain provisions that might enable our management to resist a takeover. These provisions may:

- discourage, delay or prevent a change in control of our company or a change in our management;
- adversely affect the voting power of holders of common stock; and
- limit the price that investors might be willing to pay in the future for shares of our common stock.

In addition, our collaboration agreement with Biosense Webster contains provisions that may similarly discourage a takeover and negatively affect our share price as described above.

Evolving regulation of corporate governance and public disclosure may result in additional expenses and continuing uncertainty.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the new SEC regulations such as the Dodd-Frank Wall Street Reform and Consumer Protection Act have in the past created uncertainty for public companies. We continue to evaluate and monitor developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional compliance costs we may incur or the timing of such costs. These new or changed laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by courts and regulatory and governing bodies. This could result in uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. Maintaining appropriate standards of corporate governance and public disclosure may result in increased general and administrative expense and diversion of management time and attention from revenue-generating activities to compliance activities. In addition, if we fail to comply with new or changed laws, regulations and standards, regulatory authorities may initiate legal proceedings against us and our business and reputation may be harmed.

Our future operating results may be below securities analysts' or investors' expectations, which could cause our stock price to decline.

The revenue and income potential of our products and our business model are unproven, and we may be unable to generate significant revenue or grow at the rate expected by securities analysts or investors. In addition, our costs may be higher than we, securities analysts, or investors expect. If we fail to generate sufficient revenue or our costs are higher than we expect, our results of operations will suffer, which in turn could cause our stock price to decline. Our results of operations will depend upon numerous factors, including:

- demand for our products;
- the performance of third-party contract manufacturers and component suppliers;
- our ability to develop sales and marketing capabilities;
- the success of our strategic relationships with fluoroscopy system manufacturers and providers of catheters and electrophysiology mapping systems;
- our ability to develop, introduce and market integrated next generation systems and/or alternatives to our current strategic relationships with fluoroscopy system manufacturers and catheter and electrophysiology mapping system providers on a timely basis;

- our ability to develop, introduce and market new or enhanced versions of our products on a timely basis;
- our ability to obtain regulatory clearances or approvals for our new products; and
- our ability to obtain and protect proprietary rights.

Our operating results in any particular period may not be a reliable indication of our future performance. In some future quarters, our operating results may be below the expectations of securities analysts or investors. If this occurs, the price of our common stock will likely decline.

Given that the stock of the Company is thinly traded, liquidity could be impacted by a variety of events.

In August 2016, the Nasdaq Capital Market (“Nasdaq”) delisted our common stock due to our failure to meet certain applicable requirements. Shares of our common stock then began trading on the OTCQX® Best Market under the Company’s existing ticker symbol of “STXS.” On September 5, 2019, the common stock of the Company ceased trading on the OTCQX® Best Market at the close of trading and began trading on the NYSE American under the symbol “STXS” at the open of trading on September 6, 2019. Despite the move to a national securities exchange, any of the aforementioned risk factors could negatively impact the liquidity of our common stock with the volume being insufficient to provide for efficient market trading and our ability to access the capital markets, which could impair the value of your investment.

Furthermore, our common stock may not continue to trade on the NYSE American in the future, broker-dealers may cease to provide public quotes of our common stock on this market, or the trading volume of our common stock may be insufficient to provide for an efficient trading market. Any such developments could impair the value of your investment.

We expect that the price of our common stock could fluctuate substantially, possibly resulting in class action securities litigation.

Trading volume has been historically limited and/or sporadic. The market price of our common stock has experienced substantial volatility, and this may continue even though our common stock began trading on the NYSE American on September 6, 2019. During 2018, our common stock traded between \$0.51 and \$1.65 per share, on trading volume ranging from none to approximately 300,000 shares per day. In 2019, our common stock has traded between \$1.07 and \$4.75 per share, on trading volume ranging from approximately 2,800 to 763,500 shares per day. During nearly all of this time, our common stock was trading on the OTCQX Best Market.

The market price of our common stock will be affected by a number of factors, including:

- actual or anticipated variations in our results of operations or those of our competitors;
- the receipt or denial of regulatory approvals;
- changing regulatory requirements, particularly in the EU, making market access more difficult;
- announcements of new products, technological innovations or product advancements by us or our competitors;
- developments with respect to patents and other intellectual property rights;
- decisions of acute care hospitals in both the United States and abroad to make or defer capital purchases based upon economic factors, statutory or regulatory changes, changes in the standard of care, competitive alternatives, and changes in reimbursement for procedures, among other factors;
- changes in earnings estimates or recommendations by securities analysts or our failure to achieve analyst earnings estimates;

- developments in our industry; and
- participants in the market for our common stock may take short positions with respect to our common stock.

