Filed pursuant to Rule 424(b)(5)
Registration No. 333-193434

PROSPECTUS SUPPLEMENT

To Prospectus dated January 31, 2014

Shares

OHR PHARMACEUTICAL, INC.

1,800,000 Shares of Common Stock

$10.00 per share

We are offering 1,800,000 shares of our common stock.

Our common stock is listed on the Nasdaq Stock Market under the symbol "OHRP." The last sale price of our common stock on April 7, 2014, as reported by the Nasdaq Stock Market, was $12.03 per share.

Investing in our securities involves a high degree of risk. See "Risk Factors," beginning on page S-12 of this prospectus supplement, as well as in the documents incorporated or deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus, for a discussion of the factors you should carefully consider before deciding to purchase our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

We have retained Chardan Capital Markets, LLC and Brean Capital, LLC to act as our exclusive placement agents in connection with the shares of common stock offered by this prospectus supplement. We have agreed to pay the placement agents the placement agent fees set forth in the table below, which assumes that we sell all of the securities we are offering. See "Plan of Distribution" beginning on page S-30 of this prospectus supplement for more information regarding this arrangement.

	Per Share	Total
Public Offering Price	$ 10.00	$ 18,000,000
Placement Agent Fees	$ 0.60	$ 1,080,000
Proceeds to Us, Before Expenses	$ 9.40	$ 16,920,000

We have also agreed to reimburse the placement agents for their accountable out of pocket expenses in connection with this offering, including the fees and expenses of the placement agents' counsel.

Delivery of the shares of common stock will take place on or about April 11, 2014, subject to the satisfaction of certain conditions.

Chardan Capital Markets, LLC **Brean Capital, LLC**

Prospectus Supplement dated April 8, 2014.

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ABOUT THIS PROSPECTUS SUPPLEMENT

On January 17, 2014, we filed with the Securities and Exchange Commission, or SEC, a registration statement on Form S-3 (File No. 333-193434) utilizing a shelf registration process relating to the securities described in this prospectus supplement, which registration statement became effective on January 31, 2014. Under this shelf registration process, we may, from time to time, sell common stock and other securities, including the securities to be sold in this offering.

This document is in two parts. The first part is the prospectus supplement, including the documents incorporated or deemed to be incorporated herein by reference, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated or deemed to be incorporated therein by reference, provides more general information about us and our securities. Generally, when we refer to this prospectus, we are referring to both parts of this document combined together with all documents incorporated or deemed incorporated by reference. Before you invest, you should carefully read this prospectus supplement, the accompanying prospectus, all information incorporated or deemed to be incorporated by reference herein and therein, as well as the additional information described under "Where You Can Find More Information" on page S-35 of this prospectus supplement. These documents contain information you should consider when making your investment decision. This prospectus supplement may add, update or change information contained in the accompanying prospectus. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated or deemed to be incorporated by reference therein filed prior to the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document filed after the date of this prospectus supplement and deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus — the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in or incorporated or deemed to be incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectuses we may provide to you in connection with this offering. We have not authorized any other person to provide you with any information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any filing that is incorporated or deemed to be incorporated by reference into this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us, this offering and information appearing elsewhere in this prospectus supplement, in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all the information you should consider before investing in our common stock pursuant to this prospectus supplement and the accompanying prospectus. Before making an investment decision, to fully understand this offering and its consequences to you, you should carefully read this entire prospectus supplement and the accompanying prospectus, including "Risk Factors" beginning on page S-12 of this prospectus supplement and the financial statements and related notes and the other information that we incorporated by reference herein, including our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q that we file from time to time.

Ohr Pharmaceutical, Inc.

Our Company

Ohr Pharmaceutical, Inc. ("we", "Ohr", or the "Company") is a biotechnology company focused on the development of the Company's previously acquired compounds with a focus on the clinical development of our two later stage lead products, Squalamine for the treatment of the wet form of age-related macular degeneration ("AMD") using an eye drop formulation and OHR/AVR118 for the treatment of cancer cachexia (multi-symptom wasting disorder). We acquired OHR/AVR118 and Squalamine as part of the Company's strategy to acquire undervalued biotechnology companies and assets.

The Company is currently engaged in the clinical testing of Squalamine eye drops for the treatment of wet-AMD and OHR/AVR118 for the treatment of cancer cachexia. OHR/AVR118 has completed a Phase II trial for the treatment of cachexia.

Product Pipeline

Squalamine

Squalamine is a small molecule anti-angiogenic drug with a novel intracellular mechanism of action. The drug acts against the development of aberrant neovascularization by inhibiting multiple protein growth factors of angiogenesis, including vascular endothelial growth factor ("VEGF"), platelet-derived growth factor ("PDGF") and basic fibroblast growth factor growth factor ("bFGF"). Recent clinical evidence has shown PDGF to be an additional target for the treatment of Wet Age-related Macular Degeneration ("Wet-AMD"). Using an intravenous formulation in over 250 patients in Phase I and Phase II trials for the treatment of Wet-AMD, the trials demonstrated that the molecule had biological effect and maintained and improved visual acuity outcomes, with both early and advanced lesions responding.

Ohr reformulated Squalamine for ophthalmic indications from an intravenous infusion ("IV") to a topical eye drop. Preclinical testing has demonstrated that the eye drop formulation is both safe to ocular tissues and achieves in excess of target anti-angiogenic concentrations in the tissues of the back of the eye. The topical formulation is designed for enhanced uptake to the back of the eye and decreased potential for side effects. The Company is advancing its clinical wet-AMD program with this topical formulation. In May 2012, the U.S. Food and Drug Administration ("FDA") awarded Fast Track Designation to the Squalamine eye drop program for the potential treatment of wet-AMD.

Squalamine eye drops are designed for self-administration which may provide several potential advantages over the FDA approved current standards of care (Roche/Genetech's Lucentis® and Regeneron's Eylea® Intravitreal Injections).

- Eye drops versus standard of care which is an intravitreal injection directly into the eye every 4-8 weeks on a chronic basis
- Reduction or elimination of intravitreal injections has the potential to provide patients with improved safety by reducing or eliminating side effects associated with the intravitreal injection procedure
- Inhibition of multiple growth factors may achieve superior visual acuity outcomes. Clinical evidence has demonstrated that inhibiting VEGF and PDGF together may provide patients with better visual acuity outcomes than anti-VEGF therapy alone
- Cost advantage of manufacturing a small molecule when compared to large molecule proteins and antibodies

In Phase II clinical trials using the intravenous formulation of Squalamine, stabilization or improvement in visual activity was observed in the vast majority of patients, with both early and advanced lesions responding and few drug-related ocular or systemic effects observed. In a number of patients whose wet-AMD had progressed to an advanced stage, the administration of Squalamine produced beneficial effects and significant improvement in best corrected visual acuity. As opposed to the approved current standard of care therapy, Squalamine does not require direct injection into the eye.

The Company conducted preclinical testing on the novel topical formulation with the following results:

- Ocular Tolerance and Toxicity: In a dose escalation safety study involving daily eye drop treatment in Dutch belted rabbits over a 28 day period, the formulation proved safe, and exhibited no signs of ocular toxicity or changes in intraocular pressure. Importantly, no macroscopic or histopathological changes to the ocular tissues were noted.
- Single Dose Biodistribution study: A single eye drop was administered to the front of the eye in Dutch belted rabbits. At all evaluated timepoints, drug concentrations in the posterior sclera-choroid region behind the retina at the back of the eye exceeded the tissue concentrations of Squalamine that are known to block the choroidal neovascularization process in Wet-AMD.

- Multi Dose Biodistribution Study: Squalamine eye drops were administered once or twice daily in both eyes for up to 14 days in Dutch belted rabbits. The eyes were examined one full dosing interval (12 hours when given twice daily, 24 hours when given once daily) after the last administration of Squalamine eye drops to determine concentrations of Squalamine in the posterior ocular tissues ("Trough" level). At all time points and dosing regimens, Trough Squalamine concentrations exceeded tissue concentrations of Squalamine that are known to block the choroidal neovascularization process in Wet-AMD.

- Long Term Ocular Tolerance and Toxicity: In a 26-week safety and toxicity study in male and female Dutch belted rabbits, Squalamine or placebo eye drops were administered via topical instillation twice a day in both eyes. Ophthalmoscopic examinations were conducted throughout the study period to assess ocular toxicity (irritation, redness, swelling, discharge). Blood and urine samples for clinical pathology evaluations were collected, and blood samples for determination of the plasma concentrations of squalamine eye drops and toxicokinetic evaluations were collected from all animals at designated time points. At study termination, necropsy examinations were performed, and organs and optical tissues were microscopically examined.

- No adverse effects of treatment were observed in any of the parameters evaluated including clinical findings, body weights, food consumption, ocular irritation, hematology, coagulation, clinical chemistry, urinalysis and macroscopic pathology examinations. Importantly, ophthalmoscopic examinations indicated no signs of clouding of the lens, no corneal opacities or deposits, and no increase in intraocular pressure. In addition, microscopic histopathology evaluations on ocular tissues were normal. Squalamine also did not build up in plasma over long term administration, indicating reduced potential for systemic side effects.

The Company presented preclinical data at the Association for Research and Vision in Ophthalmology conference in May 2012, and at the Macula Society meeting in June 2012.

We commenced a clinical study, Study OHR-002, which began enrolling patients in late 2012. Study OHR-002 is a randomized, double blind, placebo controlled Phase II study to evaluate the efficacy and safety of Squalamine Eye Drops for the treatment of wet-AMD. The study will enroll 120 treatment naïve wet-AMD patients at more than twenty clinical sites in the U.S., who will be treated with Squalamine Eye Drops or placebo eye drops twice daily for a nine month period. The primary and secondary endpoints include visual acuity parameters, need for rescue intravitreal injections, and safety. The protocol includes an interim analysis upon the completion of the treatment period in 50% of the patients (approximately 60). We completed 50% enrollment in the study in the third calendar quarter of 2013 and therefore anticipate the release of interim results of the OHR-002 study in the second quarter of 2014. Full enrollment is expected to be completed in the second quarter of calendar 2014, with final data on the study available in the first quarter of calendar 2015.

We have also commenced two investigator sponsored trials ("IST") in indications where a molecule that possesses anti-angiogenic properties may provide therapeutic benefit. Study OHR-003 is a monotherapy IST evaluating Squalamine Eye Drops in five patients with Proliferative Diabetic Retinopathy. The Principal Investigator of Study OHR-003 presented a case report from the ongoing trial at the Macula Society meeting on February 19, 2014 and we expect the final data to be available in the second half of calendar 2014 for presentation at a scientific conference or forum. Study OHR-004 is an IST evaluating Squalamine Eye Drops in 20 patients with Branch and Central Retinal Vein Occlusion. We expect the data from OHR-004 to be available in the second half of calendar 2014 for presentation by the investigator at a scientific forum or conference.

We also anticipate initiating two additional IST's to further evaluate Squalamine eye drops for the treatment of diabetic macular edema in the second quarter of calendar 2014. Study OHR-005 will evaluate Squalamine Eye Drops in a randomized, masked, placebo controlled trial of approximately 30 patients with Diabetic Macular Edema ("DME"). Study OHR-006 will evaluate Squalamine Eye Drops in combination with monthly Lucentis® injections for DME patients that have been sub responders to monthly intravitreal Lucentis® injections. The trial will enroll approximately 20 patients and will be randomized, masked, and placebo controlled.

Additionally, Squalamine has shown promise in the treatment of solid tumors such as ovarian cancer using the intravenous formulation in significantly higher doses than the eye drop formulation. In a Phase IIa study, patients with stage III and IV refractory and resistant ovarian cancer received Squalamine in combination with carboplatin, with approximately two thirds of the patients achieving a complete response, partial response or stable disease. Squalamine has been awarded Orphan Drug Status by the FDA for the treatment of late stage resistant or refractory ovarian cancer. We expect to publish or present the survival data on the completed phase IIa study in the middle of calendar year 2014 at a scientific conference or appropriate forum. Because of funding constraints, Ohr is seeking a development partner to further advance development of this indication; however we currently do not have plans to enter into such a transaction and there is no assurance that the Company will complete such a transaction.

OHR/AVR118

OHR/AVR118 is a novel immunomodulator with a singular chemical structure that is terminally sterilized and endotoxin-free. The compound is composed of two small peptides, Peptide A, which is 31 amino acids long, and Peptide B, that is 21 amino acids long. Peptide B is unique in that the dinucleotide, diadenosine, is covalently attached to serine at position 18 through a phosphodiester bond. OHR/AVR118 is stable at room temperature and has a favorable safety profile both in animal toxicity studies and in human clinical trials.

The Company completed a phase IIa study evaluating OHR/AVR118 in patients with cancer cachexia. In December 2013, the data was presented at the 7th International Cachexia Conference in Kobe, Japan. The data were selected for podium presentation of late breaking clinical trials and were presented by principal investigator Dr. Martin Chasen, Medical Director, Palliative Care, Ottawa Hospital Cancer Centre, Canada.

In this Phase 2a trial with OHR/AVR118, 29 patients with advanced cancer and cachexia were enrolled. 18 patients, three with stage III and 15 with stage IV cancers completed the treatment protocol. This included 5 patients with pancreatic cancer, five with lung cancer, two with prostate cancer and one each with colon, stomach, esophageal, liver cancers, head and neck cancer and multiple myeloma. While the primary trial end point of weight gain was not met, at the completion of treatment, patients achieved stabilization of body weight, body fat and muscle mass with a significant increase in appetite (p=<.005). Additionally, PG-SGA (Patient Generated Subjective Global Assessment) scores (p=.025) demonstrated improvement, indicating an enhanced quality of life.

After completing the initial 28 day treatment period, patients had the option to continue receiving study drug if they felt it was in their best interest. 11 of the 18 patients (61%) elected to do so, being treated with the drug for a total of between 42 to 153 days. Sustained body weight stabilization was maintained even on prolonged therapy with the drug in this sub-group of patients. These results were seen despite the fact that seven of the 18 patients were receiving concomitant chemotherapy, and one was receiving concomitant radiotherapy during the trial treatment period with OHR/AVR118. Chemotherapy and radiation frequently exacerbate the symptoms of cachexia. Overall, the drug appeared well tolerated with minimal side effects.

Ohr also owns various other compounds in earlier stages of development, including the PTP1b inhibitor Trodusquemine and related analogs. See “Corporate Strategy” concerning a Trodusquemine joint venture.

Competitive Factors

The pharmaceutical industry is characterized by intense competition and confidentiality. We may not be aware of the other biotechnology, pharmaceutical companies or public institutions that are developing pharmaceuticals that compete with our potential products. We also may not be aware of all the other competing products our known competitors are pursuing. In addition, these biotechnology companies and public institutions compete with us in recruiting for research personnel and subjects, which may affect our ability to complete our research studies. Current treatment of cachexia is limited to off-label use of steroid based therapeutics and nutritional supplements but there are various other companies developing investigational drugs in Phase I, II and III trials for the treatment of cachexia. We cannot assure that none of them will get to market before us or that OHR/AVR118 will be a better treatment. Lucentis® (Genentech/Roche) and Eylea® (Regeneron) are currently approved by the FDA and are the market leaders for the treatment of wet-AMD. There is no assurance that we can get FDA approval for Squalamine eye drops for the treatment of wet-AMD, and if we get it, there is no assurance we will be able to displace the market leaders as a treatment in a significant amount of patients. In addition there are various other companies with drugs in Phase I and II trials for the treatment of wet-AMD. We cannot assure that none of them will get to market before us or that Squalamine eye drops will be a better treatment. See “Risk Factors” below.

