AGILE THERAPEUTICS INC
Form S-1/A
May 09, 2014

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As filed with the Securities and Exchange Commission on May 9, 2014

Registration Statement No. 333-194621

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

Amendment No. 3
to

FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

AGILE THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**2834**	**23-2936302**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(IRS Employer Identification Number)*

101 Poor Farm Road
Princeton, New Jersey 08540
(609) 683-1880

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

Alfred Altomari
Chief Executive Officer
Agile Therapeutics, Inc.
101 Poor Farm Road
Princeton, New Jersey 08540
(609) 683-1880

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

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

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, check the following box. o

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. o

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. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) 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. o

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

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to Be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee(3)(4)
Common Stock, par value $0.0001 per share	$74,307,702	$9,571

(1) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended.

(2) Includes shares of common stock subject to the underwriters' option to purchase additional shares of common stock.

(3) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

(4) A registration fee of $8,888 was previously paid in connection with the Registration Statement, and the additional amount of $683 is being paid herewith.

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 Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This preliminary prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated May 9, 2014

4,615,385 Shares

COMMON STOCK

We are offering 4,615,385 shares of our common stock. This is our initial public offering and no public market currently exists for our common stock. We expect that the initial public offering price will be between $12.00 and $14.00 per share.

We have applied to list our common stock on the NASDAQ Global Market under the symbol "AGRX."

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, and will be subject to reduced public company reporting requirements.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 13.

	Per Share	Total
Initial public offering price	$	$
Underwriting discount and commissions(1)	$	$
Proceeds, before expenses, to us	$	$

(1) See "Underwriting" in this prospectus for a description of compensation payable to the underwriters.

We have granted the underwriters an option to purchase up to 692,308 additional common shares to cover over-allotments, if any, exercisable at any time until 30 days after the date of this prospectus. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be $ and the total proceeds to us, before expenses, will be $.

Certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $15.0 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering.

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 underwriters expect to deliver the shares on or about , 2014.

RBC CAPITAL MARKETS **WILLIAM BLAIR**

CANTOR FITZGERALD & CO. **JANNEY MONTGOMERY SCOTT**

Prospectus dated , 2014

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You should rely only on the information contained in this prospectus and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not authorized anyone to provide you with information that is different from that contained in such prospectuses. We are offering to sell shares of our common stock, and seeking offers to buy shares of our common stock, only in jurisdictions where such offers and sales are permitted. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock.

Until and including , 2014, 25 days after the date of this prospectus, all dealers that buy, sell or trade our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

For investors outside of the United States: neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about and to observe any restrictions relating to this offering and the distribution of this prospectus.

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PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. Before you decide to invest in our common stock, you should read the entire prospectus carefully, including the "Risk Factors" section and the financial statements and related notes appearing at the end of this prospectus. In this prospectus, unless otherwise stated or the context otherwise indicates, references to "Agile," "we," "us" or "our" refer to Agile Therapeutics, Inc.

Overview

We are a women's health specialty pharmaceutical company focused on the development and commercialization of new prescription contraceptive products. Our product candidates are designed to provide women with contraceptive options that offer greater convenience and facilitate compliance. Our lead product candidate, Twirla™, also known as AG200-15, is a once-weekly prescription contraceptive patch currently in Phase 3 clinical development. We anticipate receiving data from our Phase 3 trial by the end of 2015, and, if approved, we plan to launch Twirla in the United States through a focused specialty sales force. Twirla is based on our proprietary transdermal patch technology, called Skinfusion®, which is designed to provide advantages over currently available patches and is intended to optimize patch adherence and stability and patient comfort. Twirla is a combined hormonal contraceptive, or CHC, patch that contains the active ingredients ethinyl estradiol, or EE, which is a synthetic estrogen, and levonorgestrel, or LNG, which is a type of progestin, a synthetic steroid hormone, both of which have an established history of efficacy and safety in currently marketed combination low-dose, oral contraceptives. Twirla is designed to consistently deliver both hormones over a seven-day period at levels comparable to currently marketed low-dose oral contraceptives. By delivering these active ingredients over seven days, in a comfortable, convenient and easy-to-use weekly patch, Twirla is designed to promote enhanced patient compliance.

The U.S. hormonal contraceptive market, with total market sales of $5.6 billion in 2013, represents the greatest opportunity for Twirla. Over half of those sales were generated by branded products. Contraceptive methods, other than sterilization, can be divided into non-hormonal and hormonal alternatives. Non-hormonal contraceptive products available in the United States include the diaphragm, male condom and female condom. There are several methods of hormonal contraception available in the United States, including oral contraceptives, a vaginal ring, intrauterine contraceptive devices, or IUDs, subcutaneous implants, injectables and a transdermal patch which is available in branded and generic versions. Over the years, the doses of EE most commonly included in CHCs have steadily decreased to 35 micrograms per day or below, due to associated safety risks of higher EE doses. The currently approved transdermal patch products deliver EE at a level that is 60% higher than that delivered with low-dose oral contraceptives containing 35 micrograms of EE. As a result, the currently approved patch products carry a black box warning describing safety risks associated with this higher level of EE. Before these issues were identified with the first marketed patch, it achieved rapid market uptake and quickly captured approximately 10% of the CHC market. We believe there is an unmet market need for a low-dose transdermal patch as a contraceptive option that does not carry the additional safety risks associated with higher levels of EE.

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Twirla is designed to be highly appealing to patients and healthcare professionals as a method of contraception. Twirla delivers approximately 30 micrograms of EE per day, a dose of EE consistent with low-dose oral contraceptives. The daily delivery of EE from Twirla is much lower than the levels of EE delivered by the currently approved patch products, as reported in that patch's label. Twirla is round and made of a soft, flexible, silky fabric, designed to flex with the movement of a woman's body. Twirla is a matrix patch consisting of several layers of material which contain the active ingredients EE and LNG, inactive ingredients to assist in transport of EE and LNG across the skin, and adhesives that allow adherence to the skin. There is a barrier formed between the inner portion of the patch, which contains the active ingredients, and the outer portion of the patch, which only contains the adhesive. This barrier is intended to prevent the active and inactive ingredients from migrating to the peripheral portion of the patch, and from breaking down the adhesive in that portion of the patch. Twirla is also designed to help prevent seepage of the adhesives from around the edges of the patch where it could collect dirt and leave a sticky black ring on the skin. The six layers of the patch are integrated to create a patch which has a slim profile, less than one half millimeter, and is unobtrusive when applied. The results of multiple clinical trials suggest that Twirla delivers the active ingredients needed for contraception over a seven-day period, and that it remains adhered to the skin of most subjects for the full seven-day period, even under conditions of heat, humidity, showering, exposure to water and vigorous exercise.

We have conducted a comprehensive clinical program enrolling over 2,100 women in Phase 1, Phase 2 and Phase 3 trials, over 1,500 of whom received Twirla. In the larger of our two completed Phase 3 trials, 485 women received Twirla for 12 months. In Phase 1 and Phase 2 clinical trials, we demonstrated that Twirla delivers levels of both EE and LNG to the blood stream that are consistent with current low-dose oral contraceptives. In our two completed Phase 3 clinical trials that enrolled over 1,900 women in the aggregate for up to 12 months, we demonstrated that Twirla generally had comparable efficacy and tolerability to an approved low-dose oral contraceptive. Across all clinical trials, Twirla was generally well tolerated and had a favorable safety profile.