These factors, as well as general economic, credit, political and market conditions, may materially adversely affect the market price of our common stock. As with the stock of many other public companies, the market price of our common stock has been particularly volatile during the recent period of upheaval in the capital markets and world economy. This excessive volatility may continue for an extended period of time following the filing date of this report. Furthermore, the stock prices of many companies in the medical device industry have experienced wide fluctuations that have often been unrelated to the operating performance of these companies. Volatility in the price of our common stock on the NYSE American may depress the trading price of our common stock, which could, among other things, allow a potential acquirer of the Company to purchase a significant amount of our common stock at low prices. In addition, the volatility of our stock price could lead to class action securities litigation being filed against us, which could result in substantial costs and a diversion of our management resources, which could significantly harm our business.

If we are unable to use a short form registration statement on Form S-3, it may adversely affect our ability to access the capital markets in the future, if needed.

A Registration Statement on Form S-3 permits an eligible issuer to incorporate by reference its past and future filings and reports made under the Securities and Exchange Act of 1934, as amended, or the Exchange Act. In addition, Form S-3 enables eligible issuers to conduct primary offerings “off the shelf” under Rule 415 of the Securities Act of 1933, as amended, or the Securities Act. The shelf registration process under Form S-3 combined with the ability to incorporate information on a forward basis, allows issuers to avoid additional delays and interruptions in the offering process and to access the capital markets in a more expeditious and efficient manner than raising capital in a standard offering on Form S-1.

To be eligible to use Form S-3 for a registered offering of securities to investors, an issuer must generally have a public float (which consists of the aggregate market value of a class of equity stock held by non-affiliates) in excess of \$75 million. Issuers may also use Form S-3 in circumstances where their public float is below the \$75 million threshold, subject to certain requirements and limitations, the most relevant of which would require the issuer to have a class of common equity securities listed and registered on a national securities exchange. Although we currently meet the \$75 million public float requirement, in the recent past we have been below that threshold and cannot assure you that we will remain above it in the future. We have in the recent past not been able to use Form S-3 as a practical matter because our common stock has not been listed and registered on a national securities exchange. If we again become ineligible to use Form S-3, we will be required to use long form registration if we wanted to conduct a registered offering of securities to investors, and may experience delays in that process. In addition, our ability to undertake certain types of financing transactions could become limited or unavailable to us if we again became ineligible to use Form S-3. Furthermore, because of the delay associated with long form registration and the limitations on the financing transactions we may desire to undertake in the future, the terms of any financing transaction we are able to conduct may not be advantageous to us or may cause us not to obtain capital in a timely fashion to execute our business strategies.

FORWARD-LOOKING STATEMENTS

The prospectus contains “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1985. 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 relationships;
- 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 “Risk Factors” in this prospectus and elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2018.

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 will not receive any proceeds from the selling stockholders’ sales of our common stock. However, at the time the shares of common stock and Series B Convertible Preferred Stock were originally issued to the selling stockholders, we did receive payment for the purchase price for those securities.

We will pay for expenses of this offering, except that the selling stockholders will pay any underwriting discounts or commissions or equivalent expenses applicable to the sale of their shares.

SELLING STOCKHOLDERS

This prospectus relates to the offer, resale or other disposition of 6,585,000 shares of our common stock and 5,610,121 shares of common stock issuable upon the conversion of our Series B Convertible Preferred Stock (as defined below). For additional information regarding the issuance of the Series B Convertible Preferred Stock, see “Prospectus Summary – Securities Being Offered” above. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the common stock and the Series B Convertible Preferred Stock, the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding their beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the rules and regulations thereunder) of shares of our common stock. These rules generally provide that a person is the beneficial owner of securities if such person has or shares the power to vote or direct the voting thereof, or to dispose or direct the disposition thereof, or has the right to acquire such powers within 60 days. The second column lists the number of shares of common stock beneficially owned by the selling stockholders as of August 23, 2019. The fourth column lists the shares of common stock being offered by this prospectus by the selling stockholders.

In accordance with a registration rights agreement with the holders of the common stock and the Series B Convertible Preferred Stock, this prospectus covers the offer, resale or other disposition of the sum of (i) 100% of the number of shares of common stock issued to the holders pursuant to the SPA and (ii) 100% of the number of shares of common stock issuable upon conversion of the Series B Convertible Preferred Stock, in each case, determined as if the outstanding Series B Convertible Preferred Stock were converted in full (without regard to any limitations on conversion or exercise contained in the Certificate of Designations for the Series B Convertible Preferred Stock) as of August 23, 2019. Percentage ownership is based on 66,084,239 shares of common stock outstanding as of August 23, 2019. The selling stockholders may sell all, some or none of their shares in this offering. See “Plan of Distribution.” This information is based upon our review of public filings, our stockholder, optionholder and warrant holder registers and information furnished by the selling stockholders.

