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

FORM S-1

REGISTRATION STATEMENT **UNDER** THE SECURITIES ACT OF 1933

EyeGate Pharmaceuticals, Inc. (Exact name of registrant as specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization)

2834 (Primary Standard Industrial Classification Code Number)

98-0443284 (I.R.S. Employer Identification No.)

271 Waverley Oaks Road, Suite 108, Waltham, MA 02452 (781) 788-9043

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

Stephen From President and Chief Executive Officer EveGate Pharmaceuticals, Inc. 271 Waverley Oaks Road, Suite 108, Waltham, MA 02452 (781) 788-9043

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

With copies to:

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

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ⊠

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

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

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

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

Large Accelerated filer		Accelerated filer	
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	\times
		Emerging growth company	☒

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

CALCULATION OF REGISTRATION FEE

Title of each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾	Amount of Registration Fee
Common Stock, par value \$0.01 per share (2)	\$ 4,896,287	_
Series C Convertible Preferred Stock, par value \$0.01 per share (2)	\$ 4,896,287	_
Common Stock issuable upon conversion of Preferred Stock (2)	· · · · · · · · · · · · · · · · · · ·	_
Warrants to purchase Common Stock (2)	\$ 207,426	_
Common Stock issuable upon exercise of Warrants ⁽²⁾	\$10,000,000	_
Total	\$20,000,000	\$2,490 ⁽³⁾

- Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
- Pursuant to Rule 416 under the Securities Act, the securities being registered hereunder include such indeterminate number of additional shares of common stock as may be issued after the date hereof as a result of stock splits, stock dividends or similar transactions.
- Calculated in accordance with Rule 457(o) of the Securities Act based on an estimate of the proposed maximum aggregate offering price at the statutory rate of 124.50 per 1,000,000 of securities registered.

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

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MARCH 23, 2018

PROSPECTUS



Up to Shares of Common Stock,
Warrants to Purchase up to Shares of Common Stock and
Up to Shares of Series C Convertible Preferred Stock
(shares of Common Stock underlying the Series C
Convertible Preferred Stock)

We are offering up to shares of common stock, together with warrants to purchase shares of common stock (and the shares issuable from time to time upon exercise of the warrants) at a combined purchase price of \$ per share of common stock and warrant pursuant to this prospectus. The shares and warrants will be separately issued but will be purchased together in this offering. Each warrant will have an exercise price of \$ per share, will be exercisable upon issuance and will expire five years from the date on which such warrants were issued.

We are also offering to those purchasers, whose purchase of shares of common stock in this offering would result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding common stock following the consummation of this offering, the opportunity to purchase, if they so choose, in lieu of the shares of our common stock that would result in ownership in excess of 4.99%, shares of Series C Convertible Preferred Stock ("Series C Preferred Stock"), convertible at any time at the holder's option into a number of shares of common stock equal to \$1,000 divided by the combined public offering price per share of common stock and warrant (the "Conversion Price"), at a public offering price of \$1,000 per share of Series C Preferred Stock. Each share of Series C Preferred Stock is being sold together with the same warrants described above being sold with each share of common stock.

Our common stock is listed on the Nasdaq Capital Market under the symbol "EYEG." On March 22, 2018, the last reported sale price of our common stock on the Nasdaq Capital Market was \$0.48 per share. The public offering price per share and warrant will be determined between us and the placement agent at the time of pricing, and may be at a discount to the current market price. The warrants and any shares of Series C Preferred Stock that we issue are not and will not be listed for trading on the Nasdaq Capital Market.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. See "Prospectus Summary — Implications of Being an Emerging Growth Company."

You should read this prospectus, together with additional information described under the headings "Incorporation of Certain Information by Reference" and "Where You Can Find More Information," carefully before you invest in our common stock.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 20 of this prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, for a discussion of information that should be considered in connection with an investment in our securities.

Neither the U.S. 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.

	Per Share	Total
Public offering price	\$	\$
Placement agent fees ⁽¹⁾	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) We have also agreed to pay the placement agent a management fee equal to 0.5% of the gross proceeds raised in this offering, a non-accountable expense allowance of \$25,000 and reimbursement for legal fees and expenses of the placement agent in the amount of up to \$100,000. For additional information about the compensation paid to the placement agent, see "Plan of Distribution."

We have retained H.C. Wainwright & Co., LLC as our exclusive placement agent to use its reasonable best efforts to solicit offers to purchase the securities in this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of the securities. Because there is no minimum offering amount required as a condition to closing in this offering, the actual public offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth above.

We expect to deliver the shares and the warrants to purchasers in this offering on or about

Sole Book-Running Manager

, 2018.

H.C. Wainwright & Co.

Prospectus dated , 201

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ABOUT THIS PROSPECTUS

We have not, and the placement agent has not, authorized anyone to provide you with information that is different from that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. When you make a decision about whether to invest in our securities, you should not rely upon any information other than the information contained in or incorporated by reference in this prospectus or in any free writing prospectus that we may authorize to be delivered or made available to you. Neither the delivery of this prospectus nor the sale of our securities means that the information contained in this prospectus or any free writing prospectus is correct after the date of this prospectus or such free writing prospectus. This prospectus is not an offer to sell or the solicitation of an offer to buy our securities in any circumstances under which the offer or solicitation is unlawful.

For investors outside the United States: We have not, and the placement agent has not, taken any action that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities covered hereby and the distribution of this prospectus outside the United States.

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. Our management estimates have not been verified by any independent source, and we have not independently verified any third-party information. In addition, assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors." These and other factors could cause our future performance to differ materially from our assumptions and estimates. See "Special Note Regarding Forward-Looking Statements."

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to the registration statement of which this prospectus is a part 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.

We have proprietary rights to trademarks used in this prospectus, including EyeGate[®]. Solely for our convenience, trademarks and trade names referred to in this prospectus may appear without the "®" or "TM" symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent possible under applicable law, our rights or the rights to these trademarks and trade names. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other companies. Each trademark, trade name, or service mark of any other company appearing in this prospectus is the property of its respective holder.

PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus. It may not contain all of the information that is important to you. You should read the entire prospectus carefully, especially the discussion regarding the risks of investing in our securities under the heading "Risk Factors," before investing in our securities. All references to "Company" "we," "our" or "us" refer solely to EyeGate Pharmaceuticals, Inc. and its subsidiaries and not to the persons who manage us or sit on our Board of Directors.

Overview

We are a clinical-stage specialty pharmaceutical company that is focused on developing and commercializing products for treating diseases and disorders of the eye. We accomplish this by leveraging our two proprietary platform technologies, crosslinked thiolated carboxymethyl hyaluronic acid ("CMHA-S") and our iontophoresis drug delivery system.

CMHA-S

We are developing products using CMHA-S, a modified form of the natural polymer hyaluronic acid, which possesses unique physical and chemical properties such as hydrating and healing properties when applied to the ocular surface. Our first CMHA-S-based product, an eye drop, the EyeGate Ocular Bandage Gel ("OBG"), is being developed for the management and the acceleration of re-epithelization of corneal epithelial defects following photorefractive keratectomy (PRK) and for the management and the reduction of corneal epithelial staining associated with punctate epitheliopathies. OBG is a topically-applied eye drop formulation that is being developed under the 510(k) De Novo path for devices submitted for marketing clearance to the U.S. FDA.

OBG is a semi-synthetic biocompatible crosslinked thiolated carboxymethyl hyaluronic acid (CMHA-S) hydrogel polymer capable of coating the ocular surface and designed to resist degradation under conditions present in the eye, which prolongs residence time of the bandage on the ocular surface, thereby addressing the limitations of current non-crosslinked hyaluronic acid formulations. Additionally, crosslinking allows the product's viscosity to be modified for optimum ocular performance. The increased viscosity and non-covalent muco-adhesive properties improve residence time in the tear film, thus providing a bandage coating that aids and promotes healing of the ocular surface via physical protection.

OBG also exhibits significant shear thinning properties. This feature allows the CMHA-S polymer to act as a more concentrated, viscous barrier at low shear rates in a resting tear film, but also as a lower resistance fluid (therefore thinned) during high shear events such as blinking. This property enables better residence time and a more favorable ocular surface coating with less optical blur. We believe that this enhances ocular surface protection and patient comfort.

OBG has completed its first-in-man clinical trial. In the first quarter of 2017, we announced positive top-line data from the initial pilot trial evaluating the ability of EyeGate OBG to accelerate ocular surface reepithelialization following PRK.

We do not have the rights to the CMHA-S platform for animal health or veterinary medicine. However, the product is presently available commercially as a veterinary device indicated for use in the management of superficial corneal ulcers. Manufactured by SentrX Animal Care and sold in the U.S. by Bayer Animal Health as Remend[®] Corneal Repair (0.75% concentration), indicated for use in the management of superficial corneal ulcers and Remend[®] Eye Lubricating Drops (0.40% concentration) for the treatment of dry eye in dogs and cats. The product has been used successfully for five years in dogs, cats and horses, without adverse effects. The composition of the veterinary product is identical to that of the EyeGate OBG.

Iontophoresis Drug Delivery System

In addition, we are developing EGP-437, which incorporates a reformulated topically active corticosteroid, Dexamethasone Phosphate, that is delivered into the ocular tissues through our proprietary innovative drug delivery system, the EyeGate® II Delivery System. EGP-437 is being developed under the

505(b)(2) New Drug Application, or NDA, regulatory pathway for drugs submitted for approval to the U.S. Food and Drug Administration, or FDA, which enables an applicant to rely, in part, on the FDA's findings of safety and efficacy for an existing product, or published literature, in support of its NDA.

The EyeGate[®] II Delivery System features a compact, elegant, and easy-to-use device that we believe has the potential to deliver drugs non-invasively and quickly into the ocular tissues through the use of iontophoresis, which can accelerate the onset of action, dramatically reduce treatment frequency as compared to eye drops and sustain therapeutic effect. Iontophoresis employs the use of a low electrical current that promotes the migration of a charged drug substance across biological membranes. The electrical current produces ions, which through electrorepulsion, drive a like-charged drug substance into the tissues. The EyeGate[®] II Delivery System is easy-to-use, only takes a few minutes to employ and more than 3,000 treatments have been administered in clinical trials.

We are developing EGP-437 for the treatment of various inflammatory conditions of the eye, including the treatment of ocular inflammation and pain in post-surgical cataract patients and anterior uveitis, a debilitating form of intraocular inflammation of the anterior portion of the uvea, such as the iris and/or ciliary body and for the treatment of ocular inflammation and pain in post-surgical cataract patients. Based on guidance provided by the FDA, we expect that if the ongoing confirmatory Phase 3 trial of EGP-437 in anterior uveitis meets non-inferiority criteria, data from this trial along with data from our previously completed Phase 3 trial in anterior uveitis will be sufficient to support an NDA filing. We also believe, based on guidance provided by the FDA, that the design of the planned confirmatory Phase 3 anterior uveitis trial is acceptable and that the nonclinical work completed to date is sufficient to support an NDA filing. With respect to the development for inflammation and pain in post-surgical cataract surgery patient, we announced topline data for our Phase 2b trial in the first quarter of 2018. Although EGP-437 demonstrated a higher rate of success compared to vehicle at all time points, the co-primary endpoints of proportion of subjects with an anterior chamber cell (ACC) count of zero at day 7 and the proportion of subjects with a pain score of zero at day 1 did not show statistical significance.

We have entered into two exclusive global license agreements with a subsidiary of Valeant Pharmaceuticals International, Inc. ("Valeant") through which we granted Valeant exclusive, worldwide commercial and manufacturing rights to our EyeGate[®] II Delivery System and EGP-437 combination product, or the Combination Product, in the fields of anterior uveitis and ocular iontophoretic treatment for post-operative ocular inflammation and pain in ocular surgery patients, as well as a right of last negotiation to license the Combination Product for other indications. We are responsible for the development of the Combination Product in the U.S. for the indication of anterior uveitis, together with the costs associated therewith. Valeant has the right to develop the Combination Product in the fields outside of the U.S. and has agreed to fund 100% of any costs associated therewith.