In our Phase 3 trials, the primary measure of efficacy is the Pearl Index, or PI, which is a measure of the rate of unintended pregnancies experienced by women in the study. Specifically, the PI is expressed as the number of pregnancies per 100 woman-years of use. The PI values in the pooled completed Phase 3 trials for both the Twirla patch, 5.76, and the combined oral contraceptive control, 6.72, were higher than the PI range of 1.34 to 3.19 for products approved by the U.S. Food & Drug Administration, or FDA, within the past ten years. We believe that the results for both the patch and oral contraceptive control arms in our completed Phase 3 trials were affected primarily by issues with study conduct at several study sites, including rapid enrollment which led to an inability to manage the study population, poor subject compliance and high rates of loss to follow-up. The results were also likely affected in part by the study population, which differed in composition from the populations enrolled in trials of previously approved CHCs. Our Phase 3 trials had a high number of new users and minorities as compared to other CHC clinical trials. In particular, many contraceptive trials have enrolled a high proportion of subjects who immediately switched from other hormonal contraceptives, referred to as current users. For example, the subject population for the primary contraceptive efficacy clinical trial for the product Yaz® consisted of 60% current users and for the North American clinical trial

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for the product Natazia® consisted of 59% current users. However, only 17.8% of subjects in our larger Phase 3 trial randomized to receive Twirla were current users, and therefore, we had a higher than usual proportion of new users of contraception. Notably, there was a higher incidence of noncompliance in new users as compared to experienced users. In our Phase 3 studies, noncompliance, as verified by nondetectable serum levels of LNG and EE in a subject, was approximately three times as high in new users as compared to experienced users in both the Twirla and oral contraceptive arms of the study. Higher rates of noncompliance in contraceptive studies often correlate with a higher contraceptive failure rate.

We have filed a Section 505(b)(2) New Drug Application, or NDA, for approval of Twirla by the FDA, which is required before marketing a new drug in the United States. Our 505(b)(2) NDA relies in part on clinical trials that we conducted and in part on the FDA's findings of safety and efficacy from investigations for approved products containing the active ingredients and published scientific literature for which we have not obtained a right of reference. The FDA has indicated in a Complete Response Letter, or CRL, that our NDA was not sufficient for approval as originally submitted, due in part to the higher than desired PI. The FDA recommended that we conduct an additional Phase 3 trial with a simplified clinical trial design and improved study conduct, including site monitoring and data collection procedures. The FDA also required additional information relating to the laser etching of label information on each patch and required that the patch used in the new trial utilize the same etching as will be used for the commercial product, in order to demonstrate that it does not adversely affect the performance of the patch. Furthermore, the FDA also requested in the CRL additional information on controls and release specifications related to the patch, and manufacturing and control information related to the Drug Master File of one of the raw materials in Twirla. After multiple communications with the FDA, we have received significant guidance as to what additional clinical development and other activities need to be completed prior to approval. In accordance with the FDA's advice and comments, we are preparing to conduct an additional Phase 3 clinical trial and we expect to enroll our first subject in the third quarter of 2014. Based on the guidance that we received from the FDA, we believe that this additional trial will address all of the clinical issues raised in the CRL.

We have designed our additional Phase 3 trial as a single-arm study in which approximately 2,000 female subjects will receive Twirla for up to one year. We plan on enrolling subjects at 50 to 70 U.S. sites that have experience in conducting contraceptive studies. To manage the study, we recently hired a new Chief Medical Officer, and we intend to retain a new clinical research organization, or CRO, that is experienced in contraceptive clinical studies. We believe that by utilizing a more experienced CRO and more experienced clinical sites, we will be able to enroll subjects who will be more compliant with our protocol. Various technologies will be employed throughout the study to collect information on a real-time basis to ensure compliance with recruitment and protocol procedures. For example, subjects will use an electronic diary to record the data that are critical to the calculation of the PI, such as sexual activity, back-up contraception use and patch usage. In addition, we will employ an independent Pregnancy Review Committee to ensure accurate and timely pregnancy adjudication. Assuming successful completion of this additional study by the end of 2015, we plan to submit a complete response that includes the additional clinical trial results to the FDA in the first half of 2016.

Obstetricians and gynecologists, or ObGyns, contribute nearly 50% of the U.S. contraception prescription volume, and Nurse Practitioners and Physician Assistants, or NP/PAs, who are often

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affiliated with an ObGyn practice, contribute an additional 23% of the U.S. prescriptions. We believe that we can address this market with a specialty sales force of approximately 70 to 100 representatives. We also intend to augment our sales force through digital marketing and other techniques to market directly to patients.

Our Skinfusion technology makes Twirla the first patch capable of delivering a contraceptive dose of LNG across the skin, allowing weekly application using a patch that is soft and flexible and is designed to adhere well with low levels of skin irritation. We, along with Corium International, Inc., or Corium, our manufacturing partner, have made a significant investment in a proprietary process to manufacture Twirla. We believe we have developed a robust process to reliably manufacture Twirla on a commercial scale. The materials produced for our clinical trials were manufactured using the same process that will be used for our commercial-scale manufacturing, and we have made a significant investment in equipment for commercial-scale manufacturing if Twirla is approved. We believe that the technical challenges and know-how involved in manufacturing, including proprietary chemistry, production to scale and use of custom equipment and reproducibility, present significant barriers to entry for other pharmaceutical companies who might potentially want to replicate our Skinfusion technology.

Our intellectual property represents an additional barrier to potential competitors. We have five issued U.S. patents which cover Twirla that we intend to list in the Orange Book, the last of which expires in 2028. The Orange Book lists drug products, including related patent and exclusivity information, approved by the FDA under the Federal Food, Drug, and Cosmetic Act. If a patent is listed in the Orange Book, potential competitors seeking approval of drug products under an Abbreviated New Drug Application, which provides for the marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics and intended use, among other things, of a previously approved product, or a 505(b)(2) application, for which the listed drug is a reference product, must provide a patent certification in their application stating either that (1) no patent information on the drug product has been submitted to the FDA; (2) such patent has expired; (3) the date on which such patent expires; or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. In addition, we continue to prosecute additional patent applications relating to Twirla, as well as our other product candidates, both in the United States and internationally. The intellectual property behind all of our product candidates in the pipeline and our Skinfusion technology consists of patent families developed and wholly-owned by us. There are no royalties or payments owed to third parties on our Skinfusion technology or any of our product candidates.

In addition to Twirla, we are developing a pipeline of other new transdermal contraceptive products, including AG200-ER, which is a regimen designed to allow a woman to extend the length of her cycle, AG200-SP, which is a regimen designed to provide a shortened hormone-free interval, and AG890, which is a progestin-only contraceptive patch intended for use by women who are unable or unwilling to take estrogen. AG200-ER utilizes the same drug product as Twirla, and therefore requires no further patch development. We believe that a regimen for AG200-ER could be presented to the FDA and a Phase 3 study started once a protocol is developed. AG200-SP requires additional patch development work prior to conducting Phase 1 studies. Initial Phase 1/2 work has been conducted on AG890, but this product candidate requires additional patch development work for dose selection prior to conducting further Phase 1 and 2 studies. We

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do not expect to be required to conduct preclinical studies for any of these product candidates. Based upon a number of factors, including, but not limited to, our available capital resources and feedback from the FDA, we intend to review the clinical path for each of these three product candidates in 2015.