Name and Address of Selling Stockholder	Shares Beneficially Owned Prior to the Offering (1)		Maximum Number of Shares Offered by This Prospectus (2)	Shares Beneficially Owned Subsequent to the Offering (1)(3)	
	Shares	Percent		Shares	Percent
Entities affiliated with Redmile Group, LLC (4) One Letterman Drive, Building D, Suite D3-300 San Francisco, CA 94129	6,969,941	9.99%	8,895,121	0	0%
Opaleye L.P. (5) One Boston Place 26 th Floor Boston, MA 02018	4,070,000	6.16%	3,000,000	1,070,000	1.62%
Whitney Capital Series Fund LLC 460 Park Ave, 19 th Floor New York, NY 10022	177,570	*	115,070	62,500	*
Schonfeld Fundamental Equity Fund LLC 460 Park Ave, 19 th Floor New York, NY 10022	177,566	*	115,066	62,500	*
Parkman HP Master Fund 700 Canal Street 2 nd Floor Stamford, CT 06902	107,811	*	69,864	37,947	*

* Less than one percent.

(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) Pursuant to the Certificate of Designations, Preferences, Rights and Limitations of Series B Convertible Preferred Stock of Stereotaxis, Inc., the Company may not effect a conversion and a selling stockholder of the Series B Convertible Preferred Stock does not have the right to convert any portion of the shares of Series B Convertible Preferred Stock held by such selling stockholder to the extent that, after giving effect to the attempted conversion set forth in a notice of conversion, such selling stockholder, together with such selling stockholder's affiliates and any other person whose beneficial ownership of shares of common stock would be aggregated with such selling stockholder's for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the SEC, including any "group" of which such selling stockholder is a member, would beneficially own more than 9.99% of our common stock then issued and outstanding (the "Beneficial Ownership Limitation"). The 9.99% Beneficial Ownership Limitation percentage may be changed at a holder's election upon 61 days' notice to the Company. Includes 100% of the shares of common stock issued to the selling stockholders pursuant to the SPA and 100% of the shares of common stock issuable upon conversion of the Series B Convertible Preferred Stock at the current conversion price without regard to the 9.99% Beneficial Ownership Limitation.
- (3) Assumes for each stockholder the conversion in full of all shares of Series B Convertible Preferred Stock held by such stockholder without regard to the 9.99% Beneficial Ownership Limitation and the sale of all shares offered hereby and that the selling stockholders do not acquire beneficial ownership of any additional shares.
- (4) Based on the Company's records and a Schedule 13G filed with the SEC on August 12, 2019 by Redmile Group, LLC ("Redmile"), Jeremy C. Green, Redmile Strategic Master Fund, LP ("Strategic Fund"), Redmile Capital Offshore II Master Fund, Ltd. ("Master Fund" and together with Strategic Fund, the "Redmile Affiliates"), the shares of the Company's common stock that may be deemed to be beneficially owned by entities affiliated with Redmile is comprised of: (i) 1,701,400 shares of common stock held by Strategic Fund, (ii) 1,583,600 shares of common stock held by Master Fund, (iii) 2,905,600 shares of common stock issuable upon the conversion of shares of Series B Convertible Preferred Stock held by Strategic Fund, and (iv) 2,704,521 shares of common stock issuable upon the conversion of shares of Series B Convertible Preferred Stock held by Master Fund. Redmile is the investment manager/adviser to each of the Redmile Affiliates and, in such capacity, exercises sole voting and investment power over all of the shares held by the Redmile Affiliates and may be deemed to be the beneficial owner of these shares, subject to the Beneficial Ownership Limitation. Jeremy C. Green serves as the principal of Redmile and also may be deemed to be the beneficial owner of these shares, subject to the Beneficial Ownership Limitation. Redmile and Mr. Green each disclaim beneficial ownership of these shares, except to the extent of its or his pecuniary interest in such shares, if any. The Series B Convertible Preferred Stock is initially convertible into shares of common stock on a one-for-one basis. The 6,969,941 shares of common stock reported as beneficially owned prior to the offering by entities affiliated with Redmile represents 9.99% of the outstanding shares of common stock as of August 23, 2019, assuming the conversion of 3,684,941 shares of Series B Convertible Preferred Stock into 3,684,941 shares of common stock, which, due to the Beneficial Ownership Limitation, is the maximum number of shares of Series B Convertible Preferred Stock that could be converted to common stock as of August 23, 2019.
- (5) Based on the Company's records and a Schedule 13G filed on August 16, 2019, by Opaleye L.P. (the "Opaleye Fund"), Opaleye Management, Inc. (the "Investment Manager") and Mr. James Silverman. The Investment Manager serves as investment manager of the Opaleye Fund and Mr. Silverman is the President of the Investment Manager. Each of the Opaleye Fund, the Investment Manager and Mr. Silverman hold shared voting and dispositive power over the shares held by the Opaleye Fund.