Our Strategy

Our goal is to become a leading specialty pharmaceutical company focused on developing and commercializing products for treating diseases and disorders of the eye. The key elements of this strategy are to:

- Continue clinical development of our EyeGate OBG device for the treatment of corneal epithelial wounds. We completed our first-in-man trial enrolling subjects with a 8 to 9mm corneal wound, a large corneal epithelial defect, post PRK surgery and released positive top-line data in the first quarter of 2017.
 We expect to initiate a masked controlled pilot trial in the first half of 2018.
- Initiate clinical development of our EyeGate OBG device for the treatment of punctate epitheliopathies. We anticipate submitting a second IDE in the first quarter of 2018 to begin a clinical trial focused on treating patients with punctate epitheliopathies as confirmed by fluorescein staining of the cornea. We expect to initiate a masked controlled pilot trial in April of 2018.
- Continue clinical development of our EGP-437 Combination Product for the treatment of noninfectious anterior uveitis. We have initiated and continue enrolling patients for the

confirmatory Phase 3 trial evaluating the safety and efficacy of our EGP-437 Combination Product for the treatment of noninfectious anterior uveitis. Based on our estimates regarding subject enrollment, we expect to have topline data for this trial in the third quarter of 2018.

- Continue to analyze the data from our recently completed Phase 2b trial with our EGP-437 Combination Product for the treatment of inflammation and pain post cataract surgery. We recently completed a Phase 2b trial and announced topline data for this trial in the first quarter of 2018. Although EGP-437 demonstrated a higher rate of success compared to vehicle at all time points, the co-primary endpoints of proportion of subjects with an anterior chamber cell (ACC) count of zero at day 7 and the proportion of subjects with a pain score of zero at day 1 did not show statistical significance. We will continue to review the data to determine next steps and to continue evaluating EGP-437 for the reduction of pain and inflammation following ocular surgery.
- Utilize the EyeGate iontophoresis expertise to expand our drug delivery platform for the treatment of eye diseases. Our initial platform, the EyeGate® II Drug Delivery System, is an in-office treatment performed by an eye care giver. We plan to develop a system based on iontophoresis that could be applied at home by the patient. We believe this would be valuable for the treatment of certain chronic ocular diseases where less frequent visits to the eye care givers office are required.
- Pursue other strategic collaborations. We plan to evaluate opportunities to enter into collaborations that
 may contribute to our ability to advance our drug delivery platform and product candidates and to progress
 concurrently a range of discovery and development programs. We also plan to evaluate opportunities to
 in-license or acquire the rights to other products, product candidates or technologies for the treatment of
 eye diseases.

Ophthalmic Market Opportunity

Ophthalmology is a specialty market with commercial and regulatory dynamics that make it possible for small or medium sized companies like us to develop and commercialize products on our own. We believe that the specialists in the U.S. who treat ocular diseases are sufficiently concentrated that we could effectively promote our products with a specialty sales and marketing group.

EyeGate OBG

The EyeGate OBG is a synthetic biocompatible cross-linked thiolated carboxymethyl hyaluronic acid (CMHA-S) hydrogel capable of coating the ocular surface and designed to resist degradation under conditions present in the eye. This prolongs residence time of the bandage on the ocular surface, thereby addressing the limitations of current non-cross-linked hyaluronic acid formulations. Additionally, cross-linking allows the product's viscosity to be modified to meet optimum ocular needs. The increased viscosity and non-covalent mucoadhesive interfacial forces improve residence time in the tear film, thus providing a coating that aids and promotes re-epithelization of the ocular surface via physical protection.

The EyeGate OBG exhibits significant shear thinning properties. This feature allows the CMHA-S polymer to act as a more concentrated, viscous barrier at low shear rates in a resting tear film, but also as a lower resistance fluid (therefore thinned) during high shear events such as blinking. This property enables better residence time and a more favorable ocular surface coating with less optical blur. This should enhance ocular surface protection and patient comfort.

The EyeGate OBG has been shown to provide a mechanical barrier that aids in the management of corneal epithelial defects and accelerates re-epithelization in both preclinical studies and in clinical ophthalmic veterinary use. As such, PRK surgery was chosen as the subject population which we believe is best suited to demonstrate this effect. PRK is an efficacious alternative to patients seeking surgical correction of refractive errors who are not suitable candidates for laser in situ keratomileusis (LASIK) due to inadequate corneal thickness, larger pupil size, history of keratoconjunctivitis sicca (KCS), or anterior basement membrane disease.

We believe that the EyeGate OBG can be used for the management of a variety of large and small corneal epithelial defects including Punctate Epitheliopathies. Punctate Epitheliopathies are an early sign of epithelial compromise and are associated with a variety of pathologic ocular inflammatory conditions including ocular causes, as well as systemic diseases. This ocular surface condition is common and may represent areas of epithelial cell damage and loss and therefore stain positively with fluorescein. Causes can include dry eye, acute and chronic bacterial and viral conjunctivitis, trauma, contact lens wear (tight lens syndrome), chemical irritation and burns, diabetic and infectious neuropathies, chemotherapy and corneal abrasion. We plan on submitting a second IDE to the FDA in the first quarter of 2018 for the development of EyeGate OBG for treating Punctate Epitheliopathies. We anticipate initiating our first pilot trial in the first half of 2018.

EyeGate® II Delivery System and EGP-437

Delivery of therapeutic agents using ocular iontophoresis has been of interest as a means of non-invasively achieving higher drug levels within the eye by promoting the migration of a charged drug substance across biological membranes with a low electrical current. The EyeGate® II Delivery System applicator utilizes an inert electrode, which stimulates the electrolysis of water to produce ions (hydroxide or hydronium), which via electrorepulsion, drive a like-charged drug substance into the ocular tissues. The EyeGate® II Delivery System delivery platform requires custom pharmaceutical formulations to enable delivery efficiency and safety while allowing for potential novel intellectual property. The data from multiple clinical trials suggests that EGP-437 does not significantly raise mean intraocular pressure, or IOP, at the time points evaluated during the study period.

Many front of the eye diseases such as cataract surgery and non-infectious anterior uveitis are acute inflammatory conditions. The current standard of care to treat ocular surface and anterior segment inflammation is patient administered corticosteroids in the form of eye drops. Topical corticosteroids suffer from a number of drawbacks including low ocular bioavailability, rapid clearance and steroid-related side effects including elevated IOP. We believe that our EGP-437 Combination Product has the potential to address these unmet needs by providing in-office treatments given by the eye care provider thereby mitigating the patient compliance issues and substantially reducing the burden of care.

Currently, the only primary route of administration for drugs treating retinal diseases is through intravitreal injection into the vitreous of the eye. These injections must be given as frequently as once per month when treating chronic diseases like macular degeneration. Unfortunately, there are known drawbacks associated with administering intravitreal injections, including safety risks, adverse patient experience and being time- and laborintensive to administer. Data from our Phase 1b/2a proof-of-concept macular edema trial suggests that iontophoresis can non-invasively deliver EGP-437 to the back of the eye. The non-invasive delivery of EGP-437 has demonstrated a positive response in some patients with macular edema.

Current Targeted Indications

EyeGate OBG: Large Corneal Epithelial Defects from PRK Surgery

PRK is an efficacious alternative to patients seeking surgical correction of refractive errors who are not suitable candidates for laser in situ keratomileusis (LASIK) due to inadequate corneal thickness, larger pupil size, history of keratoconjunctivitis sicca (KCS), or anterior basement membrane disease. PRK involves controlled mechanical removal of corneal epithelium with subsequent excimer laser photoablation of the underlying Bowman's layer and anterior stroma, including the subepithelial nerve plexus.

The military prefers PRK as a refractive surgery due to the stability of the PRK incision and the absence of risk for flap dislocation during military active duty. Although this procedure yields desirable visual acuity results, common complications of the procedure include post-operative pain secondary to the epithelial defects, risk of corneal infection prior to re-epithelization of the large epithelial defect, corneal haze formation, decreased contrast sensitivity, and slower visual recovery.

Late complications such as corneal haze formation and diminished contrast sensitivity are thought to be related to the stromal response due to the damaged epithelium and/or to the stromal ablation itself. The superficial keratocytes initially undergo apoptosis, followed by proliferation and activation of the remaining keratocytes. Activated keratocytes have been associated with increased collagen deposition and collagen disorganization which correlate with corneal haze and regression of the correction after PRK. Enabling the epithelium to heal faster may mitigate the immediate peri-operative complications as well as improve the longer visual term outcomes.

EyeGate OBG: Punctate Epitheliopathies

Punctate Epitheliopathies, or PE, are an early sign of epithelial compromise and are associated with a variety of pathologic ocular inflammatory conditions including ocular causes, as well as systemic diseases. This ocular surface condition is common and may represent areas of epithelial cell damage and loss and therefore stain positively with fluorescein. PE is characterized by a breakdown or damage of the epithelium of the cornea in a pinpoint pattern, which can be seen with examination with a slit-lamp. Patients may present with non-specific symptoms such as red eye, tearing, foreign body sensation, photophobia and burning. Causes can include dry eye, acute and chronic bacterial and viral conjunctivitis, trauma, contact lens wear (tight lens syndrome), chemical irritation and burns, diabetic and infectious neuropathies, chemotherapy and corneal abrasion.

Standard of care treatments are aimed at attempting to heal these punctate micro defects and/or epitheliopathies and can include increasing humidity, artificial tears, lubricants and ointments and in severe cases can even utilize bandage contact lens, antibiotics and amniotic membrane graphs, as well as treating the underlying cause with topical anti-inflammatory and T cell modulators. The endpoint of treatment is to re-epithelize the cornea and reduce the corneal staining. Reduction of the corneal staining are frequently measured by scales such as the National Eye Institute Scale (NEI) or Oxford scale. These standardized and validated scales have been developed to help score and measure these defects. Often these current treatments fall short as they are ineffective in protecting and enabling corneal re-epithelization. The artificial tears have limited residence time and often do nothing to mechanically protect the cornea and create an environment that can accelerate corneal reepithelization and resolve staining. Furthermore, many of the ointments and gels, although offering better residence time, are thicker and blur vision, thus making them less attractive for day time use.

The EyeGate OBG, once applied to the eye, forms a thin layer that protects the eye to promote re-epithelization in the management of a variety of large and small corneal epithelial defects including PE.

EGP-437: Cataract Surgery

Cataracts are the leading cause of blindness worldwide, and there are more than 24 million people age 40 and older who have cataracts in the U.S. alone, according to the Vision Problems in the U.S. report from Prevent Blindness. A cataract is a clouding of the lens in the eye that affects vision. Most cataracts are related to aging and are very common in older people. By age 80, more than half of the U.S. population either have a cataract or have had cataract surgery. Cataract surgery is the most common surgical procedure in the population aged over 65 years. There are approximately three million cataract surgeries performed per year in the U.S. As the technology of cataract surgery has progressed, so too, has the increased patient demand for excellent vision and safety after the procedure, but visual rehabilitation after cataract surgery is sometimes delayed by the inflammatory processes that are induced by phacoemulsification where the eye's internal lens is emulsified with an ultrasonic hand piece and aspirated from the eye. Inflammation is induced in all cataract surgery by the mechanical transmission of energy into the eye, disruption of cell membranes, and the normal healing process. Postoperative topical corticosteroids are used routinely to reduce inflammation and improve visual outcomes after cataract surgery. Despite their use, transient corneal edema is one of the major factors hindering the improvement of vision in the first days after surgery, and cystoid macula edema may reduce quality of vision for weeks and months after the procedure. Therefore, reducing inflammation and its potential damage to the corneal endothelium and retina is a high priority for the ophthalmic surgeon.

EGP-437: Non-Infectious Anterior Uveitis

Uveitis is a general term for inflammation of the uveal tract and encompasses a wide range of etiologies. It may be iodiopathic, associated with systemic diseases or result from a variety of infectious agents. An annual estimated 17.6% of active uveitis patients experience transient or permanent loss of vision. Uveitis is responsible for more than 2.8% of cases of blindness in the U.S., making this disorder an important cause of vision loss and impairment. Non-infectious anterior uveitis is a debilitating form of intraocular inflammation of the anterior portion of the uvea, such as the iris and/or ciliary body and is the most common form of uveitis. Incidence in the U.S. ranges from approximately 26.6 to 102 per 100,000 adults annually with recent reports indicating occurrence in all age groups with the highest incidence in those over age 65 years. Chronic or recurrent, anterior uveitis may lead to complications such as posterior subcapsular cataract, glaucoma and macular edema.

Inflammation can be classified as either acute or chronic. Acute inflammation is the initial response of the body to harmful stimuli and is achieved by the increased movement of plasma and white blood cells from the blood into the injured tissues, in this case the uvea. Sometimes, the inflammation associated with anterior uveitis is in response to a real infection. This is known as infectious anterior uveitis. However, anterior uveitis often occurs for no apparent reason as the result of the immune system malfunctioning and triggering the process of inflammation even though no infection is present. This is known as non-infectious anterior uveitis. Patients that have anterior uveitis exhibit a large number of white blood cells in the anterior chamber of the eye. In order to count these cells in the anterior chamber, the physician uses a slit lamp, an instrument consisting of a high-intensity light source that can be focused to shine a thin sheet of light into the eye. The treatment objective is to eliminate the inflammation of the uvea which can be confirmed by an anterior chamber cell count of zero.