Our Corporate Strategy

Key elements of our strategy include:

- Further developing Twirla to obtain regulatory approval in major commercial markets;
- Commercializing Twirla in the United States through a focused sales force;
- Contracting with commercial partners to develop and commercialize Twirla outside of the United States;
- Leveraging our strong scientific team and extensive in-house expertise in drug development to pursue the development of additional women's health products; and
- Opportunistically seeking to in-license or acquire complementary women's health products.

Risks Associated with Our Business

Our business and our ability to implement our business strategy are subject to numerous risks, as more fully described in the section entitled "Risk Factors" immediately following this prospectus summary. You should read these risks before you invest in our common stock. We may be unable to implement our business strategy for many reasons, including those that are beyond our control. In particular, risks associated with our business include:

- We are highly dependent on the success of Twirla, which is still in clinical development, and we may not be able to successfully obtain regulatory or marketing approval for, or successfully commercialize, this product candidate.
- Clinical development is a lengthy and expensive process with an uncertain outcome, as evidenced by our receipt of a CRL to our NDA submission for Twirla. Our planned Phase 3 clinical trial for Twirla may not have favorable results, or Twirla may not receive regulatory approval.
- Our development and commercialization strategy for Twirla depends, in part, upon the FDA's prior findings of safety and efficacy of EE and LNG based on data not developed by us, but upon which the FDA may rely in reviewing our NDA.
- We may experience delays in the commencement or completion of our clinical trials, which could result in increased costs to us and delay our ability to pursue regulatory approval and generate product revenues.
- If we are unable to establish sales and marketing capabilities, we may not be able to effectively market and sell Twirla, if approved, and generate product revenue.
- We have incurred significant operating losses since our inception and had an accumulated deficit of approximately $117.5 million as of March 31, 2014.

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We anticipate that we will continue to incur losses for the foreseeable future and, we may never be profitable. Our recurring losses from operations have raised substantial doubt regarding our ability to continue as a going concern, and as a result, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2013 with respect to this uncertainty.

Physicians, patients and payors may not adopt a new contraceptive patch due to concerns based upon the prior experience with the first contraceptive patch.

Assuming approval of Twirla, we will require additional capital to commence commercialization. Raising additional funds through debt or equity financing may be dilutive or restrict our operations and raising funds through collaborations or licenses may require us to relinquish rights to our product candidates.

We have no manufacturing capacity and anticipate continued reliance on third party manufacturers, such as Corium, for the development and commercialization of our product candidates in accordance with manufacturing regulations.

If we are unable to obtain or protect intellectual property rights related to our product candidates, we may not be able to compete effectively in our market.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to decline.

Corporate Information

We were incorporated under the laws of the State of Delaware in December 1997. Our principal executive offices are located at 101 Poor Farm Road, Princeton, New Jersey 08540, and our telephone number is (609) 683-1880. Our website address is www.agiletherapeutics.com. The information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

We have proprietary rights to a number of trademarks used in this prospectus which are important to our business, including Agile Therapeutics®, Twirla™ and Skinfusion®. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. All other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of

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relief from certain reporting requirements and other burdens that are otherwise applicable generally to public companies. These provisions include:

- only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- exemption from the auditor attestation requirement on the effectiveness of our internal controls over financial reporting;
- reduced disclosure about our executive compensation arrangements; and
- no requirements for non-binding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of these provisions for up to five years or such earlier time that we no longer qualify as an emerging growth company. We would cease to be an emerging growth company if we have more than $1.0 billion in annual revenue, have more than $700 million in market value of our capital stock held by non-affiliates or issue more than $1.0 billion of non-convertible debt over a three-year period. We may choose to take advantage of some but not all of these reduced burdens. For example, we have taken advantage of the reduced reporting requirements with respect to disclosure regarding our executive compensation arrangements, have presented only two years of audited financial statements, have presented reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure and have taken the exemption from auditor attestation on the effectiveness of our internal controls over financial reporting. To the extent that we take advantage of these reduced burdens, the information that we provide stockholders may be different than you might obtain from other public companies in which you hold equity interests.

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THE OFFERING

Common stock offered by us	4,615,385 shares
Common stock to be outstanding immediately after this offering	13,883,003 shares
Option to purchase additional shares	We have granted the underwriters an option for 30 days from the date of this prospectus to purchase up to 692,308 additional shares of common stock.
Use of proceeds	We estimate that the net proceeds to us from this offering, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately $53.8 million, assuming the shares are offered at $13.00 per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus. We anticipate that the majority of the net proceeds from this offering will be used for costs associated with the commencement and completion of an additional Phase 3 trial for Twirla. The remaining proceeds will be used for completion of the Corium equipment validation, development of our product pipeline, and for working capital and general corporate purposes which may include scheduled payments of principal and interest on our outstanding loan. See "Use of Proceeds" for additional information.
Risk factors	You should read the "Risk Factors" section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Proposed NASDAQ Market symbol	AGRX

The number of shares of our common stock that will be outstanding immediately after this offering includes 113,519 shares of common stock outstanding as of March 31, 2014, 8,809,317 shares of common stock issuable upon conversion of all currently outstanding shares of our convertible preferred stock, 113,551 shares of common stock issuable upon net exercise of certain warrants to purchase preferred stock and 231,231 shares of common stock issuable upon conversion of all currently outstanding convertible subordinated promissory notes upon the completion of this offering. This calculation excludes:

- any shares of common stock issuable upon exercise of the over-allotment option granted to the underwriters;
- 1,387,291 shares of common stock issuable upon exercise of stock options outstanding as of March 31, 2014 at a weighted average exercise price of $4.19 per share;

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35,003 shares of common stock issuable upon the exercise of outstanding warrants as of March 31, 2014, at an exercise price of $10.71 per share; and

867,759 shares of common stock available for future grant under our 2014 Incentive Compensation Plan, or the 2014 Plan, which will become effective on the date of this offering (including the shares of common stock reserved for issuance under our 2008 Equity Incentive Plan, which shares will be added to the shares reserved under the 2014 Plan upon its effectiveness), as of March 31, 2014.

Unless otherwise indicated, all information in this prospectus assumes that the underwriters will not exercise the over-allotment option granted to them by us, and has been adjusted to reflect:

an amendment and restatement of our charter and bylaws upon the closing of this offering;

the net exercise of all outstanding warrants to purchase shares of Series A-1 and Series A-2 convertible preferred stock assuming an initial public offering price of $13.00 per share, which is the midpoint of the price range set forth on the cover of this prospectus and the automatic conversion of such preferred shares into 113,551 shares of common stock;

the conversion, on a 1.4-for-one basis, of all outstanding shares of convertible preferred stock into shares of common stock upon the closing of this offering;

the conversion of all outstanding warrants to purchase shares of Series C convertible preferred stock into warrants to purchase 35,003 shares of common stock upon the closing of this offering;

the conversion of the aggregate principal amount of $3.0 million and interest accrued as of May 7, 2014 under our outstanding convertible subordinated promissory notes into shares of common stock upon the closing of the offering assuming an initial public offering price of $13.00 per share, which is the midpoint of the price range set forth on the cover of this prospectus. For a description of the convertible subordinated promissory notes, see "Management's Discussion and Analysis of Financial Condition and Results of Operations April 2014 Convertible Subordinated Note Financing;" and

a 1.4-for-one stock split of our common stock effected on May 7, 2014.