PLAN OF DISTRIBUTION

We are registering the shares of common stock previously issued to the selling stockholders and the shares of common stock issuable upon the conversion of the Series B Convertible Preferred Stock previously issued to the selling stockholders in order to permit the selling stockholders to offer the shares for resale from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

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 directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock or interests in shares of common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. These dispositions may be sold in one or more transactions, 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. These sales may be effected in transactions which may involve cross or block transactions.

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

- transactions on any national securities exchange or U.S. inter-dealer quotation system of a registered national securities association on which the shares may be listed or quoted at the time of sale;
- over-the-counter market transactions;
- transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- 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;
- through the distribution of the common stock by any selling stockholder to its partners, members or stockholders;
- through one or more underwritten offerings on a firm commitment or best efforts basis;
- in sales pursuant to Rule 144;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders 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 by 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 or donate the shares of common stock in other circumstances, in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of securities or otherwise, 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 shares in the course of hedging the positions they assume. The selling stockholders may also sell shares short and deliver these shares to close out their short positions and to return borrowed shares in connection with such short sales, or loan or pledge the shares to broker-dealers that in turn may sell these shares. 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 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, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders, individually and not severally, and any underwriters, broker-dealers or agents that participate in the distribution of the common stock may be deemed to be “underwriters” within the meaning of Section 2(a)(11) of the Securities Act. Any discounts, commissions, concessions or profit earned by any such broker-dealer on any resale of the shares may be deemed to be underwriting discounts and commissions under the Securities Act. Selling stockholders who are “underwriters” within the meaning of Section 2(a)(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act, including Rule 172 thereunder and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act. 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.

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, and 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 of which this prospectus forms a part.

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.

Each selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholder and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. If the selling stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, and the selling stockholders have advised us that, except as set forth in a supplement to this prospectus, in the case of an agency transaction, such commissions will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2121 and, in the case of a principal transaction, any such markup or markdown will be in compliance with FINRA Rule 2121.

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. There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement of which this prospectus forms a part.

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 forms 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 Rule 144 under the Securities Act or (2) the date on which all of the shares may be sold without restriction or condition pursuant to Rule 144 of the Securities Act.

Once sold under the registration statement of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

DESCRIPTION OF SECURITIES

General

As of the date of this prospectus, we are authorized to issue up to 300,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.

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 certificate of incorporation and 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 those documents, they are on file with the SEC, as described under the heading "Where You Can Find Additional Information" below.

Common Stock

As of August 23, 2019, there were approximately 66 million shares of common stock outstanding that were held of record by approximately 492 stockholders, although we believe that there is a significantly larger number of beneficial owners of our common stock. In addition, as of such date, we had 2,062,514 shares of common stock issuable upon the exercise of outstanding options and stock appreciation rights at a weighted average exercise price of \$2.10 per share, 1,023,074 shares of common stock issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$0.70 per share, 43,082,782 shares of common stock issuable upon the conversion of Series A Convertible Preferred Stock, 5,610,121 shares of common stock issuable upon the conversion of Series B Convertible Preferred Stock, and 857,687 shares of unvested restricted share units.

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 is authorized to issue up to 10,000,000 shares of preferred stock in one or more series, to fix the number of shares in each series, and to determine the designations and preferences, limitations and relative rights of each series, including dividend rates, terms of redemption, liquidation preferences, sinking fund requirements, conversion rights, voting rights, and whether the preferred stock can be issued as a share dividend with respect to another class or series of shares, all without any vote or other action on the part of stockholders. This power is limited by applicable laws or regulations and may be delegated to a committee of our board of directors. The preferred stock is not secured, is not guaranteed by us or any of our affiliates and is not subject to any other arrangement that legally or economically enhances the ranking of the preferred stock.

As described below, as of the date of this prospectus, we had authorized the issuance of up to 5,634,121 shares in the aggregate of Series A Convertible Preferred Stock and Series B Convertible Preferred Stock, leaving an aggregate of 4,365,879 shares of preferred stock authorized but undesignated. In the case of the Series B Preferred Stock, any shares converted to common stock shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series B Preferred Stock.