Clinical Trial Results

EyeGate OBG: Large Corneal Epithelial Defects

In the first quarter of 2017, we reported topline results from the first-in-human pilot trial of EyeGate OBG, the acceleration of re-epithelialization of large corneal epithelial defects in patients having undergone PRK. The prospective, randomized, controlled study enrolled 39 subjects undergoing bilateral PRK surgery and aimed to assess the safety and performance of EyeGate OBG on its own or combined with a Bandage Contact Lens ("BCL") compared to the current standard of care, artificial tears and BCL. The primary endpoint of the study was complete wound closure by Day 3.

The enrolled subjects were randomized into one of three study groups, with subjects receiving the same treatment in both eyes:

- Patients in arm 1 (n=12) received EyeGate Ocular Bandage Gel four times daily (QID) for two weeks after surgery.
- Arm 2 (n=14) was comprised of EyeGate Ocular Bandage Gel QID for 2 weeks after surgery in combination with a BCL.
- Arm 3 (n=13) was comprised of artificial tears administered four times daily and BCL.

The study demonstrated safety and tolerability of EyeGate OBG, with encouraging potential efficacy. 83.3% of the subjects in Arm 1 (EyeGate OBG alone) achieved complete wound closure by Day 3, compared to 53.8% of patients that received the standard of care. Thus, the OBG arm had approximately 55% more subjects achieve full wound closure on Day 3 than the standard of care arm. Also, on Day 3, the average wound length, measured horizontally and vertically was 83.3% and 66.7% smaller, respectively, for the OBG arm versus the standard or care arm. Additionally, on Day 1 (24 hours post-surgery), the average wound length, measured horizontally and vertically, was 35.9% and 27.4% smaller, respectively, for the OBG arm versus the standard-of-care arm. Based on these positive results, EyeGate plans to continue development with a double-masked, controlled trial evaluating EyeGate OBG monotherapy against BCL in the first half of 2018.

				Length in mm			
	# Subjects	Closed Wound: Day 3		Day 1		Day 3	
	per arm	#	%	Horizontal	Vertical	Horizontal	Vertical
Arm 1: OBG	12	10	83.3%	4.1	4.5	0.10	0.20
Arm 2: OBG + BCL	14	9	64.3%	6.3	6.50	0.30	0.30
Arm 3: BCL + AT ⁽¹⁾	13	7	53.8%	6.4	6.20	0.60	0.60
Total Subjects Enrolled	39						
OBG: % better than BCL			54.8%	35.9%	27.4%	83.3%	66.7%

EGP-437

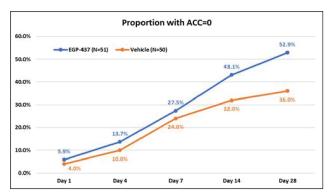
We submitted an IND for EGP-437 to the FDA on April 28, 2008. The initial protocol submitted as part of the IND application was for our Phase 1/2 non-infectious anterior uveitis trial. Subsequently, we submitted amendments to our IND for protocols for additional trials that we have since completed on September 12, 2008, April 6, 2010, October 18, 2011, April 13, 2012 and May 20, 2015. An IND application (IND 107,846) referencing our IND (IND 77,888) was submitted by the University of Pennsylvania, School of Medicine on January 29, 2010 with a protocol for the treatment of anterior scleritis.

We have completed eight clinical trials under IND 107,846 for the EGP-437 Combination Product. The first two trials were executed in parallel — a Phase 1/2 non-infectious anterior uveitis trial and a Phase 2 dry eye trial. These two trials were followed by a Phase 3 dry eye trial. Subsequently, we completed our first Phase 3 trial for non-infectious anterior uveitis. During the time that we executed the Phase 3 non-infectious anterior uveitis trial we completed a Phase 2 proof-of-concept cataract surgery trial, with prophylactic treatment of the EGP-437 Combination Product. In 2016, we completed a Phase 1b/2a dose ranging trial treating inflammation and pain for subjects that have undergone cataract surgery and a Phase 1b/2a proof-of-concept macular edema trial. In early 2018, we completed a Phase 2b cataract surgery trial.

INDICATION	PHASE	NO. SUBJECTS RANDOMIZED	CONTROL ARM
Anterior Uveitis	1/2	40	None
Dry Eye	2	105	Placebo
Dry Eye	3	198	Placebo
Anterior Uveitis	3	193	Standard of care
Cataract Surgery	2 POC	45	Placebo
Macular Edema	1b/2a	26	None
Cataract Surgery	1b/2a	80	Placebo
Cataract Surgery	2b	100	Placebo
	Anterior Uveitis Dry Eye Dry Eye Anterior Uveitis Cataract Surgery Macular Edema Cataract Surgery	Anterior Uveitis Dry Eye Dry Eye 3 Anterior Uveitis 3 Cataract Surgery And The Property of the Property	INDICATION PHASE RANDOMIZED Anterior Uveitis 1/2 40 Dry Eye 2 105 Dry Eye 3 198 Anterior Uveitis 3 193 Cataract Surgery 2 POC 45 Macular Edema 1b/2a 26 Cataract Surgery 1b/2a 80

Cataract Surgery: Phase 2b Trial (EGP-437-009)

We announced topline data for this trial in the first quarter of 2018. Although EGP-437 demonstrated a higher rate of success compared to vehicle at all time points, the co-primary endpoints of proportion of subjects with an anterior chamber cell (ACC) count of zero at day 7 and the proportion of subjects with a pain score of zero at day 1 did not show statistical significance. The efficacy results for the absence of inflammatory cells in the EGP-437 treatment group met our expectations, but the vehicle group response was better than anticipated. The difference in proportion of subjects with total clearing of ACC between the EGP-437 group and the Placebo widens at Day 14 and Day 28, trending towards statistical significance (see graph below). Also, the difference in average or mean cell count at Day 7 (the day for evaluating the primary endpoint) between the EGP-437 group and the Placebo group was statistically significant with a P value = 0.0096.



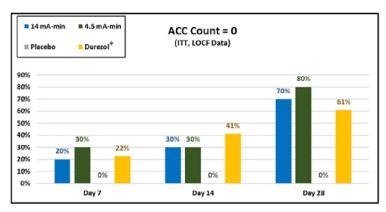
We will continue to review the data to determine next steps and to continue evaluating EGP-437 for the reduction of inflammation and pain following ocular surgery.

Cataract Surgery: Phase 1b/2a Trial (EGP-437-008)

We have reported positive data for our dose-ranging clinical trial for the treatment of ocular inflammation and pain in post-surgical cataract patients. The Phase 1b/2a clinical trial was a multi-center, open-label trial enrolling 80 subjects who had undergone unilateral cataract extraction and implantation of a monofocal intra-ocular lens. The primary objective of this trial was to assess the safety and efficacy of iontophoretic EGP-437 in these patients following surgery.

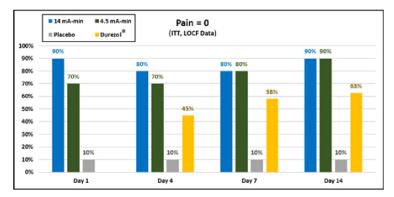
The trial design included eight cohorts, ten subjects per cohort, whereby iontophoretic doses of 4.0 mA-min, 4.5 mA-min, 9.0 mA-min and 14.0 mA-min were employed and the 9.0 and 14.0 mA-min cohorts included different dosing regimens. Dosing regimens included three treatments administered on Day 0, Day 1 and Day 2 or Day 0, Day 1 and Day 4 with potential for an additional treatment at Day 7 in all cohorts. One cohort had the Day 0 treatment given prior to surgery and all other cohorts had the Day 0 treatment provided after surgery. All cohorts except one was treatment delivering EGP-437, the exception was a placebo arm. The primary endpoint for all cohorts is based on the proportion of subjects that achieved an anterior chamber cell (ACC) count of zero, with secondary endpoints measuring pain score and intra-ocular pressure.

A positive response was achieved demonstrating that EGP-437 delivered via our EyeGate II Delivery System was safe and effective in reducing inflammation and preventing pain. The best responses were achieved with the 4.5mA-min and 9.0mA-min cohorts with similar or greater percentage of patients with ACC count of zero greater than Durezol* at Day 7. Both EGP-437 cohorts demonstrated a greater proportion of patients with ACC count of zero than Durezol* at Day 28. The percentage of patients with zero pain was better than Durezol* at Day 4, 7 and 14 for both EGP-437 cohorts. The optimal dose was determined to take forward into a Phase 2b trial, initiated in the third quarter of 2017.



"Durezol is a topical corticosteroid approved for the treatment of pain and inflammation post ocular surgery and data shown is from CDER Application Number 22-212. Medical Review for Durezol, studies ST-501A-002a and 002b. Durezol data shown is based on combined data from both studies. QID does, ITT, LOCF.

EGP-437 data based on treatments given on Days 0, 1, and 4 (some subjects received additional dose at Day 7) and is ITT, LOCF.



*Durezol is a topical conficosteroid approved for the treatment of pain and inflammation post ocular surgery and data shown is from CDER Application Number 22-212. Medical Review for Durezol, studies ST-601A-002a and 002b. Durezol data shown is based on combined data from both studies. GID does. ITT. LOCF.

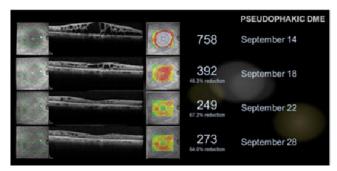
EGP-437 data based on treatments given on Days 0, 1, and 4 (some subjects received additional dose at Day 7) and is ITT, LOCF.

Macular Edema: Phase 1b/2a Trial (EGP-437-007)

We have reported data for our first clinical trial treating a back of the eye indication, macular edema. The Phase 1b/2a proof-of-concept trial suggests that iontophoresis can non-invasively deliver EGP-437 to the back of the eye. The non-invasive delivery of EGP-437 has demonstrated a positive response in some patients with macular edema.

The completed Phase 1b / 2a clinical trial is a multi-center, open-label trial. The data reported was based on the first 19 patients enrolled and had macular edema associated with Retinal Vein Occlusion, Diabetic Retinopathy or Post-Surgical (cystoid) Macular Edema. The primary objective of this trial is to evaluate the safety and efficacy of iontophoretic EGP-437 in patients suffering from Macular Edema. Three treatments at 14.0 mA-min (3.5mA) were administered on Day 0, Day 4 and Day 9. Primary outcome of the trial measured reduction in mean central subfield thickness on Day 4, Day, 9 and Day 14. Ozurdex [®] was administered as control to patients that did not respond to the investigational therapy at Day 14 and were re-evaluated at Day 28.

A positive response was observed in some of the patients, with pseudophakic eyes (an eye implanted with an intraocular lens) responding better than phakic eyes (an eye with a natural lens). A positive response was demonstrated in three subpopulations of macular edema including macular edema associated with diabetes, retinal vein occlusion and inflammation or cystoid. In one example, a subject that presented with diabetic macular edema was provided with three treatments of EGP-437, Day 0, Day 4 and Day 9 and showed anatomic resolution in approximately one week after only two treatments, as illustrated by the optical coherence tomography scan below. Additionally, the investigational therapy showed no serious treatment emergent adverse effects including no increase in ocular pressure even at three times the iontophoretic dose that was used for our Phase 3 non-infectious anterior uveitis trial.



Non-Infectious Anterior Uveitis: Phase 3 Clinical Trial (EGP-437-004)

Our previous Phase 1/2 non-infectious anterior uveitis clinical trial, and two dry eye clinical trials, showed that the EGP-437 dose selected for the Phase 3 non-infectious anterior uveitis trial was well tolerated and demonstrated positive activity. The Phase 3 non-infectious anterior uveitis clinical trial was conducted to assess safety and efficacy of the EGP-437 Combination Product and evaluate its non-inferiority status to a standard of care, prednisolone acetate 1% (PA) eye drops. Communication received from the FDA in 2007 stated that the FDA recommended that PA, administered at least four times per day (q.i.d.), be the positive control agent for the treatment of anterior uveitis. Our trial utilized a more stringent regimen for the positive control of eight times per day in week one and six times per day in week two before going to four times per day in weeks three and four. Patients had to agree to comply with dosing regimen to be included in the trial.