Certain of our existing stockholders and directors have indicated an interest in purchasing up to an aggregate of approximately $15.0 million of shares of our common stock in this offering at the initial public offering price. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters could determine to sell more, less or no shares to any of these potential investors and any of these potential investors could determine to purchase more, less or no shares in this offering.

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SUMMARY FINANCIAL DATA

The following table summarizes our financial data. We have derived the following statement of operations data for the years ended December 31, 2012 and 2013 and the period from inception to December 31, 2013 and the balance sheet data as of December 31, 2013 from our audited financial statements, included elsewhere in this prospectus. We have derived the statements of operations data for the three months ended March 31, 2013 and 2014 and the balance sheet data as of March 31, 2014 from our unaudited financial statements included in this prospectus. The unaudited financial data include, in the opinion of management, all adjustments, consisting of normal recurring adjustments, that are necessary for a fair statement of our financial position and results of operations for these periods. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period, and our results for any interim period are not necessarily indicative of the results to be expected for a full fiscal year. The following summary financial data should be read in conjunction with "Management's Discussion

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and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

	Years ended December 31,		Three Months Ended March 31,		Period from Inception (December 22, 1997) to March 31, 2014
	2012	2013	2013	2014	
	(In thousands, except share and per share data)				
Statement of operations data:					
Operating expenses:					
Research and development	$ 17,387	$ 9,154	$ 3,072	$ 1,394	$ 87,612
General and administrative	5,930	3,574	1,156	1,053	27,397
Total operating expenses	23,317	12,728	4,228	2,447	115,009
Loss from operations	(23,317)	(12,728)	(4,228)	(2,447)	(115,009)
Total other income (expense)	57	(1,592)	(377)	(366)	(631)
Loss before benefit for income taxes	(23,260)	(14,320)	(4,605)	(2,813)	(115,640)
Benefit from income taxes				3,652	4,325
Net loss	(23,260)	(14,320)	(4,605)	839	(111,315)
Beneficial conversion charge	(600)				(6,160)
Net (loss) income available to common shareholders	$ (23,860)	$ (14,320)	$ (4,605)	$ 839	$ (117,475)
Weighted average basic common shares outstanding	39,518	49,486	42,181	106,309	
Weighted average diluted common shares outstanding	39,518	49,486	42,181	822,178	

(Loss) income per common share basic(1)	$ (603.78)	$ (289.39)	$ (109.18)	$ 0.10
(Loss) income per common share diluted(1)	$ (603.78)	$ (289.39)	$ (109.18)	$ 0.01

(1) See Note 2 to our interim financial statements appearing at the end of this prospectus regarding the calculation of net income per share.

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	As of March 31, 2014		
	Actual	Pro Forma(1)	Pro Forma as Adjusted(2)(3)
	(In thousands)		
Balance sheet data:			
Cash and cash equivalents	$ 3,010	$ 6,010	$ 59,810
Total assets	15,992	18,992	72,792
Total current liabilities	7,897	7,265	7,265
Long term debt, less current portion	9,156	9,156	9,156
Convertible preferred stock	69,233		
Deficit accumulated during the development stage	(117,475)	(117,481)	(117,481)
Total shareholders' equity (deficit)	(70,294)	2,570	56,370

(1) Pro forma amounts reflect (i) the net exercise of all outstanding warrants to purchase shares of Series A-1 and Series A-2 convertible preferred stock into 81,108 shares of preferred stock that will subsequently be converted into 113,551 shares of common stock, assuming an initial public offering price of $13.00 (the midpoint of the price range set forth on the cover page of this prospectus), (ii) the conversion of all outstanding warrants to purchase shares of Series C convertible preferred stock into warrants to purchase 35,003 shares of common stock, (iii) the conversion of all our outstanding shares of convertible preferred stock into an aggregate of 8,809,317 shares of our common stock (iv) the sale of our convertible subordinated promissory notes on April 28, 2014 and (v) the conversion of all principal and interest accrued as of May 7, 2014 under our outstanding convertible subordinated promissory notes into an aggregate of 231,231 shares of our common stock, assuming an initial public offering price of $13.00 (the midpoint of the price range set forth on the cover page of this prospectus).

(2) Pro forma as adjusted amounts reflect the pro forma conversion adjustments described in footnote (1) above, as well as the sale of 4,615,385 shares of our common stock in this offering at an assumed initial public offering price of $13.00 per share (the midpoint of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) A $1.00 increase (decrease) in the assumed initial public offering price would increase (decrease) each of cash and cash equivalents, total assets and total stockholders' equity by $4.3 million, assuming the number of shares offered by us as stated on the cover page of this prospectus remain unchanged and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $12.1 million, assuming an initial public offering price of $13.00 per share (the midpoint of the price range set forth on the cover page of this prospectus) remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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RISK FACTORS

You should carefully consider the risk factors set forth below as well as the other information contained in this prospectus before investing in our common stock. Any of the following risks could materially and adversely affect our business, financial condition or results of operations. In such a case, you may lose all or part of your investment. The risks described below are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently view to be immaterial may also materially adversely affect our business, financial condition or results of operations.

Risks Related to the Clinical Trial Process and Regulatory Approval for Our Product Candidates

We have not obtained regulatory approval for any of our product candidates in the United States or any other country.

We currently do not have any product candidates that have gained regulatory approval for sale in the United States or any other country, and we cannot guarantee that we will ever have marketable products. Our business is substantially dependent on our ability to complete the development of, obtain regulatory approval for and successfully commercialize product candidates in a timely manner. We cannot commercialize product candidates in the United States without first obtaining regulatory approval to market each product candidate from the U.S. Food and Drug Administration, or FDA; similarly, we cannot commercialize product candidates outside of the United States without obtaining regulatory approval from comparable foreign regulatory authorities.

We have previously conducted two Phase 3 clinical trials for Twirla, and we filed a new drug application, or NDA, with the FDA for Twirla in April 2012. The FDA issued a Complete Response Letter, or CRL, in February 2013, identifying certain issues, including a request for additional clinical data, quality information and chemistry, manufacturing and controls information, which must be addressed before approval can be granted. Accordingly, we are gathering the requested information and intend to conduct an additional Phase 3 clinical trial for Twirla, which is expected to commence enrollment during the third quarter of 2014. The FDA may also re-inspect our manufacturing partner's facilities before approval can be granted. Although we met with the FDA in October 2013 to discuss our new Phase 3 clinical trial and received substantial written comments from the FDA in February 2014, we have not sought and have not obtained agreement with the FDA on a special protocol assessment regarding the new Phase 3 trial. We cannot predict whether our additional Phase 3 clinical trial or any future trials we may conduct will be successful or whether regulators will agree with our conclusions regarding the results of these trials or any clinical trials we have conducted to date.