Wet-AMD Market

Age-related macular degeneration ("AMD") is a medical condition which usually affects older adults and generally results in a loss of vision. AMD occurs in "dry" (non-exudative) and "wet" (exudative) forms. Wet-AMD is the advanced form of macular degeneration that involves the formation of abnormal and leaky blood vessels in the back of the eye behind the retina, through a process known as choroidal neovascularization ("CNV"). The wet form accounts for approximately 15 percent of all AMD cases, yet is responsible for 90 percent of severe vision loss associated with AMD. According to the National Eye Institute (NEI), the prevalence of wet-AMD among adults 40 years or older in the U.S. alone is estimated at 1.75 million people. In addition, more than 200,000 new cases are diagnosed yearly in the U.S.

Competitive Landscape in Wet-AMD

The current FDA approved market leaders for the treatment of wet-AMD are VEGF inhibitors, including Lucentis®, Eylea® and (off-label) Avastin®. In 2012, annual revenue (worldwide) was more than $3.5 billion for Lucentis, despite significant cannibalization by the off-label use of Avastin (estimated to be 45-55%). Eylea®, was approved for use in wet-AMD in the U.S. in November 2011 and achieved 2012 revenues in excess of $800 million. Both Lucentis and Eylea are administered via frequent intravitreal injections directly into the eye. Fovista ® a PDGF targeting aptamer being developed by Ophthotech, is currently enrolling three phase three clinical studies to evaluate Fovista in combination with anti-VEGF agents including Lucentis®, Eylea®, and Avastin®. The clinical trials are designed for patients to receive two intravitreal injections per month for a period of 24 months. Other programs currently in phase II trials include MP0112, a VEGF targeting DARPin molecule being developed by Allergan, iSonep, a sphingosine-1-phosphate targeting agent being developed by LPath inc and Pfizer, x-82, a tyrosine kinase inhibitor being developed by Xcovery Vision, and ALG-1001, an integrin targeting peptide being developed by Allegro Ophthalmics. All of these products in clinical development, with the exception of x-82, use an intravitreal injection into the eye much like the current standards of care.

Corporate Strategy

The Company is currently actively developing its pipeline products for applications in ophthalmology, oncology, and cancer supportive care. During the 2014 fiscal year, we plan to embark on a strategy to transition Ohr to a core focus on ophthalmology indications and to build an ophthalmology-focused pipeline. With this strategy, we plan to seek and evaluate acquisition candidates in preclinical and clinical stage development for non intravitreal delivery to the back of the eye or other innovative ophthalmic products; however we currently do not have plans to enter into such a transaction and there is no assurance that the Company will complete such a transaction.

The Company plans to move forward with the development of OHR/AVR118, a non ophthalmology asset, to potential value creation milestones and then look to license or otherwise monetize this asset through a license agreement, partnership, joint venture, or sale; however we currently do not have plans to enter into such a transaction and there is no assurance that the Company will complete such a transaction.

On February 26, 2014, the Company entered into a Joint Venture Agreement and related agreements with Cold Spring Harbor Laboratory ("CSHL") pursuant to which a joint venture, DepYmed Inc. ("DepYmed"), was formed to further pre-clinical and clinical development of Ohr's Trodusquemine and analogues as PTP1B inhibitors for undisclosed indications. PTP1B is non-receptor phospho-tyrosine protein phosphatase. There can be no assurance that DepYmed will be able to design and support clinical trials or otherwise determine the efficacy or commercial potential of Trodusquemine for commercial use, or that regulatory authorities will approve final testing or marketing of any pharmaceutical product. DepYmed will be jointly owned and managed by CSHL and the Company, and will license research from CSHL and intellectual property from the Company.

Risks Associated with Our Business

Investing in our securities involves a high degree of risk. These risks are discussed more fully in the "Risk Factors" section of this prospectus supplement. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in this prospectus supplement and in our other reports filed with the SEC, together with all of the other information contained in or incorporated by reference in this prospectus supplement.

Recent Developments

On December 16, 2011, the Company completed a private placement offering pursuant to which the Company sold 611,114 shares of its common stock at a price of $1.80 per share for gross proceeds of $1,100,000. Purchasers of the shares also received an aggregate of 305,559 Class J Warrants to purchase common stock at an exercise price of $1.95 per share and exercisable for a period of 5 years. The holders of Class J Warrants have piggybank registration rights; however the Company did not notify such holders of the registration statement under which has been filed with the SEC and declared effective on January 31, 2014. On March 11, 2014, the Company amended the Class J Warrants to provide for cashless exercise, which replaced the registration rights.

Between January 1, 2014, and April 4, 2014, the Company issued 1,829,994 shares of common stock pursuant to cashless exercises of warrants originally exercisable to purchase 2,184,700 shares at exercises prices between $1.95 and $6.75. On April 2, 2014, the Company issued 500 shares of common stock for total proceeds of $750 upon exercise of warrants with an exercise price of $1.50.

General

Ohr Pharmaceutical, Inc. ("we", "Ohr", or the "Company") is a Delaware corporation that was organized on August 4, 2009, as successor to BBM Holdings, Inc. (formerly Prime Resource, Inc., which was organized March 29, 2002) pursuant to a reincorporation merger.

On June 3, 2013, the Company effected a 3:1 reverse stock split on its shares of common stock (with related adjustments to its outstanding preferred stock, options and warrants). Unless otherwise noted, impacted amounts and share information included in the financial statements and notes thereto have been retroactively adjusted for the stock split as if such stock split occurred on the first day of the first period presented. Certain amounts may be slightly different than previously reported due to rounding of fractional shares as a result of the reverse stock split. On June 13, 2013, the Company's common shares were approved for listing and began trading on The NASDAQ Capital Market.

Unless otherwise stated, all references to "us," "our," "Ohr," "we," the "Company" and similar designations refer to Ohr Pharmaceutical, Inc. Our logo, trademarks and service marks are the property of Ohr. Other trademarks or service marks appearing in this prospectus supplement are the property of their respective holders. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus supplement. The information contained in this prospectus supplement is accurate only as of the date of prospectus supplement, regardless of the time of delivery of this prospectus supplement or of any sale of common stock.

THE OFFERING

Common stock offered by us	1,800,000 shares.
Common stock to be outstanding after this offering	23,600,540 shares.
Use of proceeds	We intend to use the net proceeds received from the sale of our common stock for general corporate purposes, including clinical trial expenses, research and development expenses, general and administrative expenses, manufacturing expenses and potential acquisitions of companies and technologies that complement our business. There are no understandings, agreements or commitments with respect to any potential acquisitions. Please see "Use of Proceeds" on page S-27.

Risk factors	See "Risk Factors" beginning on page S-12 of this prospectus supplement, as well as the other information included in or incorporated by reference in this prospectus supplement and the accompanying prospectus, for a discussion of risks you should carefully consider before investing in our securities.
Nasdaq Stock Market listing	OHRP

The number of shares of our common stock to be outstanding after this offering set forth above is based on 21,800,540 shares of our common stock outstanding as of April 4, 2014.

Unless otherwise indicated, all information in this prospectus supplement, including the number of shares of our common stock to be outstanding after this offering set forth above, excludes the following:

- 1,633,335 shares subject to outstanding options as of April 4, 2014, having a weighted average exercise price of $4.67 per share; and
- 3,867,395 shares of our common stock issuable upon exercise of outstanding warrants as of April 4, 2014, having a weighted average exercise price of $5.05 per share.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks described below, together with all of the other information included or incorporated by reference in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference, before making an investment decision. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial may also impair our business, financial condition, operating results and prospects. Our business, financial condition and results of operations could be materially and adversely affected by any of these risks or uncertainties. In that case, the market price of our common stock could decline, and you may lose all or part of your investment in our securities.

Risks Related to this Offering

Resales of our common stock in the public market during this offering by our stockholders may cause the market price of our common stock to fall.

The issuance of new shares of our common stock in this offering could result in resales of our common stock by our current stockholders concerned about the potential dilution of their holdings. In turn, these resales could have the effect of depressing the market price for our common stock. A substantial majority of the outstanding shares of our common stock are, and all of the shares sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act of 1933, as amended, or the Securities Act.

As a new investor, you will incur substantial dilution as a result of this offering and future equity issuances, and as a result, our stock price could decline.

The offering price is substantially higher than the net tangible book value per share of our outstanding common stock. As a result, based on our capitalization as of December 31, 2013, investors purchasing common stock in this offering will incur immediate dilution of $9.03 per share of common stock purchased, based on the offering price of $10.00 per share. We are generally not restricted from issuing additional common stock, including any securities that are convertible into or exchangeable for, or that represent the right to receive, common stock. The market price of our common stock could decline as a result of sales of common stock or securities that are convertible into or exchangeable for, or that represent the right to receive, common stock after this offering or the perception that such sales could occur. See “Dilution” on page S-29 of this prospectus supplement for a more detailed discussion of the dilution you will incur in this offering.

We have broad discretion in how we use the net proceeds of this offering, and we may not use these proceeds effectively or in ways with which you agree.

Our management will have broad discretion as to the application of the net proceeds of this offering and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase the market price of our common stock.

You should carefully consider the following factors which may affect future results of operations. If any of the adverse events described below actually occur, our business, financial condition and operating results could be materially adversely affected and you may lose part or all of the value of your investment. If you choose to invest in our securities, you should be able to bear a complete loss of your investment.

We may not be able to raise additional capital on favorable terms, if at all.

We will need additional financing to further our drug development programs as well as future trials. In our capital-raising efforts, we may seek to sell additional equity or debt securities or obtain a bank credit facility. The sale of additional equity or debt securities, if convertible, could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also result in covenants that would restrict our operations. However, we may not be able to raise additional funds on acceptable terms, or at all. If we are unable to secure sufficient capital to fund our research and development activities, we may not be able to continue operations, or we may have to enter into collaboration agreements that could require us to share commercial rights to our products to a greater extent or at earlier stages in the drug development process than is currently intended. These collaborations, if consummated prior to proof-of-efficacy or safety of a given product candidate, could impair our ability to realize value from that product candidate. If our business does not generate the cash needed to finance our ongoing operations, we will likely need to continue to raise additional capital.

The market price and volume of our common stock fluctuate significantly and could result in substantial losses for individual investors.

The stock market from time to time experiences significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These broad market fluctuations may cause the market price and volume of our common stock to decrease. In addition, the market price and volume of our common stock is highly volatile.

Factors that may cause the market price and volume of our common stock to decrease include:

- adverse results or delays in our clinical trials;
- fluctuations in our results of operations, timing and announcements of our bio-technological innovations or new products or those of our competitors;
- developments concerning any strategic alliances or acquisitions we may enter into;
- announcements of FDA non-approval of our drug products, or delays in the FDA or other foreign regulatory review process or actions;

- adverse actions taken by regulatory agencies with respect to our drug products, clinical trials, manufacturing processes or sales and marketing activities;
- any lawsuit involving us or our drug products;
- developments with respect to our patents and proprietary rights;
- announcements of technological innovations or new products by our competitors;
- public concern as to the safety of products developed by us or others;
- regulatory developments in the United States and in foreign countries;
- changes in stock market analyst recommendations regarding our common stock or lack of analyst coverage;
- the pharmaceutical industry conditions generally and general market conditions;
- failure of our results of operations to meet the expectations of stock market analysts and investors;
- sales of our common stock by our executive officers, directors and five percent stockholders or sales of substantial amounts of our common stock.
- changes in accounting principles; and
- loss of any of our key scientific or management personnel.

The market for our common stock is highly illiquid. Our stockholders may not be able to resell their shares at or above the purchase price paid by such stockholders, or at all.

Our common stock is quoted on the NASDAQ Capital Market. The market for our securities is illiquid. This illiquidity may be caused by a variety of factors including:

- lower trading volume; and
- market conditions.

There is limited trading in our common stock and our security holders may experience wide fluctuations in the market price of our securities. Such price and volume fluctuations have particularly affected the trading prices of equity securities of many biotechnology companies. These price and volume fluctuations often have been unrelated to the operating performance of the affected companies. These fluctuations may have an extremely negative effect on the market price of our securities and may prevent a stockholder from obtaining a market price equal to the purchase price such stockholder paid when the stockholder attempts to sell our securities in the open market. In these situations, the stockholder may be required either to sell our securities at a market price which is lower than the purchase price the stockholder paid, or to hold our securities for a longer period of time than planned. An inactive market may also impair our ability to raise capital by selling shares of capital stock or to recruit and retain managers with equity-based incentive plans.

We will not pay cash dividends and investors may have to sell their shares in order to realize their investment.

We have not paid any cash dividends on our common stock and do not intend to pay cash dividends in the foreseeable future. We intend to use our cash for reinvestment in the development and marketing of our products and services. As a result, investors may have to sell their shares of common stock to realize their investment.

Risks Related to our Business

We face heavy government regulation, and FDA regulatory approval of our products is uncertain.

The research, testing, manufacturing and marketing of drug products such as those that we are developing are subject to extensive regulation by federal, state and local government authorities, including the FDA. To obtain regulatory approval of a product, we must demonstrate to the satisfaction of the applicable regulatory agency that, among other things, the product is safe and effective for its intended use. In addition, we must show that the manufacturing facilities used to produce the products are in compliance with current Good Manufacturing Practices regulations or cGMP.

The process of obtaining FDA and other required regulatory approvals and clearances will require us to expend substantial time and capital. Despite the time and expense expended, regulatory approval is never guaranteed. The number of pre-clinical and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is in development for, and the requirements applicable to that particular drug candidate. The FDA can delay, limit or deny approval of a drug candidate for many reasons, including that:

- a drug candidate may not be shown to be safe or effective;
- the FDA may not approve our manufacturing process;
- the FDA may interpret data from pre-clinical and clinical trials in different ways than we do;
- the FDA may not meet, or may extend, the Prescription Drug User Fee Act date with respect to a particular New Drug Application (“NDA”);

For example, if certain of our methods for analyzing our trial data are not accepted by the FDA, we may fail to obtain regulatory approval for our product candidates.

Moreover, if and when our products do obtain marketing approval, the marketing, distribution and manufacture of such products would remain subject to extensive ongoing regulatory requirements. Failure to comply with applicable regulatory requirements could result in:

- warning letters
- fines
- civil penalties
- injunctions
- recall or seizure of products
- total or partial suspension of production
- refusal of the government to grant future approvals
- withdrawal of approvals
- criminal prosecution

Any delay or failure by us to obtain regulatory approvals for our product candidates could diminish competitive advantages that we may attain and would adversely affect the marketing of our products. We have not received regulatory approval to market any of our product candidates in any jurisdiction.

If we do not raise additional funds, we will not be able to continue operations or complete the necessary clinical trials to complete development of Squalamine and OHR/AVR118 or our other products and will not be able to sell them anywhere.

We will not be able to sell Squalamine and OHR/AVR118 or our other products in the United States unless we submit, and the FDA approves an NDA for each such product. We must conduct clinical trials of each of our products in humans before we submit an NDA. We do not have sufficient capital currently to complete the necessary trials to complete the development of Squalamine and OHR/AVR118 or any of our other therapeutic drug products.

It is possible that the results of clinical trials of Squalamine and OHR/AVR118 or our other products will not prove that they are safe and effective. It is also possible that the FDA will not approve the sale of any of our products in the United States if we submit an NDA for such product. It is not known at this time how later stage clinical trials will be conducted, if at all. Even if the data show that any of our products are safe and effective, obtaining approval of the NDA could take years and require financing of amounts not presently available to us.

Conducting the clinical trials of each of our products will require significant cash expenditures and we do not have the funds necessary to complete all phases of clinical trials for Squalamine and OHR/AVR118 or any other products. Our products may never be approved for commercial distribution by any country. Because our research and development expenses and clinical trial expenses will be charged against earnings for financial reporting purposes, we expect that losses from operations will continue to be incurred for the near future. We currently do not have sufficient funds to complete all phases of clinical trials of any of our products which are required to permit the commercial sale of such products.

If the results of our clinical trials do not support our claims relating to any drug candidate or if serious side effects are identified, the completion of development of such drug candidate may be significantly delayed or we may be forced to abandon development altogether, which will significantly impair our ability to generate product revenues.