The completed Phase 3 non-inferiority study in patients with non-infectious anterior uveitis appeared to demonstrate that two iontophoretic treatments with our EGP-437 Combination Product achieved the same response rate as the positive control for the primary efficacy endpoint, a complete clearing of anterior chamber cells, by Day 14. The control is the current standard of care, PA, which was administered multiple times daily as eye drops. Although we achieved the same response rate in our Phase 3 clinical trial, the dose of the EGP-437 Combination Product tested was just outside the pre-set non-inferiority margin for intent-to-treat and per protocol populations and did not achieve statistical significance in the intent-to-treat population as compared to the positive control based on the primary efficacy endpoint.

- The EGP-437 Combination Product produced the same outcomes compared to PA while eliminating the
 need to apply up to eight eye drops a day, for a total of 154 drops over a four-week period eight times
 per day for week one, six times per day for week two and four times per day for weeks three and four.
- This was achieved with a lower incidence of increased IOP, which is characterized as an increase of six mm Hg or more from baseline; in the EGP-437 Combined Product group, 14 subjects had 17 occurrences while 24 subjects had 41 occurrences in the PA arm.

Phase 3 Safety Discussion

Our EGP-437 Combination Product appears to be clinically comparable to PA topical drops. With regard to elevated IOP, no subjects in the EGP-437 Combination Product treatment arm experienced any significant increase in IOP (greater than 20mmHg), whereas the PA treatment arm had one subject with a reported IOP increase of 27mmHg. With regard to IOP-related adverse events, one subject in the EGP-437 Combination Product treatment group reported an adverse event (seen approximately three weeks after rescue was initiated) and six subjects in the PA treatment arm reported adverse events related to IOP.

Phase 3 Clinical Trial Conclusion

Topical corticosteroid therapy administered as frequently as every hour with tapering over the treatment period has been the mainstay for uveitis treatment since the 1950s. In this unique Phase 3 randomized, double-masked, positive-controlled clinical trial in subjects with non-infectious anterior uveitis, two treatments with ocular iontophoretic delivery of EGP-437 appears to be clinically comparable to PA topical drops administered with a tapering schedule from eight drops per day to four drops per day over 28 days.

By Days 7 and 14, the proportion of subjects reaching ACC counts of zero was slightly greater in the EGP-437 Combination Product arm than the PA arm. This effect was more noticeable in the subgroup of subjects with a higher baseline ACC count; a higher proportion of subjects in the EGP-437 Combination Product arm reached an ACC count of zero by Days 7 and 14 in this sub-group of subjects. Safety findings were comparable for both study arms.

Non-Infectious Anterior Uveitis: Phase 1/2 Trial (EGP-437-001)

Our first clinical trial initiated with the EGP-437 Combination Product was a Phase 1/2 trial for subjects with non-infectious anterior uveitis, which was defined as having anterior chamber cell (ACC) scores ≥ 1.5 , or in other words, cell counts of less than or equal to 11 cells. Subjects who have anterior uveitis, exhibit a large number of white blood cells in the anterior chamber of the eye. The treatment objective is to eliminate the inflammation which can be visually confirmed when all white blood cells have been cleared from the anterior chamber. The degree of intraocular inflammation is based on a grading scheme or score that uses an ordinal scale ranging from 0 to 4.

The primary objective of this exploratory study was to define a safe and effective dose of EGP-437 in subjects with non-infectious anterior segment uveitis. The secondary objective was to evaluate the systemic pharmacokinetic profile of EGP-437 (dexamethasone and dexamethasone phosphate) following ocular dosing.

This multi-site, randomized, double-masked, parallel group, dose comparison, exploratory study comprised five visits conducted over 28 days. The study population was comprised of 40 eyes of 40 subjects. Enrolled subjects were randomly assigned to receive one of four iontophoresis dose levels of EGP-437 for approximately four minutes with up to ten subjects per treatment arm. Subjects received a single treatment only, at Day 0, subjects returned for examination on Days 1, 7, 14, and 28. Eligible subjects received one of the following four iontophoresis dose levels of EGP-437 (dexamethasone phosphate ophthalmic solution (40mg/mL)) for approximately 4 minutes:

- Treatment Group A: 1.6 mA-min at 0.4 mA
- Treatment Group B: 4.8 mA-min at 1.2 mA
- Treatment Group C: 10.0 mA-min at 2.5 mA
- Treatment Group D: 14.0 mA-min at 3.5 mA

Following the single treatment with the EGP-437 Combination Product, 48% of the subjects achieved an ACC score of zero within two weeks. By Day 28, 60% of the subjects achieved an ACC score of zero and required no further treatment. At Day 14, in the lowest treatment group, the proportion of subjects with an ACC count of zero was 4/10 (40%) and for all treatment groups was 7/40 (18%). At Day 28, in the lowest

treatment group, the proportion of subjects with an ACC count of zero was higher at 6/10 (60%) and for all treatment groups was 14/40 (35%). The highest proportion of subjects with an ACC score or ACC count of zero was in the 1.6 mA-min at 0.4 mA treatment group at both Days 14 and 28.

	STATISTIC	TREATMENT GROUP					
CHARACTERISTIC	OR CATEGORY	1.6 mA-min (N = 10)	4.8 mA-min (N = 10)	10.0 mA-min (N = 10)	14.0 mA-min (N = 10)	Total (N = 40)	
ACC Score of Zero	Day 14	8 (80)%	6 (60)%	2 (20)%	3 (30)%	19 (48)%	
	Day 28	8 (80)%	6 (60)%	5 (50)%	5 (50)%	24 (60)%	
ACC Count of Zero	Day 14	4 (40)%	1 (10)%	1 (10)%	1 (10)%	7 (18)%	
	Day 28	6 (60)%	2 (20)%	1 (10)%	5 (50)%	14 (35)%	

The median time in days to an ACC score of zero ranged from a minimum of 11.5 days in the 1.6 mA-min dose group to a maximum of 31.0 days in the 14.0 mA-min dose group. The proportion of patients with an ACC score reduction of 0.5 or more on Day 28 was 80% (eight) in the 1.6 mA-min dose group and 60% (six) in the other three dose groups. The mean change in ACC score from baseline to Day 28 ranged from a maximum of -2.25 in the 1.6 mA-min dose group to a minimum of -2.00 in the 14.0 mA-min dose group. The relatively short mean times to reach an ACC score of zero in each dose group suggest that the treatment has a rapid onset of action.

The results from this trial appeared to demonstrate that the most effective EGP-437 dose level is in the 1.6 mA-min at 0.4 mA dose level. The level of association between the iontophoresis treatments and achieving an ACC Score of zero was assessed and the association was estimated to be statistically significant at a 5% level of significance (p-value = 0.032) on Day 14, suggesting that the treatment differences are larger than would be expected by chance alone. The probability-value or p-value is a number between 0.00 and 1.00, and is used to demonstrate the strength of a conclusion drawn from clinical trial data. Essentially the p-value measures consistency between the results actually obtained in the trial and the "pure chance" explanation for those results. A statement and corresponding p-value are considered of strong significance if the probability of the same reaction occurring randomly or by chance is less than 5%, corresponding to a p-value of p0.05.

This trial showed low short-term systemic exposure to dexamethasone following ocular iontophoresis delivery of dexamethasone phosphate, and no corticosteroid mediated effects were observed.

While this dose-ranging study did not include positive or negative controls, the results demonstrated that a single treatment with the EGP-437 Combination Product: (1) lowered ACC scores in the majority of patients without requiring additional treatment and (2) produced low short-term systemic exposure to dexamethasone and dexamethasone phosphate.

Clinical Development Plan

EyeGate OBG

The EyeGate OBG has been shown to provide a mechanical barrier that aids in the management of corneal epithelial wounds, defects and epitheliopathies. EyeGate OBG has been shown to accelerate re-epithelization in both preclinical studies and in clinical ophthalmic veterinary use. As such, PRK surgery was chosen as the subject population, which is best suited to demonstrate the acceleration of re-epithelization. PRK is an efficacious alternative to patients seeking surgical correction of refractive errors who are not suitable candidates for laser in situ keratomileusis (LASIK) due to inadequate corneal thickness, larger pupil size, history of keratoconjunctivitis sicca (KCS), or anterior basement membrane disease. The primary effectiveness endpoint for this initial pilot trial was time to re-epithelization of epithelial defect following PRK surgery. We have completed the initial proof-of-concept trial and announced positive top-line data in the first quarter of 2017. We anticipate initiating a prospective, masked pilot clinical trial in the first half of 2018 for large corneal epithelial defects following PRK surgery.

The FDA, at the pre-submission meeting that occurred in the fourth quarter of 2016, asked us to file an Investigational Device Exemption (IDE) application prior to continuing with the development of OBG. The IDE was filed in May of 2017 and in June of 2017, 30 days following submission, we received a

comment letter from the FDA. The letter asked us to complete specific tasks and to submit an IDE amendment with the results for those tasks. The majority of the comments were related to the validation of the manufacturing process for OBG. Due to the chemical characteristics of OBG, we are unable to terminally sterilize our final product. Terminal sterilization means that the product in its final container is subjected to a sterilization process such as heat or irradiation. We provide a sterile produced by aseptic processing. In an aseptic process, the drug product, container, and closure are first subjected to sterilization methods separately, as appropriate, and then brought together. Because there is no process to sterilize the product in its final container, it is critical that containers be filled and sealed in an extremely high-quality environment. Aseptic processing involves more variables than terminal sterilization. Before aseptic assembly into a final product, the individual parts of the final product are generally subjected to various sterilization processes. Each of these manufacturing processes requires validation and control. A terminally sterilized product, on the other hand, undergoes final sterilization in a sealed container, thus limiting the possibility of error.

Some of the items requested from the FDA included tasks such as:

- Evaluate the manufacturing process to eliminate sources which could contribute to excessive bioburden levels
- Provide alert and action levels for device components prior to filter sterilization,
- Provide description of validation protocol and bacterial retention results for sterilizing grade filters,
- Provide percent recovery results for bioburden test methods,
- · Validate gamma irradiation dose for device packaging, and
- Include validated analytical methods to identify and quantify impurities.

We filed the IDE amendment on March 8, 2018 which initiated the 30 day review period by the FDA. Assuming that the FDA provides positive feedback and allows us to move forward with our clinical trial, we anticipate commencing our next PRK trial in the first half of 2018. We also plan on submitting a second IDE in the first quarter of 2018 for the development of OBG for the treatment of Punctate Epitheliopathies, including dry eye. We anticipate commencing this pilot trial in the first half of 2018.

EGP-437: Anterior Uveitis

We have completed two trials (Phase 1/2 and Phase 3) for anterior uveitis and have demonstrated in the completed Phase 3 non-inferiority study that two iontophoretic treatments with our EGP-437 Combination Product achieved the same response rate as the positive control for the primary efficacy endpoint, a complete clearing of anterior chamber cells, by Day 14. This was achieved with a lower incidence of increased IOP, which is characterized as an increase of six mm Hg or more from baseline. We currently have an ongoing confirmatory Phase 3 trial underway and anticipate top-line data in the second quarter of 2018. The FDA has provided guidance that the ongoing confirmatory Phase 3 trial of EGP-437 in anterior uveitis meets non-inferiority criteria, data from this trial along with data from our previously completed Phase 3 trial in anterior uveitis will be sufficient to support an NDA filing. The FDA also communicated that the design of the ongoing confirmatory Phase 3 anterior uveitis trial is acceptable and that the nonclinical work completed to date is sufficient to support an NDA filing.

EGP-437: Cataract Surgery

We have completed three trials (Phase 2 prophylactic, Phase 1b/2a dose-ranging and Phase 2b) and reported positive data for our Phase 1b/2a dose-ranging clinical trial for the treatment of ocular inflammation and pain in post-surgical cataract patients.. A positive response was achieved and an optimal dose was determined to take forward into a Phase 2b trial that was completed in the first quarter of 2018. Although EGP-437 demonstrated a higher rate of success compared to vehicle at all time points, the co-primary endpoints of proportion of subjects with an anterior chamber cell (ACC) count of zero at day 7

and the proportion of subjects with a pain score of zero at day 1 did not show statistical significance. We will continue to review the data to determine next steps and to continue evaluating EGP-437 for the reduction of pain and inflammation following ocular surgery.

EGP-437: Other Indications

Although we have completed two trials (Phase 2 and Phase 3) for dry eye, at this time we are not anticipating any further development for this indication. We have completed a Phase 1/2 for macular edema and at this time we are assessing the next steps for this indication.