Before obtaining regulatory approvals for the commercial sale of any product candidate for a target indication, we must demonstrate in preclinical studies and well-controlled clinical trials and, with respect to approval in the United States, to the satisfaction of the FDA, that the product candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate. In the United States, it is necessary to submit an NDA to obtain FDA approval. An NDA must include extensive preclinical and clinical data and supporting information to establish the product candidate's safety and efficacy for each desired indication, although we may partially rely on public information or the FDA's prior approval of

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similar products. The NDA must also include significant information regarding the chemistry, manufacturing and controls for the product. The FDA may further inspect our manufacturing facilities to ensure that the facilities can manufacture our product candidates and our products, if and when approved, in compliance with the applicable regulatory requirements, as well as inspect our clinical trial sites to ensure that our studies are properly conducted. Obtaining approval of an NDA is a lengthy, expensive and uncertain process, and approval may not be obtained. Upon submission of an NDA, the FDA must make an initial determination that the application is sufficiently complete to accept the submission for filing. We cannot be certain that any submissions will be accepted for filing and review by the FDA, or ultimately be approved. If the application is not accepted for review or approval, the FDA may require that we conduct additional clinical or preclinical trials, or take other actions before it will reconsider our application. If the FDA requires additional studies or data, we would incur increased costs and delays in the marketing approval process, which may require us to expend more resources than we have available. In addition, the FDA may not consider any additional information to be complete or sufficient to support approval.

Regulatory authorities outside of the United States, such as in Europe and Japan and in emerging markets, also have requirements for approval of drugs for commercial sale with which we must comply prior to marketing in those areas. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our product candidates. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and obtaining regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. However, the failure to obtain regulatory approval in one jurisdiction could have a negative impact on our ability to obtain approval in a different jurisdiction. Approval processes vary among countries and can involve additional product candidate testing and validation and additional administrative review periods. Seeking foreign regulatory approval could require additional non-clinical studies or clinical trials, which could be costly and time consuming. Foreign regulatory approval may include all of the risks associated with obtaining FDA approval. For all of these reasons, we may not obtain foreign regulatory approvals on a timely basis, if at all.

The process to develop, obtain regulatory approval for and commercialize product candidates is long, complex and costly both inside and outside of the United States, and approval is never guaranteed. Even if our product candidates were to successfully obtain approval from regulatory authorities, any such approval might significantly limit the approved indications for use, including more limited patient populations, require that precautions, contraindications or warnings be included on the product labeling, including black box warnings, require expensive and time-consuming post-approval clinical studies, risk evaluation and mitigation strategies, or REMS, or surveillance as conditions of approval, or, through the product label, the approval may limit the claims that we may make, which may impede the successful commercialization of our product candidates. Following any approval for commercial sale of our product candidates, certain changes to the product, such as changes in manufacturing processes and additional labeling claims, as well as new safety information, will be subject to additional FDA notification, or review and approval. Also, regulatory approval for any of our product candidates may be withdrawn. If we are unable to obtain regulatory approval for our product candidates in one or more jurisdictions, or any approval contains significant limitations, our ability to market to our full target market will be

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reduced and our ability to realize the full market potential of our product candidates will be harmed. Furthermore, we may not be able to obtain sufficient funding or generate sufficient revenue and cash flows to continue or complete the development of any of our current or future product candidates.

Failure can occur at any stage of clinical development. If the clinical trials for Twirla or any of our current or future product candidates are unsuccessful, we could be required to abandon development.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. A failure of one or more clinical trials can occur at any stage of testing for a variety of reasons. The outcome of preclinical testing and early clinical trials may not be predictive of the outcome of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. For example, adverse events may occur or other risks may be discovered in our planned Phase 3 clinical trial for Twirla that would cause us to suspend or terminate the clinical trial. In some instances, there can be significant variability in safety or efficacy results between different trials of the same product candidate due to numerous factors, including changes in or adherence to trial protocols, differences in size and type of the subject populations and the rates of dropout among clinical trial subjects. Our future clinical trial results therefore may not demonstrate safety and efficacy sufficient to obtain regulatory approval for our product candidates. For example, we received a CRL from the FDA with respect to an NDA previously filed for Twirla, in which the FDA requested, among other items, additional Phase 3 clinical data to support the application. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Our future clinical trials may not be successful.

Flaws in the design of a clinical trial may not become apparent until the clinical trial is well-advanced. We have limited experience in designing contraceptive clinical trials and may be unable to design and execute clinical trials to support regulatory approval of our product candidates. In addition, clinical trials often reveal that it is not practical or feasible to continue development efforts for a product candidate.

We may voluntarily suspend or terminate our clinical trials if at any time we believe that they present an unacceptable risk to subjects. Furthermore, regulatory agencies, Institutional Review Boards, or IRBs, or data safety monitoring boards may at any time order the temporary or permanent discontinuation of our clinical trials or request that we cease using certain investigators in the clinical trials if such regulatory agencies or boards believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements or that they present an unacceptable safety risk to subjects. Since our inception, we have not voluntarily or involuntarily suspended or terminated a clinical trial due to unacceptable safety risks to subjects.

If the results of the clinical trials for our current product candidates or clinical trials for any future product candidates do not achieve the primary efficacy endpoints or demonstrate unexpected safety issues, the prospects for approval of our product candidates will be materially adversely affected. For example, in the CRL that we received from the FDA in connection with the NDA previously filed for Twirla, one of the FDA's comments was that acceptable evidence of efficacy was not demonstrated, as measured by Pearl Index, or PI. Specifically, in our two completed Phase 3 trials, the PI was higher than that seen in registration trials for previously approved hormonal contraceptives. Most experts seem to agree that inconsistent or incorrect use is

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a major contributor to the increased PI seen in more recent contraceptive trials. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have failed to achieve similar results in later clinical trials, including longer-term trials, or have failed to obtain regulatory approval of their product candidates. Many compounds that initially showed promise in clinical trials or earlier preclinical studies have later been found to cause undesirable or unexpected adverse effects that have prevented further development of the compound. Our planned Phase 3 trial for our primary product candidate, Twirla, may not produce the results that we expect, or the FDA may interpret the data differently than we do.

In addition to the circumstances noted above, we may experience numerous unforeseen events that could cause our clinical trials to be delayed, suspended or terminated, or which could delay or prevent our ability to receive regulatory approval for or commercialize our product candidates, including:

- Clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or implement a clinical hold;

- The number of subjects required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate. For instance, we experienced a high withdrawal rate in our two completed Phase 3 clinical trials for Twirla;

- Our third party contract research organization, or CRO, or study sites may fail to comply with regulatory requirements or the clinical trial protocol, or meet their contractual obligations to us in a timely manner, or at all. For instance, investigator compliance with study procedures was an issue that we encountered in our two completed Phase 3 clinical trials for Twirla;

- Regulators or IRBs may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site or amend a trial protocol;

- We may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites and our CRO;

- We may have delays in adding new investigators or clinical trial sites, or we may experience a withdrawal of clinical trial sites;

- We may elect or be required to suspend or terminate clinical trials of our product candidates based on a finding that the subjects are being exposed to health risks, or due to other reasons;

- The cost of clinical trials for our product candidates may be greater than we anticipate;

- The supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;

- There may be changes in government regulations or administrative actions;

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Our product candidates may have undesirable adverse effects or other unexpected characteristics;

We may not be able to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;

We may not be able to demonstrate that a product candidate provides an advantage over current standards of care or future competitive therapies in development; and

There may be changes in the approval policies or regulations that render our data insufficient for approval.

If we elect or are required to suspend or terminate a clinical trial for any of our product candidates, or our product candidate development is otherwise delayed, our development costs may increase, our commercial prospects will be adversely impacted, any periods during which we may have the exclusive right to commercialize our product candidates may be shortened and our ability to generate product revenues may be delayed or eliminated.