Series A Convertible Preferred Stock

On September 29, 2016, we filed a Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock (the “Series A Certificate of Designations”) to authorize the issuance of up to 24,000 shares of the Series A Convertible Preferred Stock, of which 23,855 shares remain issued and outstanding as of the date of this prospectus supplement.

Pursuant to the Series A Certificate of Designations, holders of Series A Convertible Preferred Stock are entitled to vote on an as-converted basis with holders of common stock, subject to specified beneficial ownership issuance limitations. The Series A Convertible Preferred Stock bears dividends at a rate of six percent (6.0%) per annum, which are cumulative and accrue daily from the date of issuance on the \$1,000 stated value. Such dividends will not be paid in cash, except in connection with any liquidation, dissolution or winding up of the Company or any redemption of the Series A Convertible Preferred Stock. Instead, the value of the accrued dividends is added to the liquidation preference of the Series A Convertible Preferred Stock and will increase the number of shares of common stock issuable upon conversion.

Each share of Series A Convertible Preferred Stock is convertible at the option of the holder from and after the original date of issuance, at an initial conversion price of \$0.65 per share, subject to adjustment in the event of stock splits, dividends, mergers, sales of all or substantially all of our assets or similar transactions, subject to specified beneficial ownership issuance limitations. If we fail to timely issue shares of Series A Convertible Preferred Stock or common stock issuable on conversion or remove legends from any such shares, in each case as and when required to do so under the Series A Certificate of Designations, we will be required to pay liquidated damages to the affected holder in an amount equal to 0.25% of the product of (i) the number of shares of common stock to be issued or issuable on conversion of the relevant shares of Series A Convertible Preferred Stock and (ii) the weighted average price of the common stock on the last date before such failure, and may be required to pay additional or alternative damages in specified circumstances at the option of the holder. Each holder of Series A Convertible Preferred Stock has the right to require us to redeem such holder’s Series A Convertible Preferred Stock upon the occurrence of specified events, including mergers, sales of substantially all assets of the Company, and certain defaults under the Series A Certificate of Designations and under the Registration Rights Agreement entered into in connection with that certain Securities Purchase Agreement, dated September 26, 2016, by and among the Company and the investors identified on the Schedule of Buyers thereto (the “2016 SPA”). We also have the right to redeem the Series A Convertible Preferred Stock in the event of a Change of Control Transaction (as defined in the Series A Certificate of Designations).

The Series A Convertible Preferred Stock ranks senior to our common stock as to distributions and payments upon the liquidation, dissolution and winding up of the Company. No such distributions or payments upon the liquidation, dissolution and winding up of the Company may be made to the holders of common stock unless and until the holders of Series A Convertible Preferred Stock have received the stated value of \$1,000 per share plus any accrued and unpaid dividends. Until all shares of Series A Convertible Preferred Stock have been converted or redeemed, no dividends may be paid on the common stock without the prior express written consent of the holders of a majority of the outstanding Series A Convertible Preferred Stock. In the event that dividends or other distributions of assets are made or paid by us to the holders of the common stock, the holders of Series A Convertible Preferred Stock are entitled to participate in such dividend or distribution on an as-converted basis (without giving effect to any limitations on conversion).

Under the 2016 SPA, we have agreed that for a period of 61 months following the closing date, so long as at least 8,000 shares of Series A Convertible Preferred Stock issued on the closing date are outstanding, the Buyers will have a right to participate on a pro rata basis in equity financings or issuances of securities convertible, exercisable or exchangeable into equity securities of the Company or any subsidiaries (including debt securities with an equity component), subject to certain exceptions.

Series B Convertible Preferred Stock

On August 7, 2019, we filed a Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock (the “Series B Certificate of Designations”) to authorize the issuance of up to 5,610,121 shares of the Series B Convertible Preferred Stock, all of which are issued and outstanding as of the date of this prospectus supplement.

Pursuant to the Series B Certificate of Designations, holders of Series B Convertible Preferred Stock have no voting rights except as required by law. The Series B Convertible Preferred Stock bears dividends equal to and in the same form as dividends actually paid on shares of common stock when, as and if such dividends are paid on shares of common stock. No other dividends will be paid on shares of Series B Convertible Preferred Stock.