Intellectual Property and Proprietary Rights

Overview

We are building an intellectual property portfolio for our EGP-437 Combination Product and CMHA-S platform, as well as other devices and product candidates for treatment of ocular indications in the U.S. and abroad. We currently seek, and intend to continue to seek, patent protection in the U.S. and internationally for our product candidates, methods of use, and processes for manufacture, and for other technologies, where appropriate. Our current policy is to actively seek to protect our proprietary position by, among other things, filing patent applications in the U.S. and abroad relating to proprietary technologies that are important to the development of our business. We also rely on, and will continue to rely on, trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position. We cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents that may be granted to us in the future will be commercially useful in protecting our technology.

Our success will depend significantly on our ability to obtain and maintain patent and other proprietary protection for the technologies that we consider important to our business, our ability to defend our patents, and our ability to preserve the confidentiality of our trade secrets and operate our business without infringing the patents and proprietary rights of third parties.

Patent Portfolio

Our patent portfolio includes drug delivery device patents directed to the EyeGate[®] II Delivery System, drug composition patents directed to EGP-437 and other compositions and devices related to the EyeGate[®] II Delivery System. In addition, further patent applications are directed to the CMHA-S platform in combination with active therapeutics to treat ocular diseases. These issued patents will expire between 2018 and 2034.

We have been developing drug compositions and drug delivery systems for non-invasive treatment on the eye for several years. These delivery systems include various patented and patent pending drug delivery devices, active therapeutics and combination device/therapeutic to treat components of the eye, such as the cornea, sclera, and combinations thereof. These devices and therapeutics have been further improved to provide better patient comfort levels, patient compliance and recovery times. The delivery system patent portfolio consists of seven Patent families, which includes fifteen U.S. Patents and 87 corresponding International Patents. We hold fifteen patents (thirteen issued and two allowed). Additionally, we hold 103 patents by way of our subsidiary, EyeGate Pharma S.A.S., a French corporation, or EyeGate S.A.S.

License Agreements

We are a party to six license agreements as described below. Four of the six license agreements require us to pay royalties or fees to the licensor based on revenue related to the licensed technology, and the agreements with Valeant require Valeant to pay royalties to us based on revenue related to the licensed technology.

On February 15, 1999, we entered in to an exclusive worldwide license agreement with the University of Miami School of Medicine to license technology relating to our EyeGate[®] II Delivery System, which grants us the right to use certain French, European, Canadian, Japanese, American, Mexican, Korean, Brazilian

and Israeli patents in our EGP-437 Combination Product. This agreement, which was amended in December 2005, requires us to pay to the University of Miami an annual license fee of \$12,500. This license also requires payments to the University of Miami upon our achievement of certain milestones. All annual license fee and milestone payments have been paid to date. The total amount of milestone payments paid to date under this license agreement is \$30,000 and there are potential aggregate additional amounts of up to \$70,000 due on certain milestones being met. This license agreement remains in effect until the later of twelve (12) years after the date of the first commercial sale of the applicable product or the date of the last to expire patent relating to the patent rights under the Agreement. Upon such expiration and assuming it was not terminated earlier in accordance with its terms, we retain a fully paid up and perpetual license to the product and certain intellectual property. The license agreement also provides that it may be terminated by either party in the case of continued material breach or provision of false reports, by the licensor pertaining to certain bankruptcy or insolvency circumstances regarding our company or by us upon ninety (90) days prior written notice.

On July 23, 1999, we entered into a perpetual Transaction Protocol agreement with Francine Behar-Cohen to acknowledge our right to use certain patents that Ms. Behar-Cohen had certain ownership rights with respect to and which are used in our EGP-437 Combination Product. The agreement also provides for us to pay Ms. Behar-Cohen a fee based on a percentage of the pre-tax turnover generated from sales of our EGP-437 Combination Product relating to our inclusion of the EyeGate[®] II Delivery System. The fees due under the agreement expired in January 2018, but we continue to maintain our rights under the agreement.

On September 12, 2013, Jade entered into an agreement with BioTime, Inc. granting to it the exclusive worldwide right to commercialize cross-linked thiolated carboxymethyl hyaluronic acid ("CMHA-S") for ophthalmic treatments in humans. The agreement calls for a license issue fee paid to BioTime of \$50,000, and requires us (through our Jade subsidiary) to pay an annual fee of \$30,000 and royalties to BioTime based on revenue relating to any product incorporating the CMHA-S technology. The agreement expires when patent protection for the CMHA-S technology lapses.

On July 9, 2015, we entered into an exclusive worldwide licensing agreement with a subsidiary of Valeant through which we granted Valeant exclusive, worldwide commercial and manufacturing rights to our EGP-437 Combination Product in the field of anterior uveitis, as well as a right of last negotiation to license the EGP-437 Combination Product for other indications. Under the agreement, Valeant paid us an upfront payment of \$1.0 million. We are eligible to receive milestone payments totaling up to \$32.5 million, upon and subject to the achievement of certain specified developmental and commercial milestones. In addition, we are eligible to receive royalties based on a specified percent of net sales of the Combination Product throughout the world, subject to adjustment in certain circumstances.

On June 17, 2016, we entered into an exclusive worldwide license agreement with the University of Utah Research Foundation to further the commercial development of the NASH technology, together with alkylated HA. The agreement calls for payments due to the University of Utah, consisting of an initial license grant fee of \$15,000 and an annual licensing fee, initially \$5,000, and escalating ratably up to \$20,000 in 2021.

On February 21, 2017, we entered into an exclusive, worldwide licensing agreement with a subsidiary of Valeant (the "New Valeant Agreement"), through which we granted Valeant exclusive, worldwide commercial and manufacturing rights to its EGP-437 Combination Product in the field of ocular iontophoretic treatment for post-operative ocular inflammation and pain in ocular surgery patients (the "New Field"). Under the New Valeant Agreement, Valeant paid us an initial upfront payment of \$4.0 million, and we are eligible to receive milestone payments totaling up to approximately \$99.0 million, upon and subject to the achievement of certain specified developmental and commercial progress of the EGP-437 Combination Product for the New Field. In addition, we are eligible under the New Valeant Agreement to receive royalties based on a specified percent of net sales of its EGP-437 Combination Product for the New Field throughout the world, subject to adjustment in certain circumstances.

Confidential Information and Inventions Assignment Agreements

We currently require and will continue to require each of our employees and consultants to execute confidentiality agreements upon the commencement of such individual's employment, consulting or collaborative relationships with us. These agreements provide that all confidential information developed or made known during the course of the relationship with us be kept confidential and not disclosed to third parties except in specific circumstances

In the case of employees, the agreements provide that all inventions resulting from such individual's work performed for us, utilizing our property or relating to our business and conceived or completed by the individual during employment shall be our exclusive property to the extent permitted by applicable law. Our consulting agreements also provide for assignment to us of any intellectual property resulting from services performed by a consultant for us.

Sales and Marketing

As described above, we have entered into two exclusive global License Agreements with subsidiaries of Valeant, through which we have granted Valeant exclusive, worldwide commercial and manufacturing rights to our EyeGate® II Delivery System and EGP-437 Combination Product in the fields of anterior uveitis and ocular iontophoretic treatment for post-operative ocular inflammation and pain in ocular surgery patients, as well as a right of last negotiation to license the Combination Product for other indications.

If EyeGate OBG is approved by the FDA for commercial sale, we may enter into agreements with third parties to sell EyeGate OBG or we may choose to market EyeGate OBG directly to physicians in the United States through our own sales and marketing force and related internal commercialization infrastructure. If we market EyeGate OBG directly, we will need to incur significant additional expenses and commit significant additional management resources to establish and train an internal sales and marketing force to market and sell EyeGate OBG.

Manufacturing

We do not have, and do not intend to establish an in-house manufacturing capability for our products and as a result we will depend heavily on third-party contract manufacturers to produce and package our products. We currently do not have any contractual relationships with third-party manufacturers. We intend to rely on third-party suppliers that we have used in the past for the manufacturing of various components that comprise our EGP-437 Combination Product, EyeGate OBG and other contemplated clinical trials.

Corporate Information

Our principal executive offices are located at 271 Waverley Oaks Road, Suite 108, Waltham, MA 02452, and our telephone number is (781) 788-9043. Our website address is www.eyegatepharma.com. Our website and the information contained in, or accessible through, our website will not be deemed to be incorporated by reference into this prospectus and does not constitute part of this prospectus. You should not rely on any such information in making your decision whether to purchase our securities.

Implications of Being an Emerging Growth Company

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or JOBS Act, enacted in April 2012. An "emerging growth company" may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions until December 31, 2020. However, if certain events occur prior to December 31, 2020, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.07 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company before such date.
We have elected to take advantage of certain of the reduced disclosure obligations and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than the information you might receive from other public reporting companies in which you hold equity interests.
in which you lote equity interests.

THE OFFERING

Securities offered by us shares of our common stock

> Warrants to purchase up to shares of our common stock

shares of Series C Preferred Stock that are Up to convertible into an aggregate of up to shares of common

stock, subject to certain adjustments.

Warrants The warrants will be exercisable at an initial exercise price of \$

per share. The warrants are exercisable at any time for a period of five years from the date on which such warrants were issued. This prospectus also relates to the offering of the shares of common stock

issuable upon exercise of the warrants.

Series C Preferred Stock Each share of Series C Preferred Stock is convertible at any time at the

holder's option into a number of shares of common stock equal to \$1,000 divided by the Conversion Price. Notwithstanding the foregoing, we shall not effect any conversion of Series C Preferred Stock, to the extent that, after giving effect to an attempted conversion, the holder of shares of Series C Preferred Stock (together with such holder's affiliates, and any persons acting as a group together with such holder or any of such holder's affiliates) would beneficially own a number of shares of our common stock in excess of 4.99% of the shares of our common stock then outstanding after giving effect to such exercise. For additional information, see "Description of Our Capital Stock — Series C Convertible Preferred Stock" on page 31 of this

prospectus.

Common Stock outstanding after this

offering

shares, assuming that we sell all securities offered pursuant to this prospectus and assuming conversion of all shares of Series C Preferred Stock but no exercise of the warrants issued in the

offering.

\$1,000

Price per share of common stock and

warrant

\$

Price per share of Series C Preferred

Stock and ___ warrants

Use of proceeds

We intend to use the net proceeds from this offering to support our operations, including for clinical trials, for working capital and for other general corporate purposes, which will include the pursuit of our other research and development efforts and could also include the acquisition or in-license of other products, product candidates or technologies candidates or technologies. See "Use of Proceeds" on page 27.

Risk factors Investing in our securities involves a high degree of risk. See "Risk

Factors" beginning on page 20 of this prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus, for a discussion of information that should be

considered in connection with an investment in our securities.

Nasdaq Capital Market symbol

EYEG. We do not plan on applying to list the warrants or the Series C Preferred Stock on the Nasdaq Capital Market, any national securities exchange or any other nationally recognized trading system. Without an active trading market, the liquidity of the warrants and Series C Preferred Stock will be limited.

The number of shares of our common stock to be outstanding after this offering is based on 17,257,255 shares of our common stock outstanding as of March 22, 2018 and assumes that the shares of Series C Preferred Stock sold in the offering have been converted, but does not include, as of such date:

- 2,168,503 shares of common stock issuable upon exercise of options outstanding under our 2005 Equity Incentive Plan and 2014 Equity Incentive Plan, at a weighted-average exercise price of approximately \$2.24 per share;
- 9,455,961 shares of our common stock issuable upon the exercise of outstanding warrants to purchase shares of our common stock with a weighted-average exercise price of \$3.26 per share;
- 190,911 shares of common stock reserved for future issuance under our 2014 Equity Incentive Plan;
- 117,090 shares of common stock reserved for future issuance under our 2014 Employee Stock Purchase
- 400,000 shares of common stock issuable upon the conversion of outstanding shares of Series B Convertible Preferred Stock; and
- shares of common stock issuable upon the exercise of warrants to be issued to investors in this offering at an exercise price of \$

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks and uncertainties and all other information contained in or incorporated by reference in this prospectus, including the risks and uncertainties discussed under "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017. All of these risk factors are incorporated by reference herein in their entirety. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described herein and in the documents incorporated herein by reference.

We have broad discretion to determine how to use the proceeds raised in this offering, and we may not use the proceeds effectively.

Our management will have broad discretion over the use of proceeds from this offering, and we could spend the proceeds from this offering in ways with which you may not agree or that do not yield a favorable return. We intend to use the net proceeds from this offering for clinical trials, for working capital and for other general corporate purposes, which will include the pursuit of our other research and development efforts and could also include the acquisition or in-license of other products, product candidates or technologies. If we do not invest or apply the proceeds of this offering in ways that improve our operating results, we may fail to achieve expected financial results, which could cause our stock price to decline.