We expect to conduct additional clinical trials in the future for Twirla and our other product candidates. Subject enrollment, which is a significant factor in the timing of clinical trials, is affected by a variety of factors, including the following:

Size and nature of the subject population;

Proximity of subjects to clinical sites and the number of sites;

Effectiveness of publicity created by clinical trial sites regarding the trial;

Eligibility and exclusion criteria for the trial;

Design of the clinical trial, including factors such as frequency of required assessments, length of the study and ongoing monitoring requirements;

Competing clinical trials;

Clinician and subject perceptions as to the potential advantages or disadvantages of the product candidate being studied in relation to other available therapies, including any products that may be approved for the indications we are investigating;

Subjects' ability to comply with the specific instructions related to the trial protocol, proper documentation and use of the drug product. For instance, in our Phase 3 clinical trials, there was a high rate of subject noncompliance;

Inability to obtain or maintain subject informed consents;

Risk that enrolled subjects will drop out before completion; and

Subject's relationship with her partner.

Furthermore, we plan to rely on a CRO and clinical trial sites to ensure the proper and timely conduct of our clinical trials, and while we may have agreements governing their committed activities, we have limited influence over their actual performance. Additionally, the CRO and clinical trial sites may have business, regulatory, personnel or other issues that keep us from satisfactorily completing our clinical trials. Any delays or unanticipated problems during clinical trials, such as additional monitoring of clinical trial sites, slower than anticipated enrollment in our

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clinical trials or subjects dropping out of or being excluded from participation in our clinical trials at a higher rate than we anticipate, could increase our costs, slow down our product development and approval process and harm our business.

Regulatory approval may be substantially delayed or may not be obtained for one or all of our product candidates if regulatory authorities require additional time or studies to assess the safety and efficacy of our product candidates.

We may be unable to initiate or complete development of our product candidates on schedule, if at all. The timing for the completion of the studies for our product candidates other than Twirla will require funding beyond the proceeds of this offering. In addition, if regulatory authorities require additional time or studies to assess the safety or efficacy of Twirla, we may not have or be able to obtain adequate funding to complete the necessary steps for approval for any or all of our product candidates. Additional delays may result if the FDA, an FDA Advisory Committee or other regulatory authority recommends non-approval or restrictions on approval. Studies required to demonstrate the safety and efficacy of our product candidates are time consuming, expensive and together take several years or more to complete. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval. Delays in regulatory approvals or rejections of applications for regulatory approval in the United States, Europe, Japan or other markets may result from many factors, including:

Our inability to obtain sufficient funds required for a clinical trial;

Regulatory requests for additional analyses, reports, data, non-clinical and preclinical studies and clinical trials;

Regulatory questions regarding interpretations of data and results and the emergence of new information regarding our product candidates or other products;

Clinical holds, other regulatory objections to commencing or continuing a clinical trial or the inability to obtain regulatory approval to commence a clinical trial in countries that require such approvals;

Failure to reach agreement with the FDA or non-U.S. regulators regarding the scope or design of our clinical trials;

Our inability to enroll or retain a sufficient number of subjects who meet the inclusion and exclusion criteria in our clinical trials;

Our inability to conduct our clinical trials in accordance with regulatory requirements or our clinical trial protocols;

Unfavorable or inconclusive results of clinical trials and supportive non-clinical studies, including unfavorable results regarding safety or efficacy of our product candidates during clinical trials;

Failure to meet the level of statistical significance required for approval;

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Any determination that a clinical trial presents unacceptable health risks to subjects;

Lack of adequate funding to commence or continue our clinical trials due to unforeseen costs or other business decisions;

Our inability to reach agreements on acceptable terms with prospective CROs and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;

Our inability to identify and maintain a sufficient number of sites, many of which may already be engaged in other clinical trial programs, including other clinical trials for the same indications targeted by our product candidates;

Our inability to obtain approval from IRBs to conduct clinical trials at their respective sites;

Our inability to timely obtain from our third party manufacturer sufficient quantities or quality of the product candidate or other materials required for a clinical trial;

We may be unable to obtain approval for the manufacturing processes or facilities of the third party manufacturer with whom we contract for clinical and commercial supplies;

We may have insufficient funds to pay the significant user fees required by the FDA upon the filing of an NDA; and

We may have difficulty in maintaining contact with subjects, resulting in incomplete data.

The lengthy and unpredictable approval process, as well as the unpredictability of future clinical trial results, may result in our failure to obtain regulatory approval to market Twirla or any of our other product candidates, which would significantly harm our business, results of operations and prospects.

Changes in regulatory requirements and guidance may also occur and we may need to amend clinical trial protocols submitted to applicable regulatory authorities or conduct additional studies to reflect these changes. Amendments and additional studies may require us to resubmit clinical trial protocols to Institutional Review Boards and regulatory authorities for re-examination, which may impact the costs, timing or successful completion of a clinical trial.

If we are required to conduct additional clinical trials or other studies with respect to any of our product candidates beyond those that we contemplated, if we are unable to successfully complete our clinical trials or other studies or if the results of these studies are not positive or are only modestly positive, we may be delayed in obtaining regulatory approval for our product candidates, we may not be able to obtain regulatory approval at all or we may obtain approval for indications that are not as broad as intended. For example, the FDA issued a CRL in response to our NDA for Twirla requesting, among other items, an additional Phase 3 clinical study, which will delay our ability to obtain regulatory approval for that product candidate. We may also experience delays due to changes in regulatory requirements and guidance, which may require protocol amendments or the conduct of additional studies. These amendments and additional studies may require regulatory or IRB approval. The approval and conduct of these studies may delay, limit or preclude regulatory approval for our product candidates. Our product development costs will also increase if we experience delays in testing or approvals and we may not have sufficient funding to complete the testing and approval process for any of our product candidates. Significant clinical

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trial delays could allow our competitors to bring products to market before we do and impair our ability to commercialize our products if and when approved. If any of this occurs, our business will be materially harmed.

Our product candidates may have undesirable adverse effects, which may delay or prevent regulatory approval or, if approval is received, require our products to be taken off the market, require them to include safety warnings or otherwise limit their sales.

Unforeseen adverse effects from any of our product candidates could arise either during clinical development or, if approved, after the approved product has been marketed. In the combined safety population of our completed Phase 3 trials, there were a total of 22 serious adverse events, or SAEs, of which 16 occurred in the Twirla cohort, which had approximately 2.3 times as many subjects as the oral contraceptive comparator cohort. Three of the 16 SAEs in the Twirla cohort (0.2% of the overall Twirla safety population) were considered to be possibly related to Twirla, and included one drug overdose with Benadryl, one case of uncontrollable nausea and vomiting and one instance of deep vein thrombosis. In addition to the SAEs described above, some subjects taking Twirla experienced non-serious adverse events, such as nausea, headache, application site irritation and breast tenderness. Subjects receiving the oral contraceptive comparator also experienced non-serious adverse events such as nausea, headache and breast tenderness, though at different rates.