Each share of Series B Convertible Preferred Stock is convertible at the option of the holder from and after the original date of issuance, into a number of shares of common stock equal to the Conversion Ratio. The “Conversion Ratio” for each share of Series B Convertible Preferred Stock is equal to the stated value of \$2.05 divided by the conversion price of \$2.05, subject to adjustment in the event of stock splits, stock dividends, mergers, sales of all or substantially all of our assets or similar transactions, subject to specified beneficial ownership issuance limitations. If we fail to timely issue shares of Series B Convertible Preferred Stock or common stock issuable on conversion, in each case as and when required to do so under the Series B Certificate of Designations unless the affected holder has rescinded the applicable notice of conversion, we will be required to pay liquidated damages at the holder’s option either in cash or in shares of common stock (to the extent that such issuance of shares of common stock would not cause the holder or its affiliates to exceed specified beneficial ownership issuance limitations) to the affected holder in an amount equal to the product of (i) the number of shares of common stock to be issued or issuable on conversion of the relevant shares of Series B Convertible Preferred Stock, (ii) 0.005 multiplied by the last closing trade price of the common stock on the date such shares of common stock were required to be delivered, and (iii) the number of trading days actually lapsed after the fifth trading day after the date such shares of common stock were required to be delivered, and may be required to pay additional or alternative damages in specified circumstances at the option of the holder.

The Series B Convertible Preferred Stock ranks on parity with our common stock as to distributions and payments upon the liquidation, dissolution and winding up of the Company. Subject to the prior and superior rights of the holders of any securities of the Company that rank senior to the Series B Convertible Preferred Stock, upon liquidation, dissolution or winding up of the Company, each holder of shares of Series B Convertible Preferred Stock will be entitled to receive distributions of any of the assets or surplus funds of the Company *pari passu* with any distribution to the holders of common stock in an amount equal to \$0.001 per share of Series B Convertible 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;
- 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, 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 imposes 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.

Market Information

Our common stock trades on the NYSE American 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 P.O. Box 1342, Brentwood, NY 11717-0718, and its telephone number is (855) 300-4994.

LEGAL MATTERS

The validity of the securities offered hereby has been passed upon for us by Bryan Cave Leighton Paisner LLP, St. Louis, Missouri.

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, 2018, as set forth in their report thereon, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements and schedule are incorporated by reference in reliance on Ernst & Young LLP's reports, given 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 call the SEC at 1-800-SEC-0330 for information on the operation of its Public Reference Room.

We have filed with the SEC a registration statement under the Securities Act 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—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.

The following documents listed in (a) through (e) below, which are on file with the SEC, are incorporated herein by reference (except for the portions of the Company's Current Reports on Form 8-K furnished pursuant to Item 2.02 or Item 7.01 thereof or otherwise not filed with the SEC which are deemed not to be incorporated by reference into the registration statement of which this prospectus forms a part):

- (a) The Registrant's Annual Report filed on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 15, 2019;
- (b) The Registrant's Quarterly Reports filed on Form 10-Q for the quarterly period ended March 31, 2019, filed with the SEC on May 9, 2019, and for the quarterly period ended June 30, 2019, filed with the SEC on August 9, 2019;
- (c) The Registrant's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 10, 2019;
- (d) The Registrant's Current Reports on Form 8-K filed with the SEC on January 11, 2019, May 21, 2019, July 1, 2019, August 8, 2019 and September 16, 2019; and
- (e) The description of the Registrant's common stock contained in the Registrant's Registration Statement on Form 8-A dated September 4, 2019, registering the Registrant's common stock under Section 12(b) of the Exchange Act, as amended, including any amendments or reports filed for the purpose of updating such description.

In addition, all documents subsequently filed by the Registrant with the SEC pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (other than those made pursuant to Item 2.02 or Item 7.01 of Form 8-K or other information "furnished" to the SEC) 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 the registration statement of which this prospectus forms a part and to be part hereof from the date of filing of such documents. 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 is deemed not to be incorporated by reference in the registration statement of which this prospectus forms 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 for purposes of the registration statement of which this prospectus forms a part to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

These reports and documents can be accessed free of charge on our website at www.stereotaxis.com. We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, a copy of any or all documents that are incorporated by reference into this prospectus, but not delivered with the prospectus, upon written and oral request, other than exhibits to such unless such exhibits are specifically incorporated by reference into the documents that this prospectus incorporates. Please send written requests to:

Stereotaxis, Inc.
4320 Forest Park Avenue, Suite 100
St. Louis, Missouri 63108
(314) 678-6100
Attn: Investor Relations Department

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. 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.

Securities and Exchange Commission filing fee	\$ 5,173
Legal fees and expenses	265,687
Accounting fees and expenses	8,000
Financial advisory fees and expenses	1,625,000
Total expenses	\$ 1,903,860

Item 14. 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 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 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 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 of 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.

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.