The results of our clinical trials with respect to any drug candidate might not support our claims of safety or efficacy, the effects of our drug candidates may not be the desired effects or may include undesirable side effects or the drug candidates may have other unexpected characteristics. Further, success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and the results of later clinical trials may not replicate the results of prior clinical trials and preclinical testing. The clinical trial process may fail to demonstrate that our drug candidates are safe for humans and effective for indicated uses. In addition, our clinical trials may involve a specific and small patient population. Because of the small sample size, the results of these early clinical trials may not be indicative of future results. Adverse or inconclusive results may cause us to abandon a drug candidate and may delay development of other drug candidates. Any delay in, or termination of, our clinical trials will delay the filing of our NDAs with the FDA and, ultimately, significantly impair our ability to commercialize our drug candidates and generate product revenues which would have a material adverse effect on our business and results of operations.

If we find it difficult to enroll patients in our clinical trials, it will cause significant delays in the completion of such trials and may cause us to abandon one or more clinical trials.

For the diseases or disorders that our product candidates are intended to treat, we expect only a subset of the patients with these diseases to be eligible for our clinical trials. Given that each of our product candidates is in the early stages of preclinical or clinical development, we may not be able to initiate or continue clinical trials for each or all of our product candidates if we are unable to locate a sufficient number of eligible subjects to participate in the clinical trials required by the FDA or other foreign regulatory authorities. The requirements of our clinical testing mandate that a patient cannot be involved in another clinical trial for the same indication. We are aware that our competitors have ongoing clinical trials for products that are competitive with our product candidates and subjects who would otherwise be eligible for our clinical trials may be involved in such testing, rendering them unavailable for testing of our product candidates. Our inability to enroll a sufficient number of patients for any of our current or future clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether, which would have a material adverse effect on our business.

If our contract research organizations do not successfully carry out their duties or if we lose our relationships with contract research organizations, our drug development efforts could be delayed.

We are dependent on contract research organizations, third-party vendors and investigators for pre-clinical testing and clinical trials related to our drug discovery and development efforts and we will likely continue to depend on them to assist in our future discovery and development efforts. These parties are not our employees and we cannot control the amount or timing of resources that they devote to our programs. If they fail to devote sufficient time and resources to our drug development programs or if their performance is substandard, it will delay the development and commercialization of our product candidates. The parties with which we contract for execution of our clinical trials play a significant role in the conduct of the trials and the subsequent collection and analysis of data. Their failure to meet their obligations could adversely affect clinical development of our product candidates.

If we lose our relationship with any one or more of these parties, we could experience a significant delay in both identifying another comparable provider and then contracting for its services. We may be unable to retain an alternative provider on reasonable terms, if at all. Even if we locate an alternative provider, it is likely that this provider may need additional time to respond to our needs and may not provide the same type or level of service as the original provider. In addition, any provider that we retain will be subject to current Good Laboratory Practices, and similar foreign standards, and we do not have control over compliance with these regulations by these providers. Consequently, if these practices and standards are not adhered to by these providers, the development and commercialization of our product candidates could be delayed.

If we are ever in a position to commercialize our product candidates, of which there can be no assurance, we have no experience selling, marketing or distributing products and no internal capability to do so.

We currently have no sales, marketing or distribution capabilities and no experience in building a sales force and distribution capabilities. If we are ever in a position to commercialize our product candidates, of which there can be no assurance, we must either develop internal sales, marketing and distribution capabilities, which will be expensive and time consuming, or make arrangements with third parties to perform these services. If we decide to market any of our products directly, we must commit significant financial and managerial resources to develop a marketing and sales force with technical expertise and with supporting distribution capabilities. Building an in-house marketing and sales force with technical expertise and distribution capabilities will require significant expenditures, management resources and time. Factors that may inhibit our efforts to commercialize our products directly and without strategic partners include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;

- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating and sustaining an independent sales and marketing organization.

We may not be successful in recruiting the sales and marketing personnel necessary to sell our products and even if we do build a sales force, they may not be successful in marketing our products, which would have a material adverse effect on our business and results of operations.

Developments by competitors may render our products or technologies obsolete or non-competitive which would have a material adverse effect on our business and results of operations.

We compete against fully integrated pharmaceutical companies and smaller companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Our drug candidates will have to compete with existing therapies and therapies under development by our competitors. In addition, our commercial opportunities may be reduced or eliminated if our competitors develop and market products that are less expensive, more effective or safer than our drug products. Other companies have drug candidates in various stages of preclinical or clinical development to treat diseases for which we are also seeking to develop drug products. Some of these potential competing drugs are further advanced in development than our drug candidates and may be commercialized earlier. Even if we are successful in developing effective drugs, our products may not compete successfully with products produced by our competitors.

Most of our competitors, either alone or together with their collaborative partners, operate larger research and development programs, staff and facilities and have substantially greater financial resources than we do, as well as significantly greater experience in:

- developing drugs;
- undertaking preclinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals of drugs;
- formulating and manufacturing drugs; and
- launching, marketing and selling drugs.

These organizations also compete with us to attract qualified personnel, acquisitions and joint ventures candidates and for other collaborations. Activities of our competitors may impose unanticipated costs on our business which would have a material adverse effect on our business and results of operations.

We rely on confidentiality agreements that could be breached and may be difficult to enforce which could have a material adverse effect on our business and competitive position.

Our policy is to enter agreements relating to the non-disclosure of confidential information with third parties, including our contractors, consultants, advisors and research collaborators, as well as agreements that purport to require the disclosure and assignment to us of the rights to the ideas, developments, discoveries and inventions of our employees and consultants while we employ them. However, these agreements can be difficult and costly to enforce. Moreover, to the extent that our contractors, consultants, advisors and research collaborators apply or independently develop intellectual property in connection with any of our projects, disputes may arise as to the proprietary rights to this type of information. If a dispute arises, a court may determine that the right belongs to a third party, and enforcement of our rights can be costly and unpredictable. In addition, we rely on trade secrets and proprietary know-how that we will seek to protect in part by confidentiality agreements with our employees, contractors, consultants, advisors or others. Despite the protective measures we employ, we still face the risk that:

- these agreements may be breached;
- these agreements may not provide adequate remedies for the applicable type of breach; or
- our trade secrets or proprietary know-how will otherwise become known.

Any breach of our confidentiality agreements or our failure to effectively enforce such agreements would have a material adverse effect on our business and competitive position.

If we infringe the rights of third parties we could be prevented from selling products, forced to pay damages and required to defend against litigation which could result in substantial costs and may have a material adverse effect on our business and results of operations.

We have not received to date any claims of infringement by any third parties. However, as our product candidates progress into clinical trials and commercialization, if at all, our public profile and that of our product candidates may be raised and generate such claims. Defending against such claims, and occurrence of a judgment adverse to us, could result in unanticipated costs and may have a material adverse effect on our business and competitive position. If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and we may have to:

- obtain licenses, which may not be available on commercially reasonable terms, if at all;
- redesign our products or processes to avoid infringement;

- stop using the subject matter claimed in the patents held by others, which could cause us to lose the use of one or more of our drug candidates;
- defend litigation or administrative proceedings that may be costly whether we win or lose, and which could result in a substantial diversion of management resources; or
- pay damages.

Any costs incurred in connection with such events or the inability to sell our products may have a material adverse effect on our business and results of operations.

We depend upon key officers and consultants in a competitive market for skilled personnel. If we are unable to attract and retain key personnel, it could adversely affect our ability to develop and market our products.

We are highly dependent upon the principal members of our management team, especially our Chief Executive Officer, Dr. Irach Taraporewala, and our Vice President of Business Development and CFO, Sam Backenroth, as well as our directors, including Ira Greenstein, the Chairman of our Board of Directors. A loss of any of these personnel may have a material adverse effect on aspects of our business and clinical development and regulatory programs. We have employment agreements with Dr. Taraporewala and Mr. Backenroth. Although these agreements include a non-competition covenant, the applicable noncompetition provisions can be difficult and costly to monitor and enforce. The loss of any of these persons' services would adversely affect our ability to develop and market our products and obtain necessary regulatory approvals.

We also depend in part on obtaining the service of scientific personnel and our ability to identify, hire and retain additional personnel. We experience intense competition for qualified personnel, and the existence of non-competition agreements between prospective employees and their former employers may prevent us from hiring those individuals or subject us to suit from their former employers. While we attempt to provide competitive compensation packages to attract and retain key personnel, many of our competitors are likely to have greater resources and more experience than we have, making it difficult for us to compete successfully for key personnel.

Intellectual property litigation is increasingly common and increasingly expensive and may result in restrictions on our business and substantial costs, even if we prevail.

Patent and other intellectual property litigation is becoming more common in the pharmaceutical industry. Litigation is sometimes necessary to defend against or assert claims of infringement, to enforce our patent rights, including those we have licensed from others, to protect trade secrets or to determine the scope and validity of proprietary rights of third parties. Currently, no third party is asserting that we are infringing upon their patent rights or other intellectual property, nor are we aware or believe that we are infringing upon any third party's patent rights or other intellectual property. We may, however, be infringing upon a third party's patent rights or other intellectual property, and litigation asserting such claims might be initiated in which we would not prevail, or we would not be able to obtain the necessary licenses on reasonable terms, if at all. All such litigation, whether meritorious or not, as well as litigation initiated by us against third parties, is time-consuming and very expensive to defend or prosecute and to resolve. In addition, if we infringe the intellectual property rights of others, we could lose our right to develop, manufacture or sell our products or could be required to pay monetary damages or royalties to license proprietary rights from third parties. An adverse determination in a judicial or administrative proceeding or a failure to obtain necessary licenses could prevent us from manufacturing or selling our products, which could harm our business, financial condition and prospects.

If our competitors prepare and file patent applications in the United States that claim technology we also claim, we may have to participate in interference proceedings required by the US Patent and Trademark Office to determine priority of invention, which could result in substantial costs, even if we ultimately prevail. Results of interference proceedings are highly unpredictable and may result in us having to try to obtain licenses in order to continue to develop or market certain of our drug products.

Any future acquisitions we make of companies or technologies may result in disruption to our business or distraction of our management, due to difficulties in assimilating acquired personnel and operations.

We may acquire or make investments in complementary businesses, technologies, services or products which complement our biotech operations if appropriate opportunities arise. From time to time we engage in discussions and negotiations with companies regarding our acquiring or investing in such companies' businesses, products, services or technologies, in the ordinary course of our business. We cannot be assured that we will be able to identify future suitable acquisition or investment candidates, or if we do identify suitable candidates, that we will be able to make such acquisitions or investments on commercially acceptable terms or at all. If we acquire or invest in another company, we could have difficulty in assimilating that company's personnel, operations, technology and software. In addition, the key personnel of the acquired company may decide not to work for us. If we make other types of acquisitions, we could have difficulty in integrating the acquired products, services or technologies into our operations. These difficulties could disrupt our ongoing business, distract our management and employees, increase our expenses and adversely affect our results of operations. Furthermore, we may incur indebtedness or issue equity securities to pay for any future acquisitions. The issuance of equity securities would be dilutive to our existing stockholders. As of April 6, 2014, we had no agreement to enter into any material investment or acquisition transaction.

Failure to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and operating results. In addition, current and potential shareholders could lose confidence in our financial reporting, which could have a material adverse effect on the price of our common stock.

Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. If we cannot provide reliable financial reports or prevent fraud, our results of operation could be harmed.

Section 404 of the Sarbanes-Oxley Act of 2002 requires annual management assessments of the effectiveness of our internal controls over financial reporting. We continuously monitor our existing internal controls over financial reporting systems to confirm that they are compliant with Section 404, and we may identify deficiencies that we may not be able to remediate in time to meet the deadlines imposed by the Sarbanes-Oxley Act. This process may divert internal resources and will take a significant amount of time and effort to complete.

If, at any time, it is determined that we are not in compliance with Section 404, we may be required to implement new internal control procedures and reevaluate our financial reporting. We may experience higher than anticipated operating expenses as well as increased independent auditor fees during the implementation of these changes and thereafter. Further, we may need to hire additional qualified personnel. If we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act. Failure to maintain an effective internal control environment could also cause investors to lose confidence in our reported financial information, which could have a material adverse effect on the price of our common stock.

Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses, divert management's attention from operating our business which could have a material adverse effect on our business.

There have been other changing laws, regulations and standards relating to corporate governance and public disclosure in addition to the Sarbanes-Oxley Act, as well as new regulations promulgated by the Commission and rules promulgated by the national securities exchanges. These new or changed laws, regulations and standards are subject to varying interpretations in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. As a result, our efforts to comply with evolving laws, regulations and standards are likely to continue to result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. Our board members, Chief Executive Officer, and Chief Financial Officer could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified board members and executive officers, which could have a material adverse effect on our business. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, we may incur additional expenses to comply with standards set by regulatory authorities or governing bodies which would have a material adverse effect on our business and results of operations.

Issuance of Serial Preferred Stock.

The Board of Directors has the authority to issue up to 15,000,000 shares of Serial Preferred Stock, $.0001 par value per share (the "Serial Preferred Stock"), in one or more series and to fix the number of shares constituting any such series, the voting powers, designation, preferences and relative participation, optional or other special rights and qualifications, limitations or restrictions thereof, including the dividend rights and dividend rate, terms of redemption (including sinking fund provisions), redemption price or prices, conversion rights and liquidation preferences of the shares constituting any series, without any further vote or action by the stockholders, of which 6,000,000 shares, designated the Series B Preferred, were issued, subsequently converted, and are no longer available to issue. As of the date of this filing, no Series B Preferred shares remain issued and outstanding. The issuance of additional Serial Preferred Stock could affect the rights of the holders of common stock. For example, such issuance could result in a class of securities outstanding that would have preferential voting, dividend, and liquidation rights over the common stock, and could (upon conversion or otherwise) enjoy all of the rights appurtenant to the shares of common stock. The authority possessed by the Board of Directors to issue Serial Preferred Stock could potentially be used to discourage attempts by others to obtain control of the Company through merger, tender offer, proxy contest or otherwise by making such attempts more difficult or costly to achieve. The Board of Directors may issue the Serial Preferred Stock without stockholder approval and with voting and conversion rights which could adversely affect the voting power of holders of common stock. There are no agreements or understandings for the issuance of Serial Preferred Stock and the Board of Directors has no present intention to issue any Serial Preferred Stock.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements involve risks and uncertainties. We are including the following cautionary statement in this prospectus supplement to make applicable and take advantage of the safe harbor provisions established by the Private Securities Litigation Reform Act of 1995 for any forward-looking statements made by us or on our behalf. We and our representatives may from time to time make written or oral statements that are "forward-looking," including statements contained in this prospectus supplement and other filings with the Securities and Exchange Commission, reports to our stockholders and news releases. Forward looking statements include statements concerning plans, objectives, goals, strategies, future events or performance and underlying assumptions and other statements which are other than statements of historical facts. In addition, other written or oral statements which constitute forward-looking statements may be made by us or on our behalf. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," "projects," "forecasts," "may," "should,", "could, " "potential," "predict," "will," "would," as well as variations of such words and similar expressions are intended to identify such forward-looking statements. Certain statements contained herein are forward-looking statements and accordingly involve risks and uncertainties which could cause actual results or outcomes to differ materially from those expressed in good faith forward-looking statements. Our expectations, beliefs and projections are expressed in good faith and are believed by us to have a reasonable basis, including without limitation, management's examination of historical operating trends, data contained in our records and other data available from third parties, but there can be no assurance that management's expectations, beliefs or projections will result or be achieved or accomplished. Accordingly, these statements are not guarantees of future performance and involve risks, uncertainties and assumptions which are difficult to predict. Thus, actual outcomes and results may differ materially from what is expressed or forecasted in or suggested by such forward-looking statements. Any forward-looking statement contained in this document speaks only as of the date on which the statement is made. We undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances that occur after the date on which the statement is made or to reflect the occurrence of unanticipated events.