Any undesirable adverse effects that may be caused by our product candidates could interrupt, delay or halt clinical trials and could result in more restrictive labeling or the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications, and in turn prevent us from commercializing our product candidates and generating revenues from their sale. Adverse effects could also impact subject recruitment or the ability or willingness of enrolled subjects to complete the trial, or result in product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

In addition, if any of our product candidates receive regulatory approval and we or others later identify undesirable adverse effects caused by the product, we could face one or more of the following consequences:

We may suspend marketing of, withdraw or recall the product;

Regulatory authorities may require the addition of labeling statements, such as a black box warning or a contraindication, or other labeling changes;

Regulatory authorities may withdraw their approval of the product;

Regulatory authorities may seize or detain the product or seek an injunction against its manufacture or distribution;

The FDA or other regulatory authorities may issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;

The FDA may require the establishment or modification of a REMS or a comparable foreign authority may require the establishment or modification of a similar strategy that may, for instance, require us to issue a medication guide outlining the risks of such adverse

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effects for distribution to patients, or restrict distribution of the product, if and when approved, and impose burdensome implementation requirements on us;

We may be required to conduct additional trials;

We may be required to change the way that the product is administered;

We may be subject to litigation or product liability claims, fines, injunctions or criminal penalties;

Regulatory authorities may impose additional restrictions on marketing and distribution of the product; and

Our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product or could substantially increase the costs and expenses of commercializing such product, which in turn could delay or prevent us from generating significant revenues from its sale.

Our development and commercialization strategy for Twirla depends, in part, on published scientific literature and the FDA's prior findings regarding the safety and efficacy of approved products containing Ethinyl Estradiol and Levonorgestrel based on data not developed by us, but upon which the FDA may rely in reviewing our NDA.

The Hatch-Waxman Act added Section 505(b)(2) to the Federal Food, Drug and Cosmetic Act, or FDCA. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. The FDA interprets Section 505(b)(2) of the FDCA, for purposes of approving an NDA, to permit the applicant to rely, in part, upon published literature or the FDA's previous findings of safety and efficacy for an approved product. The FDA may also require companies to perform additional clinical trials or measurements to support any deviation from the previously approved product. The FDA may then approve the new product candidate for all or some of the label indications for which the referenced product has been approved, as well as for any new indication sought by the Section 505(b)(2) applicant. The label, however, may require all or some of the limitations, contraindications, warnings or precautions included in the reference product's label, including a black box warning, or may require additional limitations, contraindications, warnings or precautions. We have submitted an NDA for Twirla under Section 505(b)(2) and as such the NDA relied, in part, on the FDA's previous findings of safety and efficacy from investigations for approved products containing ethinyl estradiol, or EE, and levonorgestrel, or LNG and published scientific literature for which we have not received a right of reference. We received a CRL in response to our Section 505(b)(2) NDA for Twirla, in which the FDA requested, among other things, that we conduct an additional Phase 3 clinical trial. Even though we may be able to take advantage of Section 505(b)(2) to support potential U.S. approval for Twirla, the FDA may require us to perform additional clinical trials or measurements to support approval over and above the clinical trials that we have already completed and the additional clinical trial we currently plan to commence during the third quarter of 2014. In addition, notwithstanding the approval of many products by the FDA pursuant to Section 505(b)(2), over the last few years some pharmaceutical companies and others have objected to the FDA's interpretation of Section 505(b)(2). If the FDA

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changes its interpretation of Section 505(b)(2), or if the FDA's interpretation is successfully challenged in court, this could delay or even prevent the FDA from approving any Section 505(b)(2) NDAs that we submit. Such a result could require us to conduct additional testing and costly clinical trials, which could substantially delay or prevent the approval and launch of our product candidates, including Twirla.

Risks Related to Our Financial Position and Need for Capital

We have never been profitable. Currently, we have no products approved for commercial sale, no source of revenue and we may never become profitable.

We have never been profitable and do not expect to be profitable in the foreseeable future. We have no products approved for commercial sale and to date have not generated any revenue from product sales. Our ability to generate revenue and become profitable depends upon our ability to successfully complete the development of and obtain the necessary regulatory approvals for our product candidates. We have been engaged in developing Twirla and our Skinfusion technology since our inception. To date, we have not generated any revenue from Twirla, and we may never be able to obtain regulatory approval for the marketing of Twirla. Further, even if we are able to gain approval for and commercialize Twirla or any other product candidate, there can be no assurance that we will generate significant revenues or ever achieve profitability. Our ability to generate product revenue depends on a number of factors, including our ability to:

- Successfully complete clinical development of, and receive regulatory approval for, our product candidates;
- Set an acceptable price for our products, if approved, and obtain adequate coverage and reimbursement from third party payors;
- Obtain commercial quantities of our products, if approved, at acceptable cost levels; and
- Successfully market and sell our products, if approved, in the United States and abroad.

In addition, because of the numerous risks and uncertainties associated with product candidate development, we are unable to predict the timing or amount of increased expenses, or when, or if, we will be able to achieve or maintain profitability. In addition, our expenses could increase beyond our current expectations if we are required by the FDA or other regulatory authorities to perform studies in addition to those that we currently anticipate. Even if our product candidates are approved for commercial sale, we anticipate incurring significant costs associated with the commercial launch of these products.

Our ability to become and remain profitable depends on our ability to generate revenue. Even if we are able to generate revenues from the sale of our products, if approved, we may not become profitable and may need to obtain additional funding to continue operations. If we fail to become profitable or obtain additional funding, or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce our operations. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, expand our business or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

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We have incurred operating losses in each year since our inception and expect to continue to incur substantial losses for the foreseeable future.

We have incurred losses in each year since our inception in December 1997. Our net losses were $23.9 million for the year ended December 31, 2012 and $14.3 million for the year ended December 31, 2013. We recorded net income of $0.8 million for the three months ended March 31, 2014 as a result of the proceeds received from the sale of a portion of our New Jersey state net operating losses. As of March 31, 2014, we had a deficit accumulated during the development stage of $117.5 million.

Specialty pharmaceutical product development is a speculative undertaking, involves a substantial degree of risk and is a capital-intensive business. We expect to incur expenses without corresponding revenues until we are able to obtain regulatory approval and subsequently sell Twirla in significant quantities, which may not happen. We have devoted most of our financial resources to research and development, including our non-clinical development activities and clinical trials. We expect to incur increased expenses as we commence our additional Phase 3 clinical trial for Twirla, respond to the CRL and supplement our NDA with the results of the trial, advance our other product candidates and expand our research and development programs. To date, we have financed our operations primarily through the sale of convertible preferred stock and convertible debt. Our product candidates will require the completion of regulatory review, significant marketing efforts and substantial investment before they can provide us with any revenue.

Assuming we obtain FDA approval, we expect that our expenses will increase as we prepare for the commercial launch of Twirla. As a result, we expect to continue to incur substantial losses for the foreseeable future, and these losses may increase. We are uncertain when or if we will be able to achieve or sustain profitability. If we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Failure to become and remain profitable would impair our ability to sustain operations and adversely affect the price of our common stock and our ability to raise capital.

Our recurring losses from operations have raised substantial doubt regarding our ability to continue as a going concern.