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

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

Item 15. Recent Sales of Unregistered Securities

On August 7, 2019, the Registrant entered into a Securities Purchase Agreement (the “SPA”) with certain institutional and other accredited investors (the “Buyers”), whereby it agreed to sell, for an aggregate purchase price of \$23.1 million, (i) an aggregate of 6,585,000 shares of common stock, par value \$0.001 per share, and (ii) an aggregate of 5,610,121 shares of Series B Convertible Preferred Stock (the “Preferred Shares”) which are convertible into shares of the Company’s common stock. The transaction closed on August 7, 2019. The offering of common stock and Preferred Shares was made to “accredited investors” as such term is defined in the Securities Act and in reliance on the exemption from registration afforded by Section 4(a)(2) and Regulation D (Rule 506) under the Securities Act and corresponding provisions of state securities laws.

Item 16. Exhibits and Financial Statement Schedules.

Exhibit Number	Document Description
3.1a	<u>Restated Articles of Incorporation of the Registrant, incorporated by reference to Exhibit 3.1 of the Registrant’s Form 10-Q (File No. 000-50884) for the fiscal quarter ended September 30, 2004.</u>
3.1b	<u>Certificate of Amendment to Amended and Restated Certificate of Incorporation, incorporated by reference to Exhibit 3.1 of the Registrant’s Form 8-K (File No. 000-50884) filed on July 10, 2012.</u>
3.2	<u>Certificate of Designations, Preferences and Rights of Series A Convertible Preferred Stock, incorporated by reference to Exhibit 3.1 of the Registrant’s Form 8-K (File No. 001-36159) filed on September 30, 2016.</u>
3.3	<u>Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock, incorporated by reference to Exhibit 3.1 of the Registrant’s Form 8-K (File No. 001-36159) filed on August 8, 2019.</u>
3.4	<u>Restated Bylaws of the Registrant, incorporated by reference to Exhibit 3.2 of the Registrant’s Form 10-Q (File No. 000-50884) for the fiscal quarter ended September 30, 2004.</u>
4.1	<u>Form of Specimen Stock Certificate, incorporated by reference to the Registration Statement on Form S-1 (File No. 333-115253) originally filed with the SEC on May 7, 2004, as amended thereafter, at Exhibit 4.1.</u>
5.1	<u>Opinion of Bryan Cave Leighton Paisner LLP.</u>
10.1	<u>Securities Purchase Agreement dated August 7, 2019, by and among the Registrant and the investors listed on the Schedule of Buyers attached thereto, incorporated by reference to Exhibit 10.1 to the Registrant’s Form 8-K (File No. 001-36159) filed on August 8, 2019.</u>
10.2	<u>Registration Rights Agreement dated August 7, 2019, by and among Registrant and the Buyers identified therein, incorporated by reference to Exhibit 10.2 to the Registrant’s Form 8-K (File No. 001-36159) filed on August 8, 2019.</u>
23.1	<u>Consent of Ernst & Young LLP.</u>
23.2	<u>Consent of Bryan Cave Leighton Paisner LLP (included in Exhibit 5.1).</u>
24.1	<u>Power of Attorney.</u>

Item 17. Undertakings.

- (1) The undersigned registrant hereby undertakes 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;
 - (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;
 - (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.

Paragraphs (1)(i), (ii), and (iii) of this section do not apply if the registration statement is on Form S-1, Form S-3, Form SF-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or, as to a registration statement on Form S-3, Form SF-3 or Form F-3, is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) The undersigned registrant hereby undertakes that, for the purpose of determining any liability under the Securities Act, as amended, 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) The undersigned registrant hereby undertakes to remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering.
- (4) The undersigned registrant hereby undertakes that, for the purposes of determining liability to any purchaser:

If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- (5) Insofar as indemnification for liabilities arising under the Securities Act, as amended, may be permitted to directors, officers and controlling persons of the undersigned registrant according to the foregoing provisions, or otherwise, the undersigned registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the 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, as amended, and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant 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 September 19, 2019.

STEREOTAXIS, INC.

By: /s/ David L. Fischel

David L. Fischel
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/ David L. Fischel</u> David L. Fischel	Chairman of the Board and Chief Executive Officer (principal executive officer)	September 19, 2019
<u>/s/ Martin C. Stammer</u> Martin C. Stammer	Chief Financial Officer (principal financial officer and principal accounting officer)	September 19, 2019
<u>*</u> David W. Benfer	Director	September 19, 2019
<u>*</u> Nathan Fischel	Director	September 19, 2019
<u>*</u> Joe Kiani	Director	September 19, 2019
<u>*</u> Arun S. Menawat	Director	September 19, 2019
<u>*</u> Robert J. Messey	Director	September 19, 2019
<u>*</u> Ross B. Levin	Director	September 19, 2019
<u>*By /s/ Martin C. Stammer</u> Martin C. Stammer Attorney-in-fact		

Signatures - 1

September 19, 2019

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



BRYAN CAVE LEIGHTON PAISNER LLP
One Metropolitan Square
211 North Broadway Suite 3600
St Louis MO 63102
T: +1 314 259 2000
F: +1 314 259 2020
www.bcplaw.com