In addition to other factors and matters discussed elsewhere herein, the following are important factors that in our view, could cause actual results to differ materially from those discussed in the forward-looking statements:

- our business, product, capital expenditure and research and development plans and product and technology roadmaps;
- the ability to compete against products intended for similar use by recognized and well capitalized companies;
- our ability to raise capital when needed, and without adverse and highly dilutive consequences to stockholders;

- our ability to protect intellectual property;
- our ability to retain management and obtain additional employees as required; and
- our ability to adapt to economic, political and regulatory conditions affecting our target markets.

The foregoing does not represent an exhaustive list of risks. Please see "Risk Factors" in this prospectus supplement and in our periodic reports filed with the Securities and Exchange Commission pursuant the Exchange Act for additional risks which could adversely impact our business and financial performance. Moreover, new risks emerge from time to time and it is not possible for our management to predict all risks, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements.

USE OF PROCEEDS

We estimate that the net proceeds to us of the sale of the common stock that we are offering will be approximately $16.7 million, after deducting the estimated offering expenses payable by us.

We intend to use the net proceeds received from the sale of our common stock for general corporate purposes, including clinical trial expenses, research and development expenses, general and administrative expenses, manufacturing expenses and potential acquisitions of companies and technologies that complement our business. There are no understandings, agreements or commitments with respect to any potential acquisitions. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, our management will retain broad discretion over the use of such proceeds. Pending the use of the net proceeds from this offering, we intend to invest the net proceeds in cash items and United States government securities.

CAPITALIZATION

The following table sets forth our cash and cash equivalents, short-term investments and capitalization as of December 31, 2013, as follows:

- on an actual basis; and
- on an as adjusted basis to reflect our issuance and sale in this offering of shares of our common stock, at the public offering price of $10 per share of our common stock after deducting the estimated offering expenses payable by us.

You should read this table together with the section of this prospectus supplement entitled "Use of Proceeds" and with the financial statements and related notes and the other information that we incorporated by reference into this prospectus supplement and the accompanying prospectus, including our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q that we file from time to time.

	As of December 31, 2013	
	Actual	As Adjusted
	(in thousands)	
Cash and cash equivalents and short-term investments	$ 4,016	$ 20,716
Stockholders' Equity:		
Preferred stock, $0.0001 par value; 15,000,000 shares authorized, 0 issued and outstanding:	—	—
Common stock, $0.0001 par value; 180,000,000 shares authorized, 19,970,046 and 21,770,046 shares issued and outstanding, actual and as adjusted, respectively	2	2
Additional paid-in capital	40,542	57,242
Accumulated deficit	(36,205)	(36,205)
Total Ohr Pharmaceutical, Inc. stockholders' equity	4,339	21,039
Total capitalization	$ 4,339	$ 21,039

The table above excludes the following as of December 31, 2013:

- 1,133,335 shares subject to outstanding options, having a weighted average exercise price of $2.31 per share; and
- 5,932,045 shares of our common stock issuable upon exercise of outstanding warrants, having a weighted average exercise price of $2.88 per share.

DILUTION

Purchasers of the securities offered by this prospectus supplement and the accompanying prospectus will suffer immediate and substantial dilution in the net tangible book value per share of our common stock. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers in this offering and the net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value as of December 31, 2013 was approximately $4.3 million, or $0.22 per share of our outstanding common stock, based on 19,970,046 shares of common stock outstanding as of December 31, 2013.

Investors participating in this offering will incur immediate and significant dilution. After giving effect to the issuance and sale in this offering of shares of our common stock at the public offering price of $10.00 per share of our common stock after deducting the estimated offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2013, would have been approximately $21.0 million, or approximately $0.97 per share of our common stock. This amount represents an immediate increase in net tangible book value of $0.75 per share of our common stock to existing stockholders and an immediate dilution in net tangible book value of $9.03 per share of our common stock to investors purchasing securities in this offering. The following table illustrates this dilution:

Assumed offering price per share			$	10.00
Net tangible book value per share as of December 31, 2013	$	0.22		
Increase per share attributable to this offering	$	0.75		
As adjusted net tangible book value per share as of December 31, 2013, after giving effect to this offering			$	0.97
Dilution per share to new investors participating in this offering			$	9.03

If any shares of our common stock are issued upon exercise of outstanding options or warrants, you will experience further dilution.

PLAN OF DISTRIBUTION

Pursuant to an engagement letter dated as of April 8, 2014, by and between Chardan Capital Markets, LLC, Brean Capital, LLC and us, we have engaged Chardan Capital Markets, LLC and Brean Capital, LLC as our exclusive placement agents in connection with this offering. The placement agents are not purchasing any shares for their own accounts in this offering and are not required to arrange the purchase or sale of any specific number or dollar amount of the securities.

The placement agents have agreed to use their reasonable best efforts to arrange for the sale of all of the securities in this offering. There is no requirement that any minimum number of shares or dollar amount of shares be sold in this offering and there can be no assurance that we will sell all or any of the shares being offered. We have entered into a securities purchase agreement on April 8, 2014, directly with the investors who agree to purchase securities in this offering. The engagement letter and the securities purchase agreement provides that the obligations of the placement agents and the investors are subject to certain conditions precedent, including, among other things, the absence of any material adverse change in our business and the receipt of certain opinions, letters and certificates from us or our counsel, as applicable.

We currently anticipate that the closing of this offering will take place on or about April 11, 2014. On the closing date, the following will occur:

- we will receive funds in the amount of the aggregate purchase price;
- The placement agents, will receive the placement agent fees in accordance with the terms of the engagement letter; and
- we will deliver the shares of common stock to the investors.

We have agreed to pay the placement agents fees equal to 6% of the gross proceeds from the sale of the shares in this offering. We have also agreed to reimburse the placement agents for all actual expenses incurred by them in connection with this offering.

The following table shows the per share and total placement agent fees we will pay in connection with the sale of the shares, assuming the purchase of all of the shares we are offering.

Per share placement agent fees	$	0.60
Maximum Offering Total	$	1,080,000

Because there is no minimum offering amount required as a condition to the closing in this offering, the actual total offering commissions, if any, are not presently determinable and may be substantially less than the maximum amount set forth above.

We estimate the total expenses of this offering, which will be payable by us, excluding the placement agent fees, will be approximately $220,000. After deducting the fees due to the placement agents and our estimated offering expenses, we expect the net proceeds from this offering to be approximately $16,700,000.

Our obligations to issue and sell shares to the investors is subject to the conditions set forth in the securities purchase agreement, which may be waived by us at our discretion. An investor's obligation to purchase shares is subject to the conditions set forth in the securities purchase agreement as well, which may also be waived.

We have agreed to indemnify the placement agents and certain other persons against certain liabilities relating to or arising out of the placement agents (or either of their) activities under the engagement letter. We have also agreed to contribute to payments the placement agents may be required to make in respect of such liabilities. We have agreed to indemnify the placement agents and specified other persons against some civil liabilities, including liabilities under the Securities Act of 1933, as amended (Securities Act), and the Securities Exchange Act of 1934, as amended (Exchange Act), and to contribute to payments that the placement agents may be required to make in respect of such liabilities.

Chardan Capital Markets, LLC and Brean Capital, LLC may each be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the shares sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, each placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of our common stock by either placement agent acting as principal. Under these rules and regulations, the placement agents

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

A copy of the engagement letter and the securities purchase agreement we entered into with the purchasers will be included as exhibits to our Current Report on Form 8-K that will be filed with the Securities and Exchange Commission in connection with the consummation of this offering.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus supplement has been passed upon by Hahn & Hessen, LLP, New York, New York. This law firm beneficially owns 9,630 shares of common stock, and a partner of this law firm serves as our corporate secretary and beneficially owns 10,070 shares of our common stock. Ellenoff Grossman & Schole LLP, New York, New York, has acted as counsel to the placement agents.

EXPERTS

The consolidated financial statements of Ohr Pharmaceutical, Inc. appearing in Ohr Pharmaceutical, Inc.'s Annual Report on Form 10-K for the fiscal year ended September 30, 2013, have been audited by Malone Bailey LLP, independent registered public accounting firm, as set forth in their report thereon included therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus supplement. The information incorporated by reference is considered to be part of this prospectus supplement, and later information that we file with the SEC will automatically update and supersede this information. The following documents filed with the Commission are incorporated by reference in this prospectus supplement:

- Our Annual Report on Form 10-K for the fiscal year ended September 30, 2013, filed on December 27, 2013;
- Our Quarterly Report on Form 10-Q for the quarter ended December 31, 2013, filed on February 14, 2014;
- Our Current Reports on Form 8-K (other than information contained in Current Reports on Form 8-K that is furnished, but not filed) filed on January 10, 2014, February 20, 2014, March 3, 2014, and March 14, 2014;
- Our Definitive Proxy Statement on Schedule 14A filed with the SEC on March 7, 2014, and Amendment No. 1 to the Definitive Proxy Statement on Schedule 14A filed with the SEC on March 28, 2014; and
- A description of our common stock contained in our registration statement on Form S-3, as amended, filed January 31, 2014.

We are also incorporating by reference any future filings we make with the Commission under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until all of the common stock to which this prospectus supplement relates has been sold or the offering is otherwise terminated, including those made between the date of filing of the initial registration statement and prior to effectiveness of the registration statement, except that information furnished under Item 2.02 or Item 7.01 of our Current Reports on Form 8-K or in any other filing where we indicate that such information is being furnished and not "filed" under the Exchange Act, is not deemed to be filed and not incorporated by reference herein.

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

You may request a copy of any or all of the information incorporated by reference, at no cost, by writing or telephoning us at the following address:

Ohr Pharmaceutical, Inc.
800 Third Avenue, 11th Floor
New York, NY 10022
(212) 682-8452

You should rely only on the information contained in this prospectus supplement, including information incorporated by reference as described above, or any other document that we have specifically referred you to. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this prospectus supplement to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus supplement to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of a registration statement on Form S-3 we have filed with the SEC under the Securities Act. This prospectus supplement does not contain all of the information in the registration statement. We have omitted certain parts of the registration statement, as permitted by the rules and regulations of the SEC. You may inspect and copy the registration statement, including exhibits, at the SEC's public reference room or website. Our statements in this prospectus supplement about the contents of any contract or other document are not necessarily complete. You should refer to the copy of each contract or other document we have filed as an exhibit to the registration statement for complete information. We are also subject to the informational requirements of the Exchange Act which requires us to file reports, proxy statements and other information with the SEC. Such reports, proxy statements and other information, along with the registration statement, including the exhibits and schedules thereto, may be inspected at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Copies of such material can be obtained from the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. Because we file documents electronically with the SEC, you may also obtain this information by visiting the SEC's Internet website at http://www.sec.gov.

PROSPECTUS

OHR PHARMACEUTICAL, INC.

$15,000,000

COMMON STOCK
PREFERRED STOCK
DEBT SECURITIES
WARRANTS
RIGHTS
PURCHASE CONTRACTS
UNITS

This prospectus will allow us to issue, from time to time at prices and on terms to be determined at or prior to the time of the offering, up to $15,000,000 of any combination of the securities described in this prospectus, either individually or in units. We may also offer common stock or preferred stock upon conversion of or exchange for the debt securities; common stock upon conversion of or exchange for the preferred stock; common stock, preferred stock or debt securities upon the exercise of warrants, rights or performance of purchase contracts; or any combination of these securities upon the performance of purchase contracts.

This prospectus describes the general terms of these securities and the general manner in which these securities will be offered. We will provide you with the specific terms of any offering in one or more supplements to this prospectus. The prospectus supplements will also describe the specific manner in which these securities will be offered and may also supplement, update or amend information contained in this document. You should read this prospectus and any prospectus supplement, as well as any documents incorporated by reference into this prospectus or any prospectus supplement, carefully before you invest.

Our securities may be sold directly by us to you, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution” in this prospectus and in the applicable prospectus supplement. If any underwriters or agents are involved in the sale of our securities with respect to which this prospectus is being delivered, the names of such underwriters or agents and any applicable fees, commissions or discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on the NASDAQ Capital Market under the symbol "OHRP." On January 16, 2014, the last reported sale price of our common stock was $8.74 per share. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Capital Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. Prospective purchasers of our securities are urged to obtain current information as to the market prices of our securities, where applicable.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks that we have described on page 11 of this prospectus under the caption "Risk Factors." We may include specific risk factors in supplements to this prospectus under the caption "Risk Factors." This prospectus may not be used to sell our securities unless accompanied by a prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is January 31, 2014.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants, rights or purchase contracts to purchase any of such securities, either individually or in units, in one or more offerings, with a total value of up to $15,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The prospectus supplement may also add, update or change information contained or incorporated by reference in this prospectus. However, no prospectus supplement will offer a security that is not registered and described in this prospectus at the time of its effectiveness. This prospectus, together with the applicable prospectus supplements and the documents incorporated by reference into this prospectus, includes all material information relating to the offering of securities under this prospectus. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated herein by reference and the additional information under the heading "Where You Can Find More Information" before making an investment decision.

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained or incorporated by reference in this prospectus. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated herein by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

Unless the context otherwise requires, "Ohr Pharmaceutical," "Ohr," "the Company," "we," "us," "our" and similar terms refer to Ohr Pharmaceutical, Inc.

PROSPECTUS SUMMARY

The following is a summary of what we believe to be the most important aspects of our business and the offering of our securities under this prospectus. We urge you to read this entire prospectus, including the more detailed consolidated financial statements, notes to the consolidated financial statements and other information incorporated by reference from our other filings with the SEC or included in any applicable prospectus supplement. Investing in our securities involves risks. Therefore, carefully consider the risk factors set forth in any prospectus supplements and in our most recent annual and quarterly filings with the SEC, as well as other information in this prospectus and any prospectus supplements and the documents incorporated by reference herein or therein, before purchasing our securities. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities.

Offerings Under This Prospectus

Under this prospectus, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants, rights or purchase contracts to purchase any of such securities, either individually or in units, with a total value of up to $15,000,000, from time to time at prices and on terms to be determined by market conditions at the time of the offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity, if applicable;
- rates and times of payment of interest or dividends, if any;
- redemption, conversion or sinking fund terms, if any;
- voting or other rights, if any; and
- conversion or exercise prices, if any.

The prospectus supplement also may add, update or change information contained in this prospectus or in documents we have incorporated by reference into this prospectus. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we offer securities through agents or underwriters, we will include in the applicable prospectus supplement:

- the names of those agents or underwriters;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

This prospectus may not be used to consummate a sale of any securities unless it is accompanied by a prospectus supplement.

The Company

Our discussion and analysis of the business and subsequent discussion of financial conditions may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended.

Ohr Pharmaceutical, Inc. ("we", "Ohr", the "Company" or the "Registrant") is a Delaware corporation that was organized on August 4, 2009, as successor to BBM Holdings, Inc. (formerly Prime Resource, Inc., which was organized March 29, 2002) pursuant to a reincorporation merger.

The Company is a biotechnology company focused on the development of the Company's previously acquired compounds with a focus on the clinical development of our two later stage lead products, OHR/AVR 118 for the treatment of cancer cachexia (multi-symptom wasting disorder), and Squalamine for the treatment of the wet form of age-related macular degeneration ("AMD") using an eye drop formulation. We acquired OHR/AVR118 in a secured party sale and Squalamine from the Genaera Liquidating Trust as part of the Company's strategy to acquire undervalued biotechnology companies and assets.

On March 19, 2009, the Company acquired in a secured party sale all the patents, related intellectual property, clinical data and other assets related to AVR118 (also known now as OHR/AVR118). OHR/AVR118 recently completed a Phase II trial for the treatment of cachexia. The Company acquired OHR/AVR118 and related assets in a secured party sale with $100,000 in cash and $500,000 principal amount of 11% convertible secured non-recourse debenture due June 20, 2011 convertible into common stock at $1.20 per share (the "Convertible Debenture"). The Convertible Debenture was repaid on December 29, 2010 and all security interests were released. The cash portion of the purchase price was financed by short-term loans from an affiliate of Orin Hirschman and another current shareholder, which were repaid June 3, 2009.