You will experience immediate and substantial dilution when you purchase shares in this offering.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the assumed sale by us of shares of our common stock in this offering at an assumed public offering price of \$ per share of common stock and warrant, the last reported sale price of our common stock on the Nasdaq Capital Market on , 2018, assuming conversion of all shares of Series C Preferred Stock into shares of common stock, and after deducting the placement agent fees and estimated offering expenses payable by us, investors in this offering will suffer an immediate dilution of \$ per share.

If we issue additional common stock, or securities convertible into or exchangeable or exercisable for common stock, our stockholders, including investors who purchase shares of common stock in this offering, may experience additional dilution, and any such issuances may result in downward pressure on the price of our common stock. We may not be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. See "Dilution" on page 28 of this prospectus for a more detailed discussion of the dilution you will incur in connection with this offering.

You will experience immediate and substantial dilution in the net tangible book value per share of the Series C Preferred Stock you purchase.

Since the price per share of our Series C Preferred Stock being offered is substantially higher than the net tangible book per share of our underlying common stock, you will suffer substantial dilution in the net tangible book value of the shares that you purchase in this offering. Based on an assumed combined public offering price of \$\ \text{per share of common stock and warrant (the last reported sale price of our common stock on the Nasdaq Capital Market on \$\, 2018\), if you purchase Series C Preferred Stock in this offering, you will suffer immediate and substantial dilution of \$\ \text{per share in the net tangible book value of the shares of common stock underlying the Series C Preferred Stock. See the section entitled "Dilution" below for a more detailed discussion of the dilution you will incur if you purchase Series C Preferred Stock in this offering.

The issuance of additional equity securities may negatively impact the trading price of our common stock.

We have issued equity securities in the past, will issue equity securities in this offering and expect to continue to issue equity securities to finance our activities in the future. In addition, outstanding options and warrants to purchase our common stock may be exercised and additional options and warrants may be issued, resulting in the issuance of additional shares of common stock. The issuance by us of additional equity securities, including the shares of common stock issuable upon exercise of the warrants issued by us in this offering, would result in dilution to our stockholders, and even the perception that such an issuance may occur could have a negative impact on the trading price of our common stock.

There is no public market for the Series C preferred stock or the warrants to purchase shares of our common stock being offered by us in this offering.

There is no established public trading market for the Series C preferred stock or the warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Series C preferred stock or the warrants on any national securities exchange or other nationally recognized trading system, including the Nasdaq Capital Market. Without an active market, the liquidity of the Series C preferred stock and the warrants will be limited.

The warrants are speculative in nature.

The warrants do not confer any rights of common stock ownership on its holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price for a limited period of time. Specifically, commencing on the date of issuance, holders of the warrants may exercise their right to acquire the common stock and pay an exercise price of \$ per share, subject to certain adjustments, prior to five years from the date on which such warrants were issued, after which date any unexercised warrants will expire and have no further value. Moreover, following this offering, the market value of the warrants, if any, is uncertain and there can be no assurance that the market value of the warrants will equal or exceed their imputed offering price. The warrants will not be listed or quoted for trading on any market or exchange. There can be no assurance that the market price of the common stock will ever equal or exceed the exercise price of the warrants, and consequently, whether it will ever be profitable for holders of the warrants to exercise the warrants.

A substantial number of shares of our common stock may be sold in this offering, which could cause the price of our common stock to decline.

In this offering, we will sell up to shares of common stock and shares of Series C Preferred Stock convertible into up to shares of common stock, collectively representing approximately % of our outstanding common stock as of March 22, 2018. This sale and any future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of common stock or the availability of those shares of common stock for sale will have on the market price of our common stock.

A significant number of additional shares of our common stock may be issued upon the conversion of existing securities, including the Series C Preferred Stock, which issuances would substantially dilute existing stockholders and may depress the market price of our common stock.

As of March 22, 2018, there were 17,257,255 shares of common stock outstanding, and shares of Series B Convertible Preferred Stock that are convertible into 400,000 shares of common stock. In addition, shares of common stock will be issuable upon conversion of our Series C Preferred Stock. The issuance of any such shares of common stock would substantially dilute the proportionate ownership and voting power of existing security holders, and their issuance, or the possibility of their issuance, may depress the market price of our common stock.

Upon conversion of the Series C Preferred Stock, holders may receive less valuable consideration than expected because the value of our common stock may decline after such holders exercise their conversion right but before we settle our conversion obligation.

Under the Series C Preferred Stock, a converting holder will be exposed to fluctuations in the value of our common stock during the period from the date such holder surrenders shares of Series C Preferred Stock for conversion until the date we settle our conversion obligation. Upon conversion, we will be required to deliver the shares of our common stock, together with a cash payment for any fractional share (if so elected by the Company), on the third business day following the relevant conversion date. Accordingly, if the price of our common stock decreases during this period, the value of the shares of common stock that you receive will be adversely affected and would be less than the conversion value of the Series C Preferred Stock on the conversion date.

We may issue additional series of preferred stock that rank senior or equally to the Series C Preferred Stock as to dividend payments and liquidation preference.

Neither our restated certificate of incorporation nor the Certificate of Designation for the Series C Preferred Stock prohibits us from issuing additional series of preferred stock that would rank senior or equally to the Series C Preferred Stock as to dividend payments and liquidation preference. Our restated certificate of incorporation provides that we have the authority to issue up to 10,000,000 shares of preferred stock. The issuances of other series of preferred stock could have the effect of reducing the amounts available to the Series C Preferred Stock in the event of our liquidation, winding-up or dissolution. It may also reduce cash dividend payments on the Series C Preferred Stock if we do not have sufficient funds to pay dividends on all Series C Preferred Stock outstanding and outstanding parity preferred stock.

Our Series C Preferred Stock will rank junior to all our liabilities to third party creditors in the event of a bankruptcy, liquidation or winding up of our assets.

In the event of bankruptcy, liquidation or winding up, our assets will be available to pay obligations on our Series C Preferred Stock only after all our liabilities have been paid. Our Series C Preferred Stock will effectively rank junior to all existing and future liabilities held by third party creditors. The terms of our Series C Preferred Stock do not restrict our ability to raise additional capital in the future through the issuance of debt. In the event of bankruptcy, liquidation or winding up, there may not be sufficient assets remaining, after paying our liabilities, to pay amounts due on any or all of our Series C Preferred Stock then outstanding.

Future issuances of preferred stock may adversely affect the market price for our common stock.

Additional issuances and sales of preferred stock, or the perception that such issuances and sales could occur, may cause prevailing market prices for our common stock to decline and may adversely affect our ability to raise additional capital in the financial markets at times and prices favorable to us.

We are not in compliance with Nasdaq's continued listing requirements. If we are unable to comply with those listing requirements, our common stock could be delisted which would have a materially adverse effect on the marketability of our comment stock.

On November 20, 2017, we received a notice from the Nasdaq Capital Market, LLC, or Nasdaq, notifying us that as of November 20, 2017, we were not in compliance with Nasdaq Listing Rule 5550(b)(1), as we did not maintain a minimum required stockholders' equity of \$2.5 million, or Nasdaq Listing Rule 5550(b)(2), as the market value of our listed securities ("MVLS") was below the minimum \$35 million for the previous 30 consecutive business days, or Nasdaq Listing Rule 5550(b)(3), as we had not had net income from continuing operations in the latest fiscal year or in two of the last three fiscal years. In accordance with Nasdaq Listing Rule 5810(c)(2)(A)(i), we submitted a plan to regain compliance to Nasdaq on January 4, 2018. Nasdaq accepted that plan, and we have a period of 180 calendar days from receipt of the original notice, or until May 21, 2018, to regain compliance. To regain compliance, at any time during the 180 calendar day-compliance period our MVLS must close at \$35 million or more for a minimum of 10 consecutive business days or we must report stockholders' equity of at least \$2.5 million.

Additionally, on March 20, 2018, we received a written notification Nasdaq indicating that we are not in compliance with Nasdaq Listing Rule 5550(a)(2), as the closing bid price for our common stock was below the \$1.00 per share requirement for the last 30 consecutive business days. The notice letter states that we will have 180 calendar days, until September 17, 2018 (the "Initial Compliance Period"), to regain compliance with the minimum bid price requirement. In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we can regain compliance if the closing bid price of our common stock is at least \$1.00 for a minimum of 10 consecutive business days. If we do not achieve compliance with the minimum bid price requirement by the end of the Initial Compliance Period, we may be granted a second 180 day compliance period, as long as (a) on the last day of the Initial Compliance Period we are in compliance with the market value requirement for continued listing as well as all other listing standards, except for the minimum bid price requirement, and (b) we provide written notice of our intention to cure the deficiency during the second compliance period.

In the event that we do not regain compliance within the allotted compliance periods, we will receive written notification that our securities are subject to delisting. At that time, we may appeal the delisting determination to a hearings panel pursuant to the procedures set forth in the applicable Nasdaq Listing Rules.

A delisting of our common stock would have an adverse effect on the market liquidity of our common stock and, as a result, the market price for our common stock could become more volatile. Further, a delisting also could make it more difficult for us to raise additional capital.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and the documents incorporated herein by reference contain, forward-looking statements that involve risks and uncertainties. The forward-looking statements are contained principally in the sections of this prospectus and the documents incorporated herein by reference under the captions "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business." In some cases, you can identify forward-looking statements by terms such as "may," "might," "will," "objective," "intend," "should," "seek," "aim," "think," "optimistic," "strategy," "goals," "sees," "new," "guidance," "future," "continue," "drive," "growth," "long-term," "develop," "possible," "emerging," "opportunity," "pursue," "could," "can," "would," "expect," "believe," "anticipate," "project," "target," "design," "estimate," "predict," "potential," "plan" or the negative of these terms, and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the timing and success of preclinical studies and clinical trials conducted by us and our development partners;
- the ability to obtain and maintain regulatory approval of our product candidates, and the labeling for any approved products;
- · the scope, progress, expansion, and costs of developing and commercializing our product candidates;
- the size and growth of the potential markets for our product candidates and the ability to serve those markets:
- our expectations regarding our expenses and revenue, the sufficiency of our cash resources and needs for additional financing;
- the rate and degree of market acceptance of any of our product candidates;
- · our expectations regarding competition;
- our anticipated growth strategies;
- · our ability to attract or retain key personnel;
- · our ability to establish and maintain development partnerships;
- our expectations regarding federal, state and foreign regulatory requirements;
- regulatory developments in the U.S. and foreign countries;
- our ability to obtain and maintain intellectual property protection for our product candidates;
- · the anticipated trends and challenges in our business and the market in which we operate; and
- · our use of proceeds from this offering.

Any forward-looking statement made by us in this prospectus speaks only as of the date on which it is made. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

PRICE RANGE OF COMMON STOCK

Our common stock is listed and has traded on the Nasdaq Capital Market under the symbol "EYEG" since July 31, 2015. From February 19, 2015, the date our initial public offering closed, to July 30, 2015, our common stock was quoted on the OTCQB Venture Marketplace (the "OTCQB") under the symbol "EYEG". The following table sets forth, for the periods indicated, the range of high and low sales prices of our common stock as reported by the Nasdaq Capital Market.

Fiscal Year Ending December 31, 2018	High	Low
First Quarter (through March 22, 2018)	\$1.34	\$0.48
Fiscal Year Ended December 31, 2017	High	Low
First Quarter	\$3.90	\$1.42
Second Quarter	2.53	1.21
Third Quarter	1.47	0.90
Fourth Quarter	\$1.38	\$0.99
Fiscal Year Ended December 31, 2016	High	Low
First Quarter	\$4.11	\$1.59
Second Quarter	3.75	2.52
Third Quarter	2.56	1.46
Fourth Quarter	\$1.85	\$1.26

On March 22, 2018, the last reported sale price of our common stock as reported by the Nasdaq Capital Market was \$0.48 per share. As of such date, we had approximately 65 stockholders of record.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain future earnings, if any, and all currently available funds for use in the operation of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our Board of Directors after considering our financial condition, results of operations, capital requirements, business prospects and other factors the Board of Directors deems relevant, and subject to the restrictions contained in our current or future financing instruments.

USE OF PROCEEDS

We estimate the net proceeds from this offering will be approximately \$\\$\text{million}, after deducting placement agent fees and expenses and our estimated offering expenses, and based on the assumed combined public offering price of \$\\$\text{per share of common stock and warrant (the last reported sale price of our common stock on the Nasdaq Capital Market on \$\,\), 2018) and excluding the proceeds, if any, from the exercise of the warrants issued pursuant to this offering.

A \$0.25 increase (decrease) in the assumed combined public offering price of \$ per share of common stock and warrant would increase (decrease) the net proceeds to us from this offering by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated placement agent fees and expenses and estimated offering expenses payable by us.