Our recurring losses from operations raise substantial doubt about our ability to continue as a going concern, and as a result, our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2013 with respect to this uncertainty. This going concern opinion could materially limit our ability to raise additional funds through the issuance of new debt or equity securities or otherwise. Future reports on our financial statements may include an explanatory paragraph with respect to our ability to continue as a going concern. We have incurred significant losses since our inception and have never been profitable, and it is possible we will never achieve profitability. We have devoted a majority of our resources to developing Twirla, but this product candidate cannot be marketed until regulatory approvals have been obtained. Meaningful revenues will likely not be available until and unless Twirla or any of our current or future product candidates are approved by the FDA or comparable regulatory agencies in other countries and successfully marketed, either by us or a partner, an outcome which may not occur. If we successfully complete this offering, based upon our currently-expected level of operating expenditures, we expect to be able to fund

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our operations through the first quarter of 2016. This period could be shortened if there are any significant increases in planned or actual spending on development programs or more rapid progress of development programs than anticipated. There is no assurance that other financing will be available when needed to allow us to continue as a going concern. The perception that we may not be able to continue as a going concern may cause others to choose not to deal with us due to concerns about our ability to meet our contractual obligations.

If we fail to obtain the capital necessary to fund our operations, we may be unable to obtain regulatory approval of or commercialize Twirla in the United States and we could be forced to share our rights to commercialize Twirla with third parties on terms that may not be favorable to us.

We need large amounts of capital to support our development and commercialization efforts for Twirla. If we are unable to secure sufficient capital to fund our operations, we will not be able to continue these efforts and we might have to enter into strategic collaborations that could require us to share commercial rights to Twirla with third parties in ways that we currently do not intend or on terms that may not be favorable to us. Based on our current operating plans, and after giving effect to the receipt of the estimated net proceeds of this offering, we believe that our cash, cash equivalents and marketable securities will be sufficient to meet our anticipated operating needs through the first quarter of 2016. Our cash and cash equivalents were $3.0 million as of March 31, 2014. We anticipate requiring additional capital to fund operating needs thereafter. We may also need to raise additional funds sooner if we choose to expand more rapidly than we presently anticipate.

Our operating activities may be restricted as a result of covenants related to the outstanding indebtedness under our loan agreement and we may be required to repay the outstanding indebtedness in an event of default, which could have a materially adverse effect on our business.

As of March 31, 2014, we had $15 million of principal indebtedness outstanding under our loan and security agreement with Oxford Finance LLC, or Oxford. The loan agreement subjects us to various customary covenants, including requirements as to financial reporting and insurance, and restrictions on our ability to dispose of our business or property, change our line of business, liquidate or dissolve, enter into any change in control transaction, merge or consolidate with any other entity or acquire all or substantially all the capital stock or property of another entity, incur additional indebtedness, incur certain types of liens on our property, including our intellectual property, pay any dividends or other distributions on our capital stock other than dividends payable solely in capital stock or redeem our capital stock. Our business may be adversely affected by these restrictions on our ability to operate our business.

The term loan is secured by substantially all of our property other than our intellectual property. We are currently required to make interest-only payments through July 2014. Based upon certain conditions, the interest-only period may be extended through January 2015. However, we cannot assure you that we will fulfill these conditions, and therefore we may be required to make payments of both principal and interest on the term loan beginning on August 1, 2014. The term loan bears interest at a fixed rate of 9.2% per annum and matures on July 1, 2017, assuming the successful completion of this offering.

Additionally, we may be required to repay the outstanding indebtedness under the term loan if an event of default occurs under the loan agreement. Under the loan agreement, an event of

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default will occur if, among other things, we fail to make payments under the loan agreement; we breach any of our covenants under the loan agreement, subject to specified cure periods with respect to certain breaches; Oxford determines in good faith that we are unable to satisfy our obligations under the loan agreement as they become due and that our principal investors do not intend to fund amounts necessary to satisfy such obligations; we or our assets become subject to certain legal proceedings, such as bankruptcy proceedings; we are unable to pay our debts as they become due; or we default on contracts with third parties which would permit Oxford to accelerate the maturity of such indebtedness or that could have a material adverse effect on us. We may not have enough available cash or be able to raise additional funds through equity or debt financings to repay such indebtedness at the time any such event of default occurs. In that case, we may be required to delay, limit, reduce or terminate our product candidate development or commercialization efforts or grant to others rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Oxford could also exercise its rights as collateral agent to take possession and dispose of the collateral securing the loan for its benefit, which collateral includes all of our property other than our intellectual property. Our business, financial condition and results of operations could be materially adversely affected as a result of any of these events.

We will need to obtain additional financing to fund our operations and, if we are unable to obtain such financing, we may be unable to complete the development and commercialization of our product candidates.

Our operations have consumed substantial amounts of cash since inception. From our inception to March 31, 2014, we have cumulative net cash flows used by operating activities of $105.9 million. We will need to obtain additional financing to fund our future operations, including completing the development and commercialization of our product candidates. We will need to obtain additional financing to conduct additional trials for the approval of our product candidates if requested by regulatory authorities, and to complete the development of any additional product candidates we might acquire. Moreover, our fixed expenses such as rent, interest expense and other contractual commitments are substantial and are expected to increase in the future.

Our future funding requirements will depend on many factors, including, but not limited to:

- Progress, timing, scope and costs of our clinical trials, including the ability to timely enroll subjects in our planned and potential future clinical trials;
- Time and cost necessary to obtain regulatory approvals that may be required by regulatory authorities;
- Our ability to successfully commercialize our product candidates, if approved;
- Amount of sales and other revenues from product candidates that we may commercialize, if any, including the selling prices for such potential products and the availability of adequate third-party coverage and reimbursement;
- Sales and marketing costs associated with commercializing our products, if approved, including the cost and timing of expanding our marketing and sales capabilities;
- Terms and timing of any potential future collaborations, licensing or other arrangements that we may establish;

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Cash requirements of any future acquisitions or the development of other product candidates;

Costs of operating as a public company;

Time and cost necessary to respond to technological and market developments; and

Costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

Until we can generate a sufficient amount of revenue, we may finance future cash needs through public or private equity offerings, license agreements, debt financings, collaborations, strategic alliances and marketing or distribution arrangements. Additional funds may not be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available, we may be required to delay or reduce the scope of or eliminate one or more of our research or development programs or our commercialization efforts. We may seek to access the public or private capital markets whenever conditions are favorable, even if we do not have an immediate need for additional capital at that time. In addition, if we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or to grant licenses on terms that may not be favorable to us.

We believe that the estimated net proceeds from this offering, together with existing cash, cash equivalents and marketable securities will be sufficient to fund our projected operating requirements through the first quarter of 2016. We expect that these funds will not be sufficient to enable us to complete all necessary development of our product candidates other than Twirla or commercially launch Twirla or our other current product candidates. Accordingly, we will be required to obtain further funding through other public or private offerings, debt financing, collaboration or licensing arrangements or other sources. Adequate additional funding may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts. Our forecast of the period of time through which our financial resources will be adequate to support our operating requirements is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this "Risk Factors" section. We have based this estimate on a number of assumptions that may prove to be wrong, and changing circumstances beyond our control may cause us to consume capital more rapidly than we currently anticipate. Our inability to obtain additional funding when we need it could seriously harm our business.

Raising additional capital may cause dilution to our existing stockholders or restrict our operations.

We may seek additional capital through a combination of private and public equity offerings, debt financings and strategic collaborations. The sale of additional equity or convertible debt securities could result in the issuance of additional shares of our capital stock and could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct

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our business. We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing research and development efforts. This could harm our business, operating results and financial condition and cause the price of our common stock to fall.

We are a development stage company which may make it difficult for you to evaluate the success of our business to date and to assess our future viability.