On August 19, 2009, the Company completed the acquisition of Squalamine, Trodusquemine and related compounds from Genaera Liquidating Trust. The Company paid $200,000 in cash for the compounds.

On April 12, 2010, Dr. Irach Taraporewala was hired as the Company's full-time CEO and Sam Backenroth was hired as the Company's Vice President of Business Development and CFO.

On June 3, 2013, the Company effected a 3:1 reverse stock split on its shares of common stock (with related adjustments to its outstanding preferred stock, options and warrants). Unless otherwise noted, impacted amounts and share information included in this document have been retroactively adjusted for the stock split as if such stock split occurred on the first day of the first period presented. Certain amounts may be slightly different than previously reported due to rounding of fractional shares as a result of the reverse stock split.

On June 13, 2013, the Company's common shares were approved for listing and began trading on The NASDAQ Capital Market.

The Company is currently engaged in the clinical testing of Squalamine eye drops for the treatment of wet-AMD and OHR/AVR118 for cancer cachexia.

Historical

Prior Business - The Company was originally formed under the name Prime Resource, Inc., a Utah corporation. After disposing of its prior insurance business, on March 30, 2007, the Company merged with Broadband Maritime Inc., a broadband maritime service supplier. No goodwill was recognized in the merger since Broadband Maritime was treated as the acquirer for accounting purposes and the Company was a "shell company." On June 5, 2007, after cancellations of key contracts, the Company announced that it had ceased broadband maritime operations and reduced employment to a small residual force. Accordingly, the Company ceased broadband maritime operations effective September 30, 2007 and was reclassified as a development stage enterprise, from the date of cessation forward.

On August 4, 2009 the Company merged with and into Ohr Pharmaceutical, Inc., a Delaware corporation ("Ohr"). Under the terms of the merger agreement Ohr became the surviving corporation in the merger. Each outstanding share of pre-merger Company common stock and preferred stock was converted into one share of Ohr common stock. Additionally, all outstanding pre-merger Company options and warrants were assumed and converted into equivalent Ohr warrants or options and maintained substantially identical terms. Finally, each outstanding share of Ohr stock owned by the Company pre-merger immediately prior to the effective date of the merger ceased to be outstanding and was cancelled and retired.

Acquisition of Pharmaceutical Business

On March 19, 2009, the Company acquired in a secured party sale all the patents, related intellectual property, clinical data and other assets related to AVR118 (renamed OHR/AVR118). OHR/AVR118 has completed a Phase II trial for the treatment of cachexia. The Company acquired the assets in the secured party sale with $100,000 in cash and by issuing a $500,000 principal amount 11% convertible secured non-recourse debenture due June 20, 2011, convertible at $1.20 per share (the "Convertible Debenture"). The Convertible Debenture was secured by the acquired assets. The cash portion of the purchase price was financed by short-term loans from an affiliate of Orin Hirschman, a director of the Company, and another current shareholder. The Convertible Debenture was paid in full on December 29, 2010 and all security interests were released.

On August 19, 2009, the Company completed the acquisition of Squalamine, Trodusquemine and related compounds from Genaera Liquidating Trust. The Company paid $200,000 in cash for the compounds.

On April 12, 2010 the Company hired Dr. Irach Taraporewala as CEO and Sam Backenroth as Vice President of Business Development and CFO. In connection with the new hires, Andrew Limpert resigned as an officer of the Company.

In December 2010, the Company opened a new clinical site for its ongoing Phase II clinical trial to investigate the efficacy of OHR/AVR118 for the treatment of cancer cachexia at the Ottawa Hospital Cancer Centre.

In June 2011, the Company commenced the Squalamine eye drop program for the treatment of the wet AMD. Animal safety and biodistribution data generated using the eye drop formulation of Squalamine were reported in July 2011, with further data being presented at the Association for Research in Vision and Ophthalmology (ARVO) and Macula Society meetings in May and June 2012, respectively.

On September 24, 2012, the Company announced the initiation of study OHR-002, a multi-center, randomized, double masked, placebo controlled Phase II trial to evaluate the efficacy and safety of Squalamine eye drops for the treatment of the wet form of age-related macular degeneration.

On March 21, 2013, the Company announced the results of the Phase II clinical trial evaluating OHR/AVR118 for the treatment of cancer cachexia, a wasting disorder often seen in late stage cancer patients. Final data on the clinical trial was presented by Dr. Martin Chasen at the Annual Cachexia Conference which took place in Kobe, Japan in December 2013.

Between April and August 2013, the Company initiated two investigator sponsored trials, Study OHR-003 and Study OHR-004. The trials will evaluate Squalamine eye drops for the treatment of Proliferative Diabetic Retinopathy and Retinal Vein Occlusion.

Until the Company is able to generate significant revenue from its principal operations, it will remain classified as a development stage company. The Company can give no assurance that it will be successful in such efforts or that its limited operating funds will be adequate to continue the Company as a public company, nor is there any assurance of any additional funding being available to the Company.

Product Pipeline

Squalamine

Squalamine is a small molecule anti-angiogenic drug with a novel intracellular mechanism of action. The drug acts against the development of aberrant neovascularization by inhibiting multiple protein growth factors of angiogenesis, including vascular endothelial growth factor ("VEGF"), platelet-derived growth factor ("PDGF") and basic fibroblast growth factor growth factor ("bFGF"). Recent clinical evidence has shown PDGF to be an additional target for the treatment of Wet Age-related Macular Degeneration ("Wet-AMD"). Using an intravenous formulation in over 250 patients in Phase I and Phase II trials for the treatment of Wet-AMD, the trials demonstrated that the molecule had biological effect and maintained and improved visual acuity outcomes, with both early and advanced lesions responding.

Ohr reformulated Squalamine for ophthalmic indications from an intravenous infusion ("IV") to a topical eye drop. Preclinical testing has demonstrated that the eye drop formulation is both safe to ocular tissues and achieves in excess of target anti-angiogenic concentrations in the tissues of the back of the eye. The topical formulation is designed for enhanced uptake to the back of the eye and decreased potential for side effects. The Company is advancing its clinical wet-AMD program with this topical formulation. In May 2012, the U.S. Food and Drug Administration ("FDA") awarded Fast Track Designation to the Squalamine eye drop program for the potential treatment of wet-AMD.

Squalamine eye drops are designed for self-administration which may provide several potential advantages over the FDA approved current standards of care (Roche/Genetech's Lucentis® and Regeneron's Eylea® Intravitreal Injections).

- Eye drops versus standard of care which is an intravitreal injection directly into the eye every 4-8 weeks on a chronic basis
- Reduction or elimination of intravitreal injections has the potential to provide patients with improved safety by reducing or eliminating side effects associated with the intravitreal injection procedure
- Inhibition of multiple growth factors may achieve superior visual acuity outcomes. Clinical evidence has demonstrated that inhibiting VEGF and PDGF together may provide patients with better visual acuity outcomes than anti-VEGF therapy alone

- Cost advantage of manufacturing a small molecule when compared to large molecule proteins and antibodies

In Phase II clinical trials using the intravenous formulation of Squalamine, stabilization or improvement in visual activity was observed in the vast majority of patients, with both early and advanced lesions responding and few drug-related ocular or systemic effects observed. In a number of patients whose wet-AMD had progressed to an advanced stage, the administration of Squalamine produced beneficial effects and significant improvement in best corrected visual acuity. As opposed to the approved current standard of care therapy, Squalamine does not require direct injection into the eye.

The Company conducted preclinical testing on the novel topical formulation with the following results:

- Ocular Tolerance and Toxicity: In a dose escalation safety study involving daily eye drop treatment in Dutch belted rabbits over a 28 day period, the formulation proved safe, and exhibited no signs of ocular toxicity or changes in intraocular pressure. Importantly, no macroscopic or histopathological changes to the ocular tissues were noted.

- Single Dose Biodistribution study: A single eye drop was administered to the front of the eye in Dutch belted rabbits. At all evaluated timepoints, drug concentrations in the posterior sclera-choroid region behind the retina at the back of the eye exceeded the tissue concentrations of Squalamine that are known to block the choroidal neovascularization process in Wet-AMD.

- Multi Dose Biodistribution Study: Squalamine eye drops were administered once or twice daily in both eyes for up to 14 days in Dutch belted rabbits. The eyes were examined one full dosing interval (12 hours when given twice daily, 24 hours when given once daily) after the last administration of Squalamine eye drops to determine concentrations of Squalamine in the posterior ocular tissues (“Trough” level). At all time points and dosing regimens, Trough Squalamine concentrations exceeded tissue concentrations of Squalamine that are known to block the choroidal neovascularization process in Wet-AMD.

- Long Term Ocular Tolerance and Toxicity: In a 26-week safety and toxicity study in male and female Dutch belted rabbits, Squalamine or placebo eye drops were administered via topical instillation twice a day in both eyes. Ophthalmoscopic examinations were conducted throughout the study period to assess ocular toxicity (irritation, redness, swelling, discharge). Blood and urine samples for clinical pathology evaluations were collected, and blood samples for determination of the plasma concentrations of squalamine eye drops and toxicokinetic evaluations were collected from all animals at designated time points. At study termination, necropsy examinations were performed, and organs and optical tissues were microscopically examined.

No adverse effects of treatment were observed in any of the parameters evaluated including clinical findings, body weights, food consumption, ocular irritation, hematology, coagulation, clinical chemistry, urinalysis and macroscopic pathology examinations. Importantly, ophthalmoscopic examinations indicated no signs of clouding of the lens, no corneal opacities or deposits, and no increase in intraocular pressure. In addition, microscopic histopathology evaluations on ocular tissues were normal. Squalamine also did not build up in plasma over long term administration, indicating reduced potential for systemic side effects.

The Company presented preclinical data at the Association for Research and Vision in Opthalmology conference in May 2012, and at the Macula Society meeting in June 2012.

We commenced a clinical study, Study OHR-002, which began enrolling patients in late 2012. The Study is a randomized, double blind, placebo controlled Phase II study to evaluate the efficacy and safety of Squalamine Eye Drops for the treatment of wet-AMD. It will enroll 120 treatment naïve wet-AMD patients at more than twenty clinical sites in the U.S., who will be treated with Squalamine Eye Drops or placebo eye drops twice daily for a nine month period. The primary and secondary endpoints include visual acuity parameters, need for rescue intravitreal injections, and safety. The protocol includes an interim analysis upon the completion of the treatment period in 50% of the patients (approximately 60). We completed 50% enrollment in the study in July 2013 and therefore anticipate the release of interim results of the OHR-002 study in the second quarter of calendar 2014. Full enrollment is expected to be completed in the first quarter of calendar 2014, with final data on the study available in the fourth quarter of calendar 2014.

We have also commenced two investigator sponsored trials (“IST”) in indications where a molecule that possesses anti-angiogenic properties may provide therapeutic benefit. Study OHR-003 is a monotherapy IST evaluating Squalamine Eye Drops in patients with Proliferative Diabetic Retinopathy, and Study OHR-004 is an IST evaluating Squalamine Eye Drops in patients with Branch and Central Retinal Vein Occlusion. We expect the data from Study OHR-003 and Study OHR-004 to be available in 2014 for presentation by the investigators at an appropriate scientific forum or conference. We also anticipate initiating additional IST’s to further evaluate Squalamine eye drops for ophthalmic indications in the first quarter of calendar 2014.

Additionally, Squalamine has shown promise in the treatment of solid tumors such as ovarian cancer using the intravenous formulation in significantly higher doses than the eye drop formulation. In a Phase IIa study, patients with stage III and IV refractory and resistant ovarian cancer received Squalamine in combination with carboplatin, with approximately two thirds of the patients achieving a complete response, partial response or stable disease. Squalamine has been awarded Orphan Drug Status by the FDA for the treatment of late stage resistant or refractory ovarian cancer. We expect to publish or present the survival data on the completed phase IIa study in the first half of calendar 2014 at a scientific conference or appropriate forum. Because of funding constraints, Ohr is seeking a development partner to further advance development of this indication; however we currently do not have plans to enter into such a transaction and there is no assurance that the Company will complete such a transaction.

OHR/AVR118

OHR/AVR118 is a novel immunomodulator with a singular chemical structure that is terminally sterilized and endotoxin-free. The compound is composed of two small peptides, Peptide A, which is 31 amino acids long, and Peptide B, that is 21 amino acids long. Peptide B is unique in that the dinucleotide, diadenosine, is covalently attached to serine at position 18 through a phosphodiester bond. OHR/AVR118 is stable at room temperature and has a favorable safety profile both in animal toxicity studies and in human clinical trials.

The Company completed a Phase IIa study evaluating OHR/AVR118 in patients with cancer cachexia. In December 2013, the data was presented at the 7th International Cachexia Conference in Kobe, Japan. The data were selected for podium presentation of late breaking clinical trials and were presented by principal investigator Dr. Martin Chasen, Medical Director, Palliative Care, Ottawa Hospital Cancer Centre, Canada.

In this Phase IIa trial with OHR/AVR118, 29 patients with advanced cancer and cachexia were enrolled. 18 patients, three with stage III and 15 with stage IV cancers completed the treatment protocol. This included five patients with pancreatic cancer, five with lung cancer, two with prostate cancer and one each with colon, stomach, esophageal, liver cancers, head and neck cancer and multiple myeloma. While the primary trial end point of weight gain was not met, at the completion of treatment, patients achieved stabilization of body weight, body fat and muscle mass with a significant increase in appetite ($p=<.005$). Additionally, PG-SGA (Patient Generated Subjective Global Assessment) scores ($p=.025$) demonstrated improvement, indicating an enhanced quality of life.

After completing the initial 28 day treatment period, patients had the option to continue receiving study drug if they felt it was in their best interest. 11 of the 18 patients (61%) elected to do so, being treated with the drug for a total of between 42 to 153 days. Sustained body weight stabilization was maintained even on prolonged therapy with the drug in this sub-group of patients. These results were seen despite the fact that during the trial treatment period with OHR/AVR118 seven of the 18 patients were receiving concomitant chemotherapy, and one was receiving concomitant radiotherapy. Chemotherapy and radiation frequently exacerbate the symptoms of cachexia. Overall, the drug appeared well tolerated with minimal side effects.

Ohr also owns various other compounds in earlier stages of development, including the PTP1b inhibitor trodusquemine and related analogs, which it is conducting preclinical research on with an academic laboratory, and will seek to develop further through a strategic partnership, joint venture, or on a sponsored basis.

Competitive Factors

The pharmaceutical industry is characterized by intense competition and confidentiality. We may not be aware of the other biotechnology, pharmaceutical companies or public institutions that are developing pharmaceuticals that compete with our potential products. We also may not be aware of all the other competing products our known competitors are pursuing. In addition, these biotechnology companies and public institutions compete with us in recruiting for research personnel and subjects, which may affect our ability to complete our research studies. Current treatment of cachexia is limited to off-label use of steroid based therapeutics and nutritional supplements but there are various other companies developing investigational drugs in Phase I, II and III trials for the treatment of cachexia. We cannot assure that none of them will get to market before us or that OHR/AVR118 will be a better treatment. Lucentis® (Genentech/Roche) and Eylea® (Regeneron) are currently approved by the FDA and are the market leaders for the treatment of wet-AMD. There is no assurance that we can get FDA approval for Squalamine eye drops for the treatment of wet-AMD, and if we get it, there is no assurance we will be able to displace the market leaders as a treatment in a significant amount of patients. In addition there are various other companies with drugs in Phase I and II trials for the treatment of wet-AMD. We cannot assure that none of them will get to market before us or that Squalamine eye drops will be a better treatment. See "Risk Factors" below.