Stereotaxis, Inc.
Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as special counsel to Stereotaxis, Inc., a Delaware corporation (the “Company”), in connection with the offer and resale of an aggregate of 12,195,121 shares (the “Shares”) of common stock of the Company, par value \$0.001 per share, pursuant to the Company’s Registration Statement on Form S-3 (the “Registration Statement”) filed by the Company with the Securities and Exchange Commission (the “SEC”) under the Securities Act of 1933, as amended (the “Securities Act”), on September 19, 2019, on behalf of the selling stockholders named therein. The Shares consist of (i) 6,585,000 shares of the Company’s common stock (the “Common Shares”) and (ii) 5,610,121 shares of the Company’s common stock (the “Conversion Shares”) issuable upon conversion of the Company’s Series B Convertible Preferred Stock (the “Series B Preferred”), in each case issued or issuable to the selling stockholders named in the Registration Statement (collectively, the “Selling Stockholders”) pursuant to that certain Securities Purchase Agreement (the “Purchase Agreement”), dated as of August 7, 2019, by and among the Company and the Selling Stockholders.

In connection herewith, we have examined:

- (1) the Registration Statement;
 - (2) the Purchase Agreement;
 - (3) the Amended and Restated Certificate of Incorporation of the Company, as amended;
 - (4) the Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock of the Company (the “Series B Certificate of Designation”); and
 - (5) the Amended and Restated Bylaws of the Company.
-

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 or by facsimile or other means of electronic transmission, or which we obtained from the Securities and Exchange Commission's ("SEC") Electronic Data Gathering, Analysis and Retrieval system ("Edgar") or other sites maintained by a court or governmental authority or regulatory body and the authenticity of the originals of such latter documents. If any documents we examined in printed, word processed or similar form have been filed with the SEC on Edgar or such court or governmental authority or regulatory body, we have assumed that the document so filed is identical to the document we examined except for formatting changes. 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.

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 (i) the Common Shares have been duly authorized and are validly issued, fully paid and non-assessable; and (ii) the Conversion Shares have been duly authorized and, when the Conversion Shares have been issued upon conversion of the Series B Preferred in accordance with the terms of the Series B Certificate of Designation, the Conversion Shares will be validly 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 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 which forms a part of the Registration Statement. 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 Leighton Paisner LLP

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3 No. 333-) and the related Prospectus of Stereotaxis, Inc. for the registration of 12,195,121 shares of its common stock and to the incorporation by reference therein of our report dated March 15, 2019, 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, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

St. Louis, Missouri
September 19, 2019

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints David L. Fischel, Martin C. Stammer and Kevin M. Barry, and each of them (with full power of each to act alone), severally, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and to execute in his or her name, place and stead (individually and in any capacity stated below) a registration statement on Form S-3 (the "Registration Statement") covering the registration shares of common stock, par value \$0.001, of Stereotaxis, Inc. (the "Company") for resale by or on behalf of certain selling stockholders pursuant to registration rights granted under a registration rights agreement, including shares issuable upon conversion of Series B Convertible Preferred Stock of the Company as set forth and described in and under that certain Securities Purchase Agreement, dated August 7, 2019, between the Company and the investors named therein, and any and all pre-effective and post-effective amendments to the Registration Statement), and any additional registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and all documents and instruments necessary or advisable in connection therewith, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission (or any other governmental regulatory authority), each of said attorneys-in-fact and agents to have power to act with or without the others and to have full power and authority to do and to perform in the name and on behalf of each of the undersigned every act whatsoever necessary or advisable to be done in the premises as fully and to all intents and purposes as any of the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents and/or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Dated: September 19, 2019

Name:	Title:
<hr/> <i>/s/ David L. Fischel</i> David L. Fischel	<hr/> Chairman and Chief Executive Officer (principal executive officer)
<hr/> <i>/s/ Martin C. Stammer</i> Martin C. Stammer	<hr/> Chief Financial Officer (principal financial officer and principal accounting officer)
<hr/> <i>/s/ David W. Benfer</i> David W. Benfer	<hr/> Director
<hr/> <i>/s/ Nathan Fischel</i> Nathan Fischel	<hr/> Director
<hr/> <i>/s/ Joe Kiani</i> Joe Kiani	<hr/> Director
<hr/> <i>/s/ Arun Menawat</i> Arun Menawat	<hr/> Director
<hr/> <i>/s/ Robert J. Messey</i> Robert J. Messey	<hr/> Director
<hr/> <i>/s/ Ross B. Levin</i> Ross B. Levin	<hr/> Director