Similarly, a one million share increase (decrease) in the number of shares of common stock and an increase (decrease) of 500,000 in the number of warrants offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us by \$ million, assuming the assumed combined public offering price of \$ per share of common stock and warrant remains the same, and after deducting estimated placement agent fees and expenses and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering, together with other available funds, to support our operations, including for clinical trials, for working capital and for other general corporate purposes, which will include the pursuit of our other research and development efforts and could also include the acquisition or inlicense of other products, product candidates or technologies, though no such acquisition or in-license is current contemplated. We have not yet determined the amount of net proceeds to be used specifically for any of the foregoing purposes.

Pending use of the proceeds as described above, we intend to invest the net proceeds of this offering in short-term, interest-bearing, investment-grade securities or certificates of deposit.

The amounts and timing of our actual expenditures will depend on numerous factors, including the progress of our clinical trials, as well as the amount of cash used in our operations. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds and investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering.

Based upon our historical and anticipated future growth and our financial needs, we may engage in additional financings of a character and amount that we determine as the need arises. We may raise additional capital through additional public or private financings, the incurrence of debt and other available sources.

DILUTION

If you purchase our common stock, Series C Preferred Stock, or both, in this offering, assuming the conversion of the Series C Preferred Stock into shares of our common stock, you will experience dilution to the extent of the difference between the public offering price per share in this offering and our as adjusted net tangible book value per share immediately after this offering. Net tangible book value (deficit) per share is equal to the amount of our total tangible assets, less total liabilities, divided by the number of outstanding shares of our common stock. As of December 31, 2017, our net tangible book value was \$5,132,391, or approximately \$0.30 per share.

After giving effect to the sale of shares of common stock by us at an assumed combined public offering price of \$ per share of common stock and warrant (the last reported sale price of our common stock on the Nasdaq Capital Market on , 2018), assuming that all shares of Series C Preferred Stock are converted into shares of common stock and after deducting estimated placement agent fees and expenses and estimated offering expenses, our as adjusted net tangible book value as of December 31, 2017 would have been per share of common stock, which excludes the warrants to purchase approximately \$ million, or \$ shares of our common stock to be issued to investors in this offering. This represents an immediate increase in net tangible book value of \$ per share of common stock to existing stockholders and immediate dilution of \$ per share of common stock to investors purchasing our common stock in this offering at the assumed public offering price. The following table illustrates this dilution on a per share basis:

Assumed public offering price per share of common stock and warrant	\$
Net tangible book value per share as of December 31, 2017	\$0.30
Increase in net tangible book value per share after giving effect to this offering	\$
As adjusted net tangible book value per share after giving effect to this offering	\$
Dilution per share to new investors	\$

Each \$0.25 increase (decrease) in the assumed public offering price of \$ per share of common stock and warrant would increase (decrease) the as adjusted net tangible book value by \$ per share of common stock and the dilution to new investors by \$ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the estimated placement agent fees and expenses and estimated offering expenses payable by us.

We may also increase or decrease the number of shares we are offering. An increase of 1,000,000 shares in the number of shares of common stock and an increase of 500,000 in the number of warrants offered by us, as set forth on the cover page of this prospectus, would increase our as adjusted net tangible book value by approximately million, or approximately \$ per share of common stock, and decrease the dilution per share to investors in this offering by approximately \$ per share, assuming that the assumed public offering price per share of common stock and warrant remains the same, and after deducting the estimated placement agent fees and expenses and estimated offering expenses payable by us. Similarly, a decrease of 1,000,000 shares in the number of shares of common stock and a decrease of 500,000 in the number of warrants offered by us, as set forth on the cover page of this prospectus, would decrease our as adjusted net tangible book value by approximately \$ approximately \$ per share, and increase the dilution per share to investors in this offering by approximately per share, assuming that the assumed public offering price per share of common stock and warrant remains the same, and after deducting the estimated placement agent fees and expenses and estimated offering expenses payable by us. The information discussed above is illustrative only and will adjust based on the actual public offering price, the actual number of shares of common stock, Series C Preferred Stock and warrants that we offer in this offering, and other terms of this offering determined at pricing.

The above discussion and table do not take into account further dilution to investors purchasing our common stock in this offering that could occur upon the exercise of outstanding options and warrants having a per share exercise price less than the public offering price per share in this offering. To the extent that outstanding options or warrants outstanding as of December 31, 2017, are exercised or other shares are issued, investors purchasing our common stock in this offering will experience further dilution. In

addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe that we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of our common stock, including through the sale of securities convertible into or exchangeable or exercisable for common stock, the issuance of these securities could result in further dilution to our stockholders, including investors purchasing our common stock in this offering.

The table and discussion above are based on 17,257,255 shares of our common stock outstanding as of December 31, 2017, and assumes that the shares of Series C Preferred Stock sold in the offering have been converted, but does not include, as of such date:

- 1,893,003 shares of common stock issuable upon exercise of options outstanding under our 2005 Equity Incentive Plan and 2014 Equity Incentive Plan, at a weighted-average exercise price of approximately \$2.49 per share;
- 9,455,961 shares of our common stock issuable upon the exercise of outstanding warrants to purchase shares of our common stock with a weighted-average exercise price of \$3.26 per share;
- 116,411 shares of common stock reserved for future issuance under our 2014 Equity Incentive Plan;
- 117,090 shares of common stock reserved for future issuance under our 2014 Employee Stock Purchase Plan;
- 400,000 shares of common stock issuable upon the conversion of outstanding shares of Series B Convertible Preferred Stock; and
- shares of common stock issuable upon the exercise of warrants to be issued to investors in this offering at an exercise price of \$ per share.

DESCRIPTION OF OUR CAPITAL STOCK

General

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.01 per share, and 10,000,000 shares of preferred stock, par value \$0.01 per share, of which 3,750 shares have been designated as Series A Convertible Preferred Stock, 10,000 shares have been designated as Series B Convertible Preferred Stock and shares have been designated as Series C Convertible Preferred Stock. The following description summarizes some of the terms of our restated certificate of incorporation and amended and restated bylaws, but does not purport to be complete and is qualified in its entirety by the provisions of our restated certificate of incorporation and amended and restated bylaws, copies of which have been filed as exhibits to the registration statement of which this prospectus is a part.

Common Stock

Outstanding Shares. There were 17,257,255 shares of our common stock outstanding as of March 22, 2018. As of March 22, 2018, there were 2,168,503 shares of common stock subject to outstanding options, and 9,455,961 shares of common stock subject to outstanding warrants and 400,000 shares of common stock issuable upon the conversion of outstanding shares of Series B Convertible Preferred Stock.

Voting Rights. Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of the stockholders, including the election of directors. Except as otherwise provided by law or our restated certificate of incorporation or bylaws, all matters other than the election of directors submitted to the stockholders at any meeting shall be decided by the affirmative vote of a majority of the outstanding shares of common stock present in person or represented by proxy at the meeting and entitled to vote thereon. Directors are elected by a plurality of the votes cast at the meeting. Our restated certificate of incorporation and amended and restated bylaws do not provide for cumulative voting rights. Because of this, the holders of a majority of the shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they should so choose.

Dividends. Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of our outstanding shares of common stock are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors out of legally available funds. At present, we have no plans to issue dividends. See the section titled "Dividend Policy".

Liquidation. In the event of our liquidation, dissolution or winding up, holders of common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Other Rights and Preferences. Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of our Series A Preferred Stock and any series of our preferred stock that we may designate and issue in the future.

Fully Paid and Nonassessable. All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Provisions in our restated certificate of incorporation provide that our Board of Directors is authorized to issue preferred stock in one or more series, to establish the number of shares to be included in each such series and to fix the designation, powers, preferences and rights of such shares and any qualifications, limitations or restrictions thereof. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of our Company without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. The issuance of preferred stock with voting and conversion rights may adversely affect the voting power of the holders of common stock, including the loss of voting control to others.

Series C Convertible Preferred Stock

General. Our Board of Directors is authorized to issue up to 10,000,000 shares of preferred stock in one or more series without shareholder approval. Our Board of Directors may determine the designations, powers, preferences and the relative, participating, optional or other special rights, and any qualification, limitations and restrictions, of each series of preferred stock. Our Board of Directors has designated 3,750 shares of preferred stock as Series A Convertible Preferred Stock, 10,000 shares of preferred stock as Series B Convertible Preferred Stock and shares of preferred stock as Series C Convertible Preferred Stock, which we refer to herein as the Series C Preferred Stock. As of March 22, 2018, there were no shares of Series A Convertible Preferred Stock outstanding and 600 shares of Series B Convertible Preferred Stock outstanding.

Rank. The Series C Preferred Stock ranks (1) on parity with our common stock on an "as converted" basis, (2) on parity with our Series A Convertible Preferred Stock and Series B Convertible Preferred Stock, (3) senior to any series of our capital stock hereafter created specifically ranking by its terms junior to the Series C Preferred Stock, (4) on parity with any series of our capital stock hereafter created specifically ranking by its terms on parity with the Series C Preferred Stock, and (5) junior to any series of our capital stock hereafter created specifically ranking by its terms senior to the Series C Preferred Stock in each case, as to dividends or distributions of assets upon our liquidation, dissolution or winding up whether voluntary or involuntary.

Conversion. Each share of the Series C Preferred Stock is convertible into shares of common stock at any time at the option of the holder, provided that the holder will be prohibited from converting Series C Preferred Stock into shares of our common stock if, as a result of such conversion, the holder would own more than 4.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of the shares of common stock issuable upon conversion of the Series C Preferred Stock, or, at the election of a holder, together with its affiliates, would own more than 9.99% of the number of shares of common stock outstanding immediately after giving effect to the issuance of the shares of common stock issuable upon conversion of the Series C Preferred Stock. The conversion rate of the Series C Preferred Stock is subject to proportionate adjustments for stock splits, reverse stock splits and similar events, but is not subject to adjustment based on price anti-dilution provisions.

Dividends. In addition to stock dividends or distributions for which proportionate adjustments will be made, holders of Series C Preferred Stock are entitled to receive dividends on shares of Series C Preferred Stock equal, on an as-if-converted-to-common-stock basis, to and in the same form as dividends actually paid on shares of the common stock when, as and if such dividends are paid on shares of the common stock. No other dividends are payable on shares of Series C Preferred Stock.

Voting Rights. Except as provided in the Certificate of Designation or as otherwise required by law, the holders of Series C Preferred Stock will have no voting rights. However, we may not, without the consent of holders of a majority of the outstanding shares of Series C Preferred Stock, alter or change adversely the powers, preferences or rights given to the Series C Preferred Stock, increase the number of authorized shares of Series C Preferred Stock, or enter into any agreement with respect to the foregoing.

Liquidation Rights. Upon any liquidation, dissolution or winding-up of the Company, whether voluntary or involuntary, the holders of Series C Preferred Stock are entitled to receive, pari passu with the holders of common stock, holders of Series A Convertible Preferred Stock and holders of Series B Convertible Preferred Stock (on an as-converted basis), out of the assets available for distribution to stockholders an amount equal to such amount per share as would have been payable had all shares of Series C Preferred Stock been converted into common stock immediately before such liquidation, dissolution or winding up, without giving effect to any limitation on conversion as a result of the Beneficial Ownership Limitation, as described below.

Beneficial Ownership Limitation. We may not effect any conversion of the Series C Preferred Stock, and a holder does not have the right to convert any portion of the Series C Preferred Stock to the extent that, after giving effect to the conversion set forth in a notice of conversion such holder would beneficially own in excess of the Beneficial Ownership Limitation, or such holder, together with such holder's affiliates, and any persons acting as a group together with such holder or affiliates, would beneficially own in excess of the Beneficial Ownership Limitation. The "Beneficial Ownership Limitation" is 4.99% of the number of

shares of the common stock outstanding immediately after giving effect to the issuance of shares of common stock issuable upon conversion of Series C Preferred Stock held by the applicable holder. A holder may, with 61 days prior notice to us, elect to increase or decrease the Beneficial Ownership Limitation; provided, however, that in no event may either the holder Beneficial Ownership Limitation or the affiliate Beneficial Ownership Limitation be 9.99% or greater.

Exchange Listing. We do not plan on making an application to list the shares of Series C Preferred Stock on the Nasdaq Capital Market, any national securities exchange or other nationally recognized trading system. Our common stock issuable upon conversion of the Series C Preferred Stock is listed on the Nasdaq Capital Market.