Wet-AMD Market

Age-related macular degeneration ("AMD") is a medical condition which usually affects older adults and generally results in a loss of vision. AMD occurs in "dry" (non-exudative) and "wet" (exudative) forms. Wet-AMD is the advanced form of macular degeneration that involves the formation of abnormal and leaky blood vessels in the back of the eye behind the retina, through a process known as choroidal neovascularization ("CNV"). The wet form accounts for approximately 15 percent of all AMD cases, yet is responsible for 90 percent of severe vision loss associated with AMD. According to the National Eye Institute (NEI), the prevalence of wet-AMD among adults 40 years or older in the U.S. alone is estimated at 1.75 million people. In addition, more than 200,000 new cases are diagnosed yearly in the U.S.

Competitive Landscape in Wet-AMD

The current FDA approved market leaders for the treatment of wet AMD are VEGF inhibitors, including Lucentis®, Eylea® and (off-label) Avastin®. In 2012, annual revenue (worldwide) was more than $3.5 billion for Lucentis, despite significant cannibalization by the off-label use of Avastin (estimated to be 45-55%). Eylea®, was approved for use in wet-AMD in the U.S. in November 2011 and achieved 2012 revenues in excess of $800 million. Both Lucentis and Eylea are administered via frequent intravitreal injections directly into the eye. Fovista ® a PDGF targeting aptamer being developed by Ophthotech, is currently enrolling three phase three clinical studies to evaluate Fovista in combination with anti-VEGF agents including Lucentis®, Eylea®, and Avastin®. The clinical trials are designed for patients to receive two intravitreal injections per month for a period of 24 months. Other programs currently in Phase II trials include MP0112, a VEGF targeting DARPin molecule being developed by Allergan, iSonep, a sphingosine-1-phosphate targeting agent being developed by LPath inc and Pfizer, x-82, a tyrosine kinase inhibitor being developed by Xcovery Vision, and ALG-1001, an integrin targeting peptide being developed by Allegro Ophthalmics. All of these products in clinical development, with the exception of x-82, use an intravitreal route of administration much like the current standards of care.

Corporate Strategy

The Company is currently actively developing its pipeline products for applications in ophthalmology, oncology, and cancer supportive care. During the 2014 fiscal year, we plan to embark on a strategy to transition Ohr to a core focus of our efforts on ophthalmology indications and to build an ophthalmology focused pipeline. With this strategy, we plan to seek and evaluate acquisition candidates in preclinical and clinical stage development for non invasive delivery to the back of the eye or other innovative ophthalmic products; however we currently do not have plans to enter into such a transaction and there is no assurance that the Company will complete such a transaction.

The Company plans to move forward with the development of our non-ophthalmology assets, notably OHR/AVR118 and Trodusquemine, to potential value creation milestones and then look to license or otherwise monetize those assets through a license agreement, partnership, joint venture, or sale; however we currently do not have plans to enter into such a transaction and there is no assurance that the Company will complete such a transaction.

Risk Factors

You should carefully consider the following factors which may affect future results of operations. If any of the adverse events described below actually occur, our business, financial condition and operating results could be materially adversely affected and you may lose part or all of the value of your investment. If you choose to invest in our securities, you should be able to bear a complete loss of your investment.

We may not be able to raise additional capital on favorable terms, if at all.

We will need additional financing to further our drug development programs as well as future trials. In our capital-raising efforts, we may seek to sell additional equity or debt securities or obtain a bank credit facility. The sale of additional equity or debt securities, if convertible, could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also result in covenants that would restrict our operations. However, we may not be able to raise additional funds on acceptable terms, or at all. If we are unable to secure sufficient capital to fund our research and development activities, we may not be able to continue operations, or we may have to enter into collaboration agreements that could require us to share commercial rights to our products to a greater extent or at earlier stages in the drug development process than is currently intended. These collaborations, if consummated prior to proof-of-efficacy or safety of a given product candidate, could impair our ability to realize value from that product candidate. If our business does not generate the cash needed to finance our ongoing operations, we will likely need to continue to raise additional capital.

The market price and volume of our common stock fluctuate significantly and could result in substantial losses for individual investors.

The stock market from time to time experiences significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These broad market fluctuations may cause the market price and volume of our common stock to decrease. In addition, the market price and volume of our common stock is highly volatile.

Factors that may cause the market price and volume of our common stock to decrease include:

- adverse results or delays in our clinical trials;
- fluctuations in our results of operations, timing and announcements of our bio-technological innovations or new products or those of our competitors;
- developments concerning any strategic alliances or acquisitions we may enter into;
- announcements of FDA non-approval of our drug products, or delays in the FDA or other foreign regulatory review process or actions;
- adverse actions taken by regulatory agencies with respect to our drug products, clinical trials, manufacturing processes or sales and marketing activities;
- any lawsuit involving us or our drug products;
- developments with respect to our patents and proprietary rights;
- announcements of technological innovations or new products by our competitors;
- public concern as to the safety of products developed by us or others;
- regulatory developments in the United States and in foreign countries;
- changes in stock market analyst recommendations regarding our common stock or lack of analyst coverage;
- the pharmaceutical industry conditions generally and general market conditions;
- failure of our results of operations to meet the expectations of stock market analysts and investors;
- sales of our common stock by our executive officers, directors and five percent stockholders or sales of substantial amounts of our common stock.

- changes in accounting principles; and
- loss of any of our key scientific or management personnel.

We face heavy government regulation, and FDA regulatory approval of our products is uncertain.

The research, testing, manufacturing and marketing of drug products such as those that we are developing are subject to extensive regulation by federal, state and local government authorities, including the FDA. To obtain regulatory approval of a product, we must demonstrate to the satisfaction of the applicable regulatory agency that, among other things, the product is safe and effective for its intended use. In addition, we must show that the manufacturing facilities used to produce the products are in compliance with current Good Manufacturing Practices regulations or cGMP.

The process of obtaining FDA and other required regulatory approvals and clearances will require us to expend substantial time and capital. Despite the time and expense expended, regulatory approval is never guaranteed. The number of pre-clinical and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is in development for, and the requirements applicable to that particular drug candidate. The FDA can delay, limit or deny approval of a drug candidate for many reasons, including that:

- a drug candidate may not be shown to be safe or effective;
- the FDA may not approve our manufacturing process;
- the FDA may interpret data from pre-clinical and clinical trials in different ways than we do;
- the FDA may not meet, or may extend, the Prescription Drug User Fee Act date with respect to a particular New Drug Application (“NDA”);

For example, if certain of our methods for analyzing our trial data are not accepted by the FDA, we may fail to obtain regulatory approval for our product candidates.

Moreover, if and when our products do obtain marketing approval, the marketing, distribution and manufacture of such products would remain subject to extensive ongoing regulatory requirements. Failure to comply with applicable regulatory requirements could result in:

- warning letters
- fines
- civil penalties
- injunctions

- recall or seizure of products
- total or partial suspension of production
- refusal of the government to grant future approvals
- withdrawal of approvals
- criminal prosecution

Any delay or failure by us to obtain regulatory approvals for our product candidates could diminish competitive advantages that we may attain and would adversely affect the marketing of our products. We have not received regulatory approval to market any of our product candidates in any jurisdiction.

If we do not raise additional funds, we will not be able to continue operations or complete the necessary clinical trials to complete development of Squalamine and OHR/AVR118 or our other products and will not be able to sell them anywhere.

We will not be able to sell Squalamine and OHR/AVR118 or our other products in the United States unless we submit, and the FDA approves an NDA for each such product. We must conduct clinical trials of each of our products in humans before we submit an NDA. We do not have sufficient capital currently to complete the necessary trials to complete the development of Squalamine and OHR/AVR118 or any of our other therapeutic drug products.

It is possible that the results of clinical trials of Squalamine and OHR/AVR118 or our other products will not prove that they are safe and effective. It is also possible that the FDA will not approve the sale of any of our products in the United States if we submit an NDA for such product. It is not known at this time how later stage clinical trials will be conducted, if at all. Even if the data show that any of our products are safe and effective, obtaining approval of the NDA could take years and require financing of amounts not presently available to us.

Conducting the clinical trials of each of our products will require significant cash expenditures and we do not have the funds necessary to complete all phases of clinical trials for Squalamine and OHR/AVR118 or any other products. Our products may never be approved for commercial distribution by any country. Because our research and development expenses and clinical trial expenses will be charged against earnings for financial reporting purposes, we expect that losses from operations will continue to be incurred for the near future. We currently do not have sufficient funds to complete all phases of clinical trials of any of our products which are required to permit the commercial sale of such products.

If the results of our clinical trials do not support our claims relating to any drug candidate or if serious side effects are identified, the completion of development of such drug candidate may be significantly delayed or we may be forced to abandon development altogether, which will significantly impair our ability to generate product revenues.

The results of our clinical trials with respect to any drug candidate might not support our claims of safety or efficacy, the effects of our drug candidates may not be the desired effects or may include undesirable side effects or the drug candidates may have other unexpected characteristics. Further, success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful, and the results of later clinical trials may not replicate the results of prior clinical trials and preclinical testing. The clinical trial process may fail to demonstrate that our drug candidates are safe for humans and effective for indicated uses. In addition, our clinical trials may involve a specific and small patient population. Because of the small sample size, the results of these early clinical trials may not be indicative of future results. Adverse or inconclusive results may cause us to abandon a drug candidate and may delay development of other drug candidates. Any delay in, or termination of, our clinical trials will delay the filing of our NDAs with the FDA and, ultimately, significantly impair our ability to commercialize our drug candidates and generate product revenues which would have a material adverse effect on our business and results of operations.

If we find it difficult to enroll patients in our clinical trials, it will cause significant delays in the completion of such trials and may cause us to abandon one or more clinical trials.

For the diseases or disorders that our product candidates are intended to treat, we expect only a subset of the patients with these diseases to be eligible for our clinical trials. Given that each of our product candidates is in the early stages of preclinical or clinical development, we may not be able to initiate or continue clinical trials for each or all of our product candidates if we are unable to locate a sufficient number of eligible subjects to participate in the clinical trials required by the FDA and/or other foreign regulatory authorities. The requirements of our clinical testing mandate that a patient cannot be involved in another clinical trial for the same indication. We are aware that our competitors have ongoing clinical trials for products that are competitive with our product candidates and subjects who would otherwise be eligible for our clinical trials may be involved in such testing, rendering them unavailable for testing of our product candidates. Our inability to enroll a sufficient number of patients for any of our current or future clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether, which would have a material adverse effect on our business.

If our contract research organizations do not successfully carry out their duties or if we lose our relationships with contract research organizations, our drug development efforts could be delayed.

We are dependent on contract research organizations, third-party vendors and investigators for pre-clinical testing and clinical trials related to our drug discovery and development efforts and we will likely continue to depend on them to assist in our future discovery and development efforts. These parties are not our employees and we cannot control the amount or timing of resources that they devote to our programs. If they fail to devote sufficient time and resources to our drug development programs or if their performance is substandard, it will delay the development and commercialization of our product candidates. The parties with which we contract for execution of our clinical trials play a significant role in the conduct of the trials and the subsequent collection and analysis of data. Their failure to meet their obligations could adversely affect clinical development of our product candidates.

If we lose our relationship with any one or more of these parties, we could experience a significant delay in both identifying another comparable provider and then contracting for its services. We may be unable to retain an alternative provider on reasonable terms, if at all. Even if we locate an alternative provider, it is likely that this provider may need additional time to respond to our needs and may not provide the same type or level of service as the original provider. In addition, any provider that we retain will be subject to current Good Laboratory Practices, and similar foreign standards, and we do not have control over compliance with these regulations by these providers. Consequently, if these practices and standards are not adhered to by these providers, the development and commercialization of our product candidates could be delayed.

If we are ever in a position to commercialize our product candidates, of which there can be no assurance, we have no experience selling, marketing or distributing products and no internal capability to do so.

We currently have no sales, marketing or distribution capabilities and no experience in building a sales force and distribution capabilities. If we are ever in a position to commercialize our product candidates, of which there can be no assurance, we must either develop internal sales, marketing and distribution capabilities, which will be expensive and time consuming, or make arrangements with third parties to perform these services. If we decide to market any of our products directly, we must commit significant financial and managerial resources to develop a marketing and sales force with technical expertise and with supporting distribution capabilities. Building an in-house marketing and sales force with technical expertise and distribution capabilities will require significant expenditures, management resources and time. Factors that may inhibit our efforts to commercialize our products directly and without strategic partners include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe our products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating and sustaining an independent sales and marketing organization.

We may not be successful in recruiting the sales and marketing personnel necessary to sell our products and even if we do build a sales force, they may not be successful in marketing our products, which would have a material adverse effect on our business and results of operations.

Developments by competitors may render our products or technologies obsolete or non-competitive which would have a material adverse effect on our business and results of operations.

We compete against fully integrated pharmaceutical companies and smaller companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Our drug candidates will have to compete with existing therapies and therapies under development by our competitors. In addition, our commercial opportunities may be reduced or eliminated if our competitors develop and market products that are less expensive, more effective or safer than our drug products. Other companies have drug candidates in various stages of preclinical or clinical development to treat diseases for which we are also seeking to develop drug products. Some of these potential competing drugs are further advanced in development than our drug candidates and may be commercialized earlier. Even if we are successful in developing effective drugs, our products may not compete successfully with products produced by our competitors.

Most of our competitors, either alone or together with their collaborative partners, operate larger research and development programs, staff and facilities and have substantially greater financial resources than we do, as well as significantly greater experience in:

- developing drugs;
- undertaking preclinical testing and human clinical trials;
- obtaining FDA and other regulatory approvals of drugs;
- formulating and manufacturing drugs; and
- launching, marketing and selling drugs.

These organizations also compete with us to attract qualified personnel, acquisitions and joint ventures candidates and for other collaborations. Activities of our competitors may impose unanticipated costs on our business which would have a material adverse effect on our business and results of operations.

We rely on confidentiality agreements that could be breached and may be difficult to enforce which could have a material adverse effect on our business and competitive position.

Our policy is to enter agreements relating to the non-disclosure of confidential information with third parties, including our contractors, consultants, advisors and research collaborators, as well as agreements that purport to require the disclosure and assignment to us of the rights to the ideas, developments, discoveries and inventions of our employees and consultants while we employ them. However, these agreements can be difficult and costly to enforce. Moreover, to the extent that our contractors, consultants, advisors and research collaborators apply or independently develop intellectual property in connection with any of our projects, disputes may arise as to the proprietary rights to this type of information. If a dispute arises, a court may determine that the right belongs to a third party, and enforcement of our rights can be costly and unpredictable. In addition, we rely on trade secrets and proprietary know-how that we will seek to protect in part by confidentiality agreements with our employees, contractors, consultants, advisors or others. Despite the protective measures we employ, we still face the risk that:

- these agreements may be breached;
- these agreements may not provide adequate remedies for the applicable type of breach; or
- our trade secrets or proprietary know-how will otherwise become known.

Any breach of our confidentiality agreements or our failure to effectively enforce such agreements would have a material adverse effect on our business and competitive position.

If we infringe the rights of third parties we could be prevented from selling products, forced to pay damages and required to defend against litigation which could result in substantial costs and may have a material adverse effect on our business and results of operations.

We have not received to date any claims of infringement by any third parties. However, as our product candidates progress into clinical trials and commercialization, if at all, our public profile and that of our product candidates may be raised and generate such claims. Defending against such claims, and occurrence of a judgment adverse to us, could result in unanticipated costs and may have a material adverse effect on our business and competitive position. If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and we may have to:

- obtain licenses, which may not be available on commercially reasonable terms, if at all;
- redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in the patents held by others, which could cause us to lose the use of one or more of our drug candidates;
- defend litigation or administrative proceedings that may be costly whether we win or lose, and which could result in a substantial diversion of management resources; or
- pay damages.

Any costs incurred in connection with such events or the inability to sell our products may have a material adverse effect on our business and results of operations.

We depend upon key officers and consultants in a competitive market for skilled personnel. If we are unable to attract and retain key personnel, it could adversely affect our ability to develop and market our products.

We are highly dependent upon the principal members of our management team, especially our Chief Executive Officer, Dr. Irach Taraporewala and our Vice President of Business Development and CFO, Sam Backenroth, as well as our directors, including Ira Greenstein, the Chairman of our Board of Directors. A loss of any of these personnel may have a material adverse effect on aspects of our business and clinical development and regulatory programs. We have employment agreements with Dr. Taraporewala and Mr. Backenroth. Although these agreements include a non-competition covenant, the applicable noncompetition provisions can be difficult and costly to monitor and enforce. The loss of any of these persons' services would adversely affect our ability to develop and market our products and obtain necessary regulatory approvals.

We also depend in part on obtaining the service of scientific personnel and our ability to identify, hire and retain additional personnel. We experience intense competition for qualified personnel, and the existence of non-competition agreements between prospective employees and their former employers may prevent us from hiring those individuals or subject us to suit from their former employers. While we attempt to provide competitive compensation packages to attract and retain key personnel, many of our competitors are likely to have greater resources and more experience than we have, making it difficult for us to compete successfully for key personnel.

Intellectual property litigation is increasingly common and increasingly expensive and may result in restrictions on our business and substantial costs, even if we prevail.

Patent and other intellectual property litigation is becoming more common in the pharmaceutical industry. Litigation is sometimes necessary to defend against or assert claims of infringement, to enforce our patent rights, including those we have licensed from others, to protect trade secrets or to determine the scope and validity of proprietary rights of third parties. Currently, no third party is asserting that we are infringing upon their patent rights or other intellectual property, nor are we aware or believe that we are infringing upon any third party's patent rights or other intellectual property. We may, however, be infringing upon a third party's patent rights or other intellectual property, and litigation asserting such claims might be initiated in which we would not prevail, or we would not be able to obtain the necessary licenses on reasonable terms, if at all. All such litigation, whether meritorious or not, as well as litigation initiated by us against third parties, is time-consuming and very expensive to defend or prosecute and to resolve. In addition, if we infringe the intellectual property rights of others, we could lose our right to develop, manufacture or sell our products or could be required to pay monetary damages or royalties to license proprietary rights from third parties. An adverse determination in a judicial or administrative proceeding or a failure to obtain necessary licenses could prevent us from manufacturing or selling our products, which could harm our business, financial condition and prospects.

If our competitors prepare and file patent applications in the United States that claim technology we also claim, we may have to participate in interference proceedings required by the US Patent and Trademark Office to determine priority of invention, which could result in substantial costs, even if we ultimately prevail. Results of interference proceedings are highly unpredictable and may result in us having to try to obtain licenses in order to continue to develop or market certain of our drug products.

Any future acquisitions we make of companies or technologies may result in disruption to our business or distraction of our management, due to difficulties in assimilating acquired personnel and operations.

We may acquire or make investments in complementary businesses, technologies, services or products which complement our biotech operations if appropriate opportunities arise. From time to time we engage in discussions and negotiations with companies regarding our acquiring or investing in such companies' businesses, products, services or technologies, in the ordinary course of our business. We cannot be assured that we will be able to identify future suitable acquisition or investment candidates, or if we do identify suitable candidates, that we will be able to make such acquisitions or investments on commercially acceptable terms or at all. If we acquire or invest in another company, we could have difficulty in assimilating that company's personnel, operations, technology and software. In addition, the key personnel of the acquired company may decide not to work for us. If we make other types of acquisitions, we could have difficulty in integrating the acquired products, services or technologies into our operations. These difficulties could disrupt our ongoing business, distract our management and employees, increase our expenses and adversely affect our results of operations. Furthermore, we may incur indebtedness or issue equity securities to pay for any future acquisitions. The issuance of equity securities would be dilutive to our existing stockholders. As of January 17, 2014, we had no agreement to enter into any material investment or acquisition transaction.

The market for our common stock is highly illiquid. Our stockholders may not be able to resell their shares at or above the purchase price paid by such stockholders, or at all.

Our common stock is quoted on the NASDAQ Capital Market. The market for our securities is illiquid. This illiquidity may be caused by a variety of factors including:

- lower trading volume; and
- market conditions.

There is limited trading in our common stock and our security holders may experience wide fluctuations in the market price of our securities. Such price and volume fluctuations have particularly affected the trading prices of equity securities of many biotechnology companies. These price and volume fluctuations often have been unrelated to the operating performance of the affected companies. These fluctuations may have an extremely negative effect on the market price of our securities and may prevent a stockholder from obtaining a market price equal to the purchase price such stockholder paid when the stockholder attempts to sell our securities in the open market. In these situations, the stockholder may be required either to sell our securities at a market price which is lower than the purchase price the stockholder paid, or to hold our securities for a longer period of time than planned. An inactive market may also impair our ability to raise capital by selling shares of capital stock or to recruit and retain managers with equity-based incentive plans.

We will not pay cash dividends and investors may have to sell their shares in order to realize their investment.

We have not paid any cash dividends on our common stock and do not intend to pay cash dividends in the foreseeable future. We intend to use our cash for reinvestment in the development and marketing of our products and services. As a result, investors may have to sell their shares of common stock to realize their investment.

Failure to maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and operating results. In addition, current and potential shareholders could lose confidence in our financial reporting, which could have a material adverse effect on the price of our common stock.

Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. If we cannot provide reliable financial reports or prevent fraud, our results of operation could be harmed.

Section 404 of the Sarbanes-Oxley Act of 2002 requires annual management assessments of the effectiveness of our internal controls over financial reporting. We continuously monitor our existing internal controls over financial reporting systems to confirm that they are compliant with Section 404, and we may identify deficiencies that we may not be able to remediate in time to meet the deadlines imposed by the Sarbanes-Oxley Act. This process may divert internal resources and will take a significant amount of time and effort to complete.

If, at any time, it is determined that we are not in compliance with Section 404, we may be required to implement new internal control procedures and reevaluate our financial reporting. We may experience higher than anticipated operating expenses as well as increased independent auditor fees during the implementation of these changes and thereafter. Further, we may need to hire additional qualified personnel. If we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act. Failure to maintain an effective internal control environment could also cause investors to lose confidence in our reported financial information, which could have a material adverse effect on the price of our common stock.

Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses, divert management's attention from operating our business which could have a material adverse effect on our business.

There have been other changing laws, regulations and standards relating to corporate governance and public disclosure in addition to the Sarbanes-Oxley Act, as well as new regulations promulgated by the Commission and rules promulgated by the national securities exchanges. These new or changed laws, regulations and standards are subject to varying interpretations in many cases due to their lack of specificity, and as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. As a result, our efforts to comply with evolving laws, regulations and standards are likely to continue to result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. Our board members, Chief Executive Officer, and Chief Financial Officer could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified board members and executive officers, which could have a material adverse effect on our business. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, we may incur additional expenses to comply with standards set by regulatory authorities or governing bodies which would have a material adverse effect on our business and results of operations.

Issuance of Serial Preferred Stock.

The Board of Directors has the authority to issue up to 9,000,000 shares of Serial Preferred Stock, $.0001 par value per share (the "Serial Preferred Stock") (after giving effect to the conversion and cancellation of a previous issue of 6,000,000 shares of Series B Preferred), in one or more series and to fix the number of shares constituting any such series, the voting powers, designation, preferences and relative participation, optional or other special rights and qualifications, limitations or restrictions thereof, including the dividend rights and dividend rate, terms of redemption (including sinking fund provisions), redemption price or prices, conversion rights and liquidation preferences of the shares constituting any series, without any further vote or action by the stockholders. 6,000,000 shares of the Serial Preferred Stock, designated the Series B Preferred, have been authorized and, as of the date of this filing, all such shares have been converted and no Series B Preferred shares remain issued and outstanding. The issuance of additional Serial Preferred Stock could affect the rights of the holders of common stock. For example, such issuance could result in a class of securities outstanding that would have preferential voting, dividend, and liquidation rights over the common stock, and could (upon conversion or otherwise) enjoy all of the rights appurtenant to the shares of common stock. The authority possessed by the Board of Directors to issue Serial Preferred Stock could potentially be used to discourage attempts by others to obtain control of the Company through merger, tender offer, proxy contest or otherwise by making such attempts more difficult or costly to achieve. The Board of Directors may issue the Serial Preferred Stock without stockholder approval and with voting and conversion rights which could adversely affect the voting power of holders of common stock. There are no agreements or understandings for the issuance of Serial Preferred Stock and the Board of Directors has no present intention to issue any Serial Preferred Stock.

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities which may be offered pursuant to this prospectus. Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of securities under this prospectus for general corporate purposes, including, but not limited to, repayment of existing indebtedness, working capital, intellectual property protection and enforcement, capital expenditures, investments and acquisitions, including acquisitions of patent portfolios. We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds, if any, we receive in connection with securities offered pursuant to this prospectus for any purpose. Pending application of the net proceeds as described above, we may initially invest the net proceeds in short-term, investment-grade, interest-bearing securities or apply them to the reduction of short-term indebtedness.

PLAN OF DISTRIBUTION

General Plan of Distribution

We may offer securities under this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities (1) through underwriters or dealers, (2)through agents or (3) directly to one or more purchasers, or through a combination of such methods. We may distribute the securities from time to time in one or more transactions at:

- a fixed price or prices, which may be changed from time to time;
- market prices prevailing at the time of sale;
- prices related to the prevailing market prices; or
- negotiated prices.

We may directly solicit offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time. We will name in a prospectus supplement any underwriter or agent involved in the offer or sale of the securities.

If we utilize a dealer in the sale of the securities being offered by this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If we utilize an underwriter in the sale of the securities being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale, and we will provide the name of any underwriter in the prospectus supplement which the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we, or the purchasers of the securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions.

With respect to underwritten public offerings, negotiated transactions and block trades, we will provide in the applicable prospectus supplement information regarding any compensation we pay to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended, or the Securities Act, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and

- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Shares of our common stock sold pursuant to the registration statement of which this prospectus is a part will be authorized for quotation and trading on the NASDAQ Capital Market. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Capital Market or any securities market or other securities exchange of the securities covered by the prospectus supplement. We can make no assurance as to the liquidity of or the existence of trading markets for any of the securities.

In order to facilitate the offering of the securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing the applicable security in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if the securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

In compliance with the guidelines of the Financial Industry Regulatory Authority, Inc., or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business.

DESCRIPTION OF CAPITAL STOCK

The following is a summary of our capital stock and provisions of our certificate of incorporation and by-laws, as they are in effect as of the date of this prospectus. For more detailed information, please see our certificate of incorporation and bylaws, which are filed with the Securities and Exchange Commission as exhibits to the registration statement of which this prospectus forms a part.

We are authorized to issue 180,000,000 shares of common stock, par value $0.0001 per share, of which, on January 17, 2014, 19,970,046 shares of common stock were outstanding held of record by 237 stockholders; and 15,000,000 shares of preferred stock, par value $0.0001 per share, of which 6,000,000 shares were issued, subsequently converted, and are no longer available to issue.

Common Stock

Holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by our board of directors out of funds legally available for dividend payments. All shares of common stock outstanding as of the date of this prospectus are fully paid and nonassessable. The holders of common stock have no preferences or rights of conversion, exchange, pre-emption or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. In the event of any liquidation, dissolution or winding-up of our affairs, holders of common stock will be entitled to share ratably in our assets that are remaining after payment or provision for payment of all of our debts and obligations and after liquidation payments to holders of outstanding shares of preferred stock, if any.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Standard Registrar & Transfer Company, Inc.

Preferred Stock

Our board of directors has the authority, without action by our stockholders, to designate and issue up to 9,000,000 shares of preferred stock (after giving effect to the conversion and cancellation of a previous issue of 6,000,000 shares of Series B Preferred) in one or more series and to designate the rights, preferences, and limitations of all such series, any or all of which may be superior to the rights of our common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of the holders of common stock until our board of directors determines the specific rights of the holders of preferred stock. However, effects of the issuance of preferred stock include restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, and making it more difficult for a third party to acquire us, which could have the effect of discouraging a third party from acquiring, or deterring a third party from paying a premium to acquire, a majority of our outstanding voting stock. We have no present plans to issue any shares of our preferred stock.

You should refer to our certificate of incorporation, as amended, which was filed with the Securities and Exchange Commission as an exhibit to our Reports on Form 8-K, dated August 11, 2009 and January 16, 2013, and which is incorporated by reference into the registration statement of which this prospectus forms a part.

General

Our board of directors may, without further action by our stockholders, from time to time, direct the issuance of shares of preferred stock in series and may, at the time of issuance, determine the rights, preferences and limitations of each series, including voting rights, dividend rights and redemption and liquidation preferences. Satisfaction of any dividend preferences of outstanding shares of preferred stock would reduce the amount of funds available for the payment of dividends on shares of our common stock. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of any liquidation, dissolution or winding-up of our company before any payment is made to the holders of shares of our common stock. In some circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. Upon the affirmative vote of our board of directors, without stockholder approval, we may issue shares of preferred stock with voting and conversion rights which could adversely affect the holders of shares of our common stock.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference, if any, per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of the Company; and
- any material limitations on issuance of any class or series of preferred stock ranking pari passu with or senior to the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the Company.

Transfer Agent and Registrar

The transfer agent and registrar for any preferred stock we offer will be set forth in the applicable prospectus supplement.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we may offer pursuant to this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any debt securities offered under such prospectus supplement may differ from the terms we describe below, and to the extent the terms set forth in a prospectus supplement differ from the terms described below, the terms set forth in the prospectus supplement shall control.

We may sell from time to time, in one or more offerings under this prospectus, debt securities, which may be senior or subordinated. We will issue any such senior debt securities under a senior indenture that we will enter into with a trustee to be named in the senior indenture. We will issue any such subordinated debt securities under a subordinated indenture, which we will enter into with a trustee to be named in the subordinated indenture. We use the term "indentures" to refer to either the senior indenture or the subordinated indenture, as applicable. The indentures will be qualified under the Trust Indenture Act of 1939, as in effect on the date of the indenture. We use the term "debenture trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities.

General

Each indenture provides that debt securities may be issued from time to time in one or more series and may be denominated and payable in foreign currencies or units based on or relating to foreign currencies. Neither indenture limits the amount of debt securities that may be issued thereunder, and each indenture provides that the specific terms of any series of debt securities shall be set forth in, or determined pursuant to, an authorizing resolution and/or a supplemental indenture, if any, relating to such series.

We will describe in each prospectus supplement the following terms relating to a series of debt securities:

- the title or designation;

- the aggregate principal amount and any limit on the amount that may be issued;
- the currency or units based on or relating to currencies in which debt securities of such series are denominated and the currency or units in which principal or interest or both will or may be payable;
- whether we will issue the series of debt securities in global form, the terms of any global securities and who the depositary will be;
- the maturity date and the date or dates on which principal will be payable;
- the interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the date or dates interest will be payable and the record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place or places where payments will be payable;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;
- whether we will be restricted from incurring any additional indebtedness;
- a discussion on any material or special U.S. federal income tax considerations applicable to a series of debt securities;
- the denominations in which we will issue the series of debt securities, if other than denominations of $1,000 and any integral multiple thereof; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities.

We may issue debt securities that provide for an amount less than their stated principal amount to be due and payable upon declaration of acceleration of their maturity pursuant to the terms of the indenture. We will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms, if any, on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale; No Protection in Event of a Change of Control or Highly Leveraged Transaction

The indentures do not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate.

Unless we state otherwise in the applicable prospectus supplement, the debt securities will not contain any provisions that may afford holders of the debt securities protection in the event we have a change of control or in the event of a highly leveraged transaction (whether or not such transaction results in a change of control), which could adversely affect holders of debt securities.

Events of Default Under the Indenture

The following are events of default under the indentures with respect to any series of debt securities that we may issue:

- if we fail to pay interest when due and our failure continues for 90 days and the time for payment has not been extended or deferred;
- if we fail to pay the principal, or premium, if any, when due and the time for payment has not been extended or delayed;
- if we fail to observe or perform any other covenant set forth in the debt securities of such series or the applicable indentures, other than a covenant specifically relating to and for the benefit of holders of another series of debt securities, and our failure continues for 90 days after we receive written notice from the debenture trustee or holders of not less than a majority in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur as to us.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of an event of default may constitute an event of default under any bank credit agreements we may have in existence from time to time. In addition, the occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

If an event of default with respect to debt securities of any series at the time outstanding occurs and is continuing, then the trustee or the holders of not less than a majority in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the debenture trustee if given by the holders), declare to be due and payable immediately the principal (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) of and premium and accrued and unpaid interest, if any, on all debt securities of that series. Before a judgment or decree for payment of the money due has been obtained with respect to debt securities of any series, the holders of a majority in principal amount of the outstanding debt securities of that series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may rescind and annul the acceleration if all events of default, other than the non-payment of accelerated principal, premium, if any, and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the applicable indenture (including payments or deposits in respect of principal, premium or interest that had become due other than as a result of such acceleration). We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of such discount securities upon the occurrence of an event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will only have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

- the holder previously has given written notice to the debenture trustee of a continuing event of default with respect to that series;
- the holders of at least a majority in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and
- the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series (or at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) other conflicting directions within 60 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the applicable debenture trustee regarding our compliance with specified covenants in the applicable indenture.

Modification of Indenture; Waiver

The debenture trustee and we may change the applicable indenture without the consent of any holders with respect to specific matters, including:

- to fix any ambiguity, defect or inconsistency in the indenture; and
- to change anything that does not materially adversely affect the interests of any holder of debt securities of any series issued pursuant to such indenture.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) that is affected. However, the debenture trustee and we may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of the series of debt securities;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or any premium payable upon the redemption of any debt securities;

- reducing the principal amount of discount securities payable upon acceleration of maturity;
- making the principal of or premium or interest on any debt security payable in currency other than that stated in the debt security; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment or waiver.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series (or, at a meeting of holders of such series at which a quorum is present, the holders of a majority in principal amount of the debt securities of such series represented at such meeting) may on behalf of the holders of all debt securities of that series waive our compliance with provisions of the indenture. The holders of a majority in principal amount of the outstanding debt securities of any series may on behalf of the holders of all the debt securities of such series waive any past default under the indenture with respect to that series and its consequences, except a default in the payment of the principal of, premium or any interest on any debt security of that series or in respect of a covenant or provision, which cannot be modified or amended without the consent of the holder of each outstanding debt security of the series affected; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for obligations to:

- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged with respect to a series, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, the premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange, and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement, in denominations of $1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company or another depositary named by us and identified in a prospectus supplement with respect to that series.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange or in the applicable indenture, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debenture Trustee

The debenture trustee, other than during the occurrence and continuance of an event of default under the applicable indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee under such indenture must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, will we make interest payments by check which we will mail to the holder. Unless we otherwise indicate in a prospectus supplement, we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of or any premium or interest on any debt securities which remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Subordination of Subordinated Debt Securities

Our obligations pursuant to any subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of senior indebtedness we may incur. It also does not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF WARRANTS

As of January 16, 2014, there were warrants and options to purchase an aggregate of 7,241,486 shares of Ohr Pharmaceutical common stock outstanding with an exercise price ranging from $1.50 to $7.96 per share.

General

We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement relating to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;

- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants may be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants we offer will be set forth in the applicable prospectus supplement.

DESCRIPTION OF RIGHTS

General

We may issue rights to our stockholders to purchase shares of our common stock, preferred stock or the other securities described in this prospectus. We may offer rights separately or together with one or more additional rights, debt securities, preferred stock, common stock, warrants or purchase contracts, or any combination of those securities in the form of units, as described in the applicable prospectus supplement. Each series of rights will be issued under a separate rights agreement to be entered into between us and a bank or trust company, as rights agent. The rights agent will act solely as our agent in connection with the certificates relating to the rights of the series of certificates and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights. The following description sets forth certain general terms and provisions of the rights to which any prospectus supplement may relate. The particular terms of the rights to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the rights so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the rights, rights agreement or rights certificates described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable rights agreement and rights certificate for additional information before you decide whether to purchase any of our rights.

We will provide in a prospectus supplement the following terms of the rights being issued:

- the date of determining the stockholders entitled to the rights distribution;
- the aggregate number of shares of common stock, preferred stock or other securities purchasable upon exercise of the rights;
- the exercise price;
- the aggregate number of rights issued;
- whether the rights are transferrable and the date, if any, on and after which the rights may be separately transferred;
- the date on which the right to exercise the rights will commence, and the date on which the right to exercise the rights will expire;
- the method by which holders of rights will be entitled to exercise;
- the conditions to the completion of the offering, if any;
- the withdrawal, termination and cancellation rights, if any;
- whether there are any backstop or standby purchaser or purchasers and the terms of their commitment, if any;
- whether stockholders are entitled to oversubscription rights, if any;
- any applicable U.S. federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the distribution, exchange and exercise of the rights, as applicable.

Each right will entitle the holder of rights to purchase for cash the principal amount of shares of common stock, preferred stock or other securities at the exercise price provided in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement.

Holders may exercise rights as described in the applicable prospectus supplement. Upon receipt of payment and the rights certificate properly completed and duly executed at the corporate trust office of the rights agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the shares of common stock, preferred stock or other securities, as applicable, purchasable upon exercise of the rights. If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements, as described in the applicable prospectus supplement.

Rights Agent

The rights agent for any rights we offer will be set forth in the applicable prospectus supplement.

DESCRIPTION OF PURCHASE CONTRACTS

We may issue purchase contracts, including contracts obligating holders to purchase from us, and for us to sell to holders, a specific or variable number of our debt securities, shares of common stock, preferred stock, warrants or rights, or securities of an entity unaffiliated with us, or any combination of the above, at a future date or dates. Alternatively, the purchase contracts may obligate us to purchase from holders, and obligate holders to sell to us, a specific or variable number of our debt securities, shares of common stock, preferred stock, warrants, rights or other property, or any combination of the above. The price of the securities or other property subject to the purchase contracts may be fixed at the time the purchase contracts are issued or may be determined by reference to a specific formula described in the purchase contracts. We may issue purchase contracts separately or as a part of units each consisting of a purchase contract and one or more of our other securities described in this prospectus or securities of third parties, including U.S. Treasury securities, securing the holder's obligations under the purchase contract. The purchase contracts may require us to make periodic payments to holders or vice versa and the payments may be unsecured or pre-funded on some basis. The purchase contracts may require holders to secure the holder's obligations in a manner specified in the applicable prospectus supplement.

The applicable prospectus supplement will describe the terms of any purchase contracts in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- whether the purchase contracts obligate the holder or us to purchase or sell, or both purchase and sell, the securities subject to purchase under the purchase contract, and the nature and amount of each of those securities, or the method of determining those amounts;
- whether the purchase contracts are to be prepaid;
- whether the purchase contracts are to be settled by delivery, or by reference or linkage to the value, performance or level of the securities subject to purchase under the purchase contract;

- any acceleration, cancellation, termination or other provisions relating to the settlement of the purchase contracts;
- any applicable U.S. federal income tax considerations; and
- whether the purchase contracts will be issued in fully registered or global form.

The preceding description sets forth certain general terms and provisions of the purchase contracts to which any prospectus supplement may relate. The particular terms of the purchase contracts to which any prospectus supplement may relate and the extent, if any, to which the general provisions may apply to the purchase contracts so offered will be described in the applicable prospectus supplement. To the extent that any particular terms of the purchase contracts described in a prospectus supplement differ from any of the terms described above, then the terms described above will be deemed to have been superseded by that prospectus supplement. We encourage you to read the applicable purchase contract for additional information before you decide whether to purchase any of our purchase contracts.

DESCRIPTION OF UNITS

The following description, together with the additional information that we include in any applicable prospectus supplements summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, as well as any related free writing prospectuses and the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units consisting of common stock, preferred stock, one or more debt securities, warrants, rights or purchase contacts for the purchase of common stock, preferred stock and/or debt securities in one or more series, in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each security included in the unit. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those set forth in any prospectus supplement or as described under "Description of Common Stock," "Description of Preferred Stock," "Description of Debt Securities," "Description of Warrants," "Description of Rights" and "Description of Purchase Contracts" will apply to each unit, as applicable, and to any common stock, preferred stock, debt security, warrant, right or purchase contract included in each unit, as applicable.

Unit Agent

The name and address of the unit agent for any units we offer will be set forth in the applicable prospectus supplement.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

Provisions of Delaware Law Governing Business Combinations

We are subject to the "business combination" provisions of Section 203 of the Delaware General Corporation Law. In general, such provisions prohibit a publicly held Delaware corporation from engaging in any "business combination" transactions with any "interested stockholder" for a period of three years after the date on which the person became an "interested stockholder," unless:

- prior to such date, the board of directors approved either the "business combination" or the transaction which resulted in the "interested stockholder" obtaining such status; or

- upon consummation of the transaction which resulted in the stockholder becoming an "interested stockholder," the "interested stockholder" owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the "interested stockholder") those shares owned by (a) persons who are directors and also officers and (b) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- at or subsequent to such time the "business combination" is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the "interested stockholder."

A "business combination" is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an "interested stockholder" is a person who, together with affiliates and associates, owns 15% or more of a corporation's voting stock or within three years did own 15% or more of a corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts with respect to us and, accordingly, may discourage attempts to acquire us.

Limitations on Liability and Indemnification of Officers and Directors

Our certificate of incorporation limits the liability of our officers and directors to the fullest extent permitted by the Delaware General Corporation Law, and our certificate of incorporation and bylaws provide that we will indemnify our officers and directors to the fullest extent permitted by such law.

LEGAL MATTERS

Hahn & Hessen LLP, New York, New York, will pass upon the validity of the issuance of the securities offered by this prospectus.

EXPERTS

The consolidated financial statements of Ohr Pharmaceutical, Inc. (a development stage company) as of September 30, 2013 and 2012 and for each of the years in the two-year period ended September 30, 2012 and for the cumulative period from October 1, 2007 (inception of the development stage) through September 30, 2013 have been incorporated by reference herein in reliance upon the reports of MaloneBailey, LLP, an independent registered public accounting firm, and Child Van Wagoner & Bradshaw, PLLC, an independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's web site at http://www.sec.gov.

This prospectus is only part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act and therefore omits certain information contained in the registration statement. We have also filed exhibits and schedules with the registration statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the public reference room or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

We also maintain a website at www.ohrpharmaceutical.com, through which you can access our SEC filings. The information set forth on, or accessible from, our website is not part of this prospectus.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act of 1933, as amended, with the SEC with respect to the securities we may offer pursuant to this prospectus. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities we may offer pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in "Where You Can Find More Information." The documents we are incorporating by reference are:

- our Annual Report on Form 10-K for the fiscal year ended September 30, 2013 filed on December 27, 2013;
- our Current Report on Form 8-K filed on January 10, 2014; and
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination or completion of the offering of securities under this prospectus shall be deemed to be incorporated by reference in this prospectus and to be a part hereof from the date of filing such reports and other documents.

Unless otherwise noted, the SEC file number for each of the documents listed above is 333-88480.

In addition, all reports and other documents filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement shall be deemed to be incorporated by reference into this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request, orally or in writing, a copy of any or all of the documents incorporated herein by reference. These documents will be provided to you at no cost, by contacting: Investor Relations, Ohr Pharmaceutical, Inc., 800 Third Avenue, 11th Floor, New York, New York 10022, or call (212) 682-8452.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an itemization of the various expenses, all of which we will pay, in connection with the issuance and distribution of the securities being registered. All of the amounts shown are estimated except the SEC Registration Fee.

SEC Registration Fee	1,932
Legal Fees and Expenses	10,000
Accounting Fees and Expenses	5,000
Miscellaneous	1,000
Total	$ 17,932

Item 15. Indemnification of Directors and Officers

The certificate of incorporation of the Company provides that all directors, officers, employees and agents of the registrant shall be entitled to be indemnified by the Company to the fullest extent permitted by Section 145 of the Delaware General Corporation Law ("DGCL").

Article ELEVENTH of the Company's certificate of incorporation provides:

"The Corporation shall, to the fullest extent permitted by the provisions of §145 of the General Corporation Law of the State of Delaware, as the same may be amended and supplemented, indemnify, and upon request advance expenses to, any and all persons who is or was a party or is threatened to be made a party to any threatened, pending or completed action, suit, proceeding or claim, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was or has agreed to be a director or officer of this Corporation or while a director or officer is or was serving at the request of this Corporation as a director, officer, partner, trustee, employee or agent of any corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, from and against any and all of the expenses, liabilities, or other matters referred to in or covered by said section (including without limitation attorneys' fees and expenses); provided, however, that the foregoing shall not require this Corporation to indemnify or advance expenses to any person in connection with any action, suit, proceeding, claim or counterclaim initiated by or on behalf of such person other than solely to enforce rights under this ARTICLE ELEVENTH. The indemnification provided for herein shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any Bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee, or agent and shall inure to the benefit of the heirs, executors, and administrators of such a person. Any person seeking indemnification under this Article ELEVENTH shall be deemed to have met the standard of conduct required for such indemnification unless the contrary shall be proven in a court of competent jurisdiction. Any repeal or modification of the foregoing provisions of this Article ELEVENTH shall not adversely affect any right or protection of a director or officer of the Corporation with respect to any acts or omissions of such director or officer occurring prior to such repeal or modification."

Pursuant to indemnification agreement with the Company, the directors and officers of the Company shall, to the fullest extent permitted by the DGCL, also have the right to receive from the Company an advancement of expenses incurred in defending any proceeding in advance of its final disposition. To the extent required under the DGCL, an advancement of expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such individual, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the Company of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified for such expenses. The Company is not required to provide indemnification or advance expenses in connection with (i) any proceeding initiated by a director or officer of the Company unless such proceeding was authorized by the Board of Directors or otherwise required by law; (ii) any proceeding providing for disgorgement of profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended; (iii) and for amounts for which payment is actually made to or on behalf of such person under any statute, insurance policy or indemnity provisions or law; or (iv) any prohibition by applicable law.

Pursuant to the Company's certificate of incorporation, the Company may also maintain a directors' and officers' insurance policy which insures the Company and any of its directors, officers, employees, agents or other entities, against expense, liability or loss asserted against such persons in such capacity whether or not the Company would have the power to indemnify such person under the DGCL.

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

At present, there is no pending litigation or proceeding involving any of our directors or executive officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

We have an insurance policy covering our officers and directors with respect to certain liabilities, including liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, or otherwise.

We carry insurance policies insuring our directors and officers against certain liabilities that they may incur in their capacity as directors and officers. In addition, we have entered into indemnification agreements with our directors and officers.

Any underwriting agreements that we may enter into will likely provide for the indemnification of us, our controlling persons, our directors and certain of our officers by the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended.

The foregoing discussion of our certificate of incorporation, bylaws, indemnification agreements, and Delaware law is not intended to be exhaustive and is qualified in its entirety by such certificate of incorporation, bylaws, indemnification agreements, or law.

Item 16. Exhibits

The exhibits to this registration statement are listed in the Exhibit Index to this registration statement, which Exhibit Index is hereby incorporated by reference.

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

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

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

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

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

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

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

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

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

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

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a) (1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

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

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

(d) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act ("Act") in accordance with the rules and regulations prescribed by the Commission under section 305(b)(2) of the Act.