Failure to Deliver Conversion Shares. If we fail to timely deliver shares of common stock upon conversion of the Series C Preferred Stock (the "Conversion Shares") within the time period specified in the Certificate of Designation (within three trading days after delivery of the notice of conversion, or any shorter standard settlement period in effect with respect to trading market on the date notice is delivered), and if the holder has not exercised its Buy-In rights as described below with respect to such shares, then we are obligated to pay to the holder, as liquidated damages, an amount equal to \$50 per business day (increasing to \$100 per business day after the third business day and \$200 per business day after the tenth business day) for each \$5,000 of Conversion Shares for which the Series C Preferred Stock converted which are not timely delivered. If we make such liquidated damages payments, we are not also obligated to make Buy-In payments with respect to the same Conversion Shares.

Compensation for Buy-In on Failure to Timely Deliver Shares. If we fail to timely deliver the Conversion Shares to the holder, and if after the required delivery date the holder is required by its broker to purchase (in an open market transaction or otherwise) or the holder or its brokerage firm otherwise purchases, shares of common stock to deliver in satisfaction of a sale by the holder of the Conversion Shares which the holder anticipated receiving upon such conversion or exercise (a "Buy-In"), then we are obligated to (A) pay in cash to the holder the amount, if any, by which (x) the holder's total purchase price (including brokerage commissions, if any) for the shares of common stock so purchased, minus any amounts paid to the holder by us as liquidated damages for late delivery of such shares, exceeds (y) the amount obtained by multiplying (1) the number of Conversion Shares that we were required to deliver times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the holder, either reinstate the portion of the Series C Preferred Stock and equivalent number of Conversion Shares for which such conversion was not honored (in which case such conversion shall be deemed rescinded) or deliver to the holder the number of shares of common stock that would have been issued had we timely complied with its conversion and delivery obligations.

Subsequent Rights Offerings; Pro Rata Distributions. If we grant, issue or sell any common stock equivalents pro rata to the record holders of any class of shares of common stock (the "Purchase Rights"), then a holder of Series C Preferred Stock will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the holder could have acquired if the holder had held the number of shares of common stock acquirable upon conversion of the Series C Preferred Stock (without regard to any limitations on conversion). If we declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of common stock, then a holder of Series C Preferred Stock is entitled to participate in such distribution to the same extent as if the holder had held the number of shares of common stock acquirable upon complete conversion of the Series C Preferred Stock (without regard to any limitations on conversion).

Fundamental Transaction. If, at any time while the Series C Preferred Stock is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another person) is completed pursuant to which holders of common stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding common stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization

of the common stock or any compulsory share exchange pursuant to which the common stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another person whereby such other person acquires more than 50% of the outstanding shares of common stock (not including any shares of common stock held by the other person or other persons making or party to, or associated or affiliated with the other persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then the Series C Preferred Stock automatically converts and the holder will receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to the Beneficial Ownership Limitation), the number of shares of common stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of common stock for which the Series C Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to the Beneficial Ownership Limitation). For purposes of any such conversion, the determination of the conversion ratio will be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of common stock in such Fundamental Transaction. If holders of common stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the holder will be given the same choice as to the Alternate Consideration it receives upon automatic conversion of the Series C Preferred Stock following such Fundamental Transaction.

Warrants

The following is a brief summary of the material terms of the warrants offered pursuant to this prospectus and is subject in all respects to the provisions contained in the warrants, the form of which is filed as an exhibit to this prospectus. As of March 22, 2018, there were warrants to purchase 9,455,961 shares of our common stock outstanding. The previously issued warrants all have a weighted average exercise price of \$3.26 per warrant and have expiration dates between 2020 and 2025.

Exercisability. Holders may exercise warrants at any time up to 11:59 p.m., New York time, on the date that is five years after the date on which such warrants were issued. The warrants are exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise discussed below). The holder of warrants does not have the right to exercise any portion of the warrant if the holder would beneficially own in excess of 4.99% of the shares of our common stock outstanding immediately after giving effect to such exercise. This percentage may, however, be raised or lowered to an amount not to exceed 9.99% at the option of the holder upon at least 61 days' prior notice from the holder to us.

Cashless Exercise. At any time when a registration statement covering the issuance of the shares of common stock issuable upon exercise of the warrants is not effective, the holder may, at its option, exercise its warrants on a cashless basis. When exercised on a cashless basis, a portion of the warrant is cancelled in payment of the purchase price payable in respect of the number of shares of our common stock purchasable upon such exercise.

Exercise Price. The exercise price of common stock purchasable upon exercise of the warrants is \$ per share. The exercise price and the number of shares issuable upon exercise of the warrants is subject to appropriate adjustment in the event of recapitalization events, stock dividends, stock splits, stock combinations, reclassifications or similar events affecting our common stock. Holders of the warrants are entitled to participate in any subsequent rights offering or distribution of our assets on an as-if-exercised basis.

Transferability. The warrants may be transferred at the option of the holder upon surrender of the warrants with the appropriate instruments of transfer.

Exchange Listing. We do not plan on making an application to list the warrants on the Nasdaq Capital Market, any national securities exchange or other nationally recognized trading system. Our common stock underlying the warrants is listed on the Nasdaq Capital Market.

Fundamental Transactions. In the event of a fundamental transaction, as described in the warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the holders of the warrants will be entitled to receive upon exercise of the warrants the kind and amount of securities with cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. In addition, in certain circumstances, upon a fundamental transaction, the holder will have the right to require us to repurchase their warrants at their fair value using the Black Scholes option pricing formula; provided, however, such holder may not require us or our successor entity to repurchase the warrants for the Black Scholes value solely in connection with a fundamental transaction that is not approved by our board of directors, and therefore not within our control.

Rights as Stockholder. Except as otherwise provided in the warrants (such as the rights described above of a warrant holder upon our sale or grant of any rights to purchase stock, warrants or securities or other property to our stockholders on a pro rata basis) or by virtue of such holder's ownership of shares of our common stock, the holders of the warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until they exercise their warrants.

Fractional Shares. No fractional shares of common stock will be issued upon the exercise of the warrants. Rather, the number of shares of common stock to be issued will be rounded down to the nearest whole number.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Some provisions of Delaware law, our restated certificate of incorporation and our amended and restated bylaws contain provisions that could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our Board of Directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Undesignated Preferred Stock. The ability of our Board of Directors, without action by the stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with voting or other rights or preferences as designated by our Board of Directors could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our Company.

Stockholder Meetings. Our amended and restated bylaws provide that a special meeting of stockholders may be called only by our chairman of the board or chief executive officer (or president, if there is no chief executive officer), or by a resolution adopted by a majority of our Board of Directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals. Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of the Board of Directors or a committee of the Board of Directors.

Elimination of Stockholder Action by Written Consent. Our restated certificate of incorporation and amended and restated bylaws eliminate the right of stockholders to act by written consent without a meeting.

Staggered Board. Our Board of Directors is divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by our stockholders. This system of electing and removing directors may tend to discourage a third-party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Removal of Directors. Our restated certificate of incorporation provides that no member of our Board of Directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds (2/3) of the total voting power of all of our outstanding voting stock then entitled to vote in the election of directors.

Stockholders Not Entitled to Cumulative Voting. Our restated certificate of incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Delaware Anti-Takeover Statute. We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed to be "interested stockholders" from engaging in a "business combination" with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the Board of Directors.

Amendment of Charter Provisions. The amendment of any of the above provisions, except for the provision making it possible for our Board of Directors to issue preferred stock, would require approval by holders of at least 66 2/3% of the total voting power of all of our outstanding voting stock.

The provisions of Delaware law, our restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Listing

Shares of our common stock are quoted on the Nasdaq Capital Market under the symbol "EYEG."

Registration Rights

In connection with our initial public offering in February 2015, we issued warrants to the underwriters for that offering that provide for certain registration rights to the holders thereof. Each of the warrants provide that the holder shall have certain rights to participate in registrations of our common stock that we may decide to do, from time to time.

PLAN OF DISTRIBUTION

Pursuant to an engagement agreement, we have engaged H.C. Wainwright & Co., LLC, or the placement agent, to act as our exclusive placement agent in connection with this offering of our securities pursuant to this prospectus on a reasonable best efforts basis. The terms of this offering were subject to market conditions and negotiations between us, the placement agent and prospective investors. The engagement agreement does not give rise to any commitment by the placement agent to purchase any of our securities, and the placement agent will have no authority to bind us by virtue of the engagement agreement. Further, the placement agent does not guarantee that it will be able to raise new capital in any prospective offering. The placement agent may engage sub-agents or selected dealers to assist with the offering.

Only certain institutional investors purchasing the securities offered hereby will execute a securities purchase agreement with us, providing such investors with certain representations, warranties and covenants from us, which representations, warranties and covenants will not be available to other investors who will not execute a securities purchase agreement in connection with the purchase of the securities offered pursuant to this prospectus. Therefore, those investors shall rely solely on this prospectus in connection with the purchase of securities in the offering.

We will deliver the securities being issued to the investors upon receipt of investor funds for the purchase of the securities offered pursuant to this prospectus. We expect to deliver the securities being offered pursuant to this prospectus on or about , 2018.

We have agreed to pay the placement agent a total cash fee equal to 7.0% of the gross proceeds of this offering plus a management fee equal to 0.5% of the gross proceeds raised in this offering. We will also pay the placement agent a non-accountable expense allowance of \$25,000 and reimbursement for the placement agent's legal fees and expenses in the amount of up to \$100,000. We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agent fees and expenses, will be approximately \$

We have also agreed to give the placement agent, subject to a successful completion of this offering, a right of first refusal to act as our lead underwriter or placement agent for any further capital raising transactions undertaken by us until the nine-month anniversary following the consummation of the offering, subject to certain conditions.

We have agreed to indemnify the placement agent and specified other persons against certain liabilities relating to or arising out of the placement agent's activities under the placement agency agreement and to contribute to payments that the placement agent may be required to make in respect of such liabilities.

The placement agent may 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 securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the 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 common stock and warrants by the placement agent acting as principal. Under these rules and regulations, the placement agent:

- · 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.

Determination of offering price

The public offering price of the securities we are offering was negotiated between us and the investors, in consultation with the placement agent based on the trading of our common stock prior to the offering, among other things. Other factors considered in determining the public offering price of the shares of our

common stock we are offering include the history and prospects of the Company, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as were deemed relevant.

Listing

Our common stock is listed on the Nasdaq Capital Market under the symbol "EYEG."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is VStock Transfer, LLC.

Other Relationships

From time to time, the placement agent has provided, and may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions. However, except as disclosed in this prospectus, we have no present arrangements with the placement agent for any further services.

The placement agent in this offering served as our exclusive placement agent in securities offerings we consummated in June 2016 and June 2017, pursuant to which it received compensation, including warrants to purchase shares of our common stock. Additionally, the placement agent in this offering serves as the sales agent for an at-the-market equity offering that we commenced in May 2016, for which it has received cash compensation.

LEGAL MATTERS

Certain legal matters with respect to the validity of the securities offered by this prospectus will be passed upon for us by Burns & Levinson LLP, Boston, MA. Lowenstein Sandler LLP, New York, New York, is acting as counsel to the placement agent in connection with this offering.

EXPERTS

The consolidated balance sheets of EyeGate Pharmaceuticals, Inc. and subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years then ended, have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their report, which is incorporated by reference herein, which report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the securities being offered by this prospectus. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

We are subject to the information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (www.sec.gov).

We post on our public website (www.eyegatepharma.com) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it under File No. 001-36672, which means that we can disclose important information to you by referring you to those publicly available 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 the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the SEC, and all documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any future report or document that is not deemed filed under such provisions, prior to the termination of the offering:

- Our Annual Report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 2, 2018:
- Our Current Reports on Form 8-K filed with the SEC on January 4, 2018, February 5, 2018 and March 22, 2018 (in each case, except for information contained therein which is furnished rather than filed); and
- The description of our common stock contained in our registration statement on Form 8-A12B filed with the SEC on July 28, 2015 and amended on July 30, 2015.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus is modified or superseded for purposes of the prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document that also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered a copy of the documents incorporated by reference into this prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following address:

EyeGate Pharmaceuticals, Inc. 271 Waverley Oaks Road, Suite 108 Waltham, MA 02452 Telephone: (781) 788-8869



Up to Shares of Common Stock,
Warrants to Purchase up to Shares of Common Stock and
Up to Shares of Series C Convertible Preferred Stock
(shares of Common Stock underlying the Series C
Convertible Preferred Stock)

PROSPECTUS

Sole Book-Running Manager

H.C. Wainwright & Co.

, 2018

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The expenses payable by EyeGate Pharmaceuticals, Inc. (the "Registrant" or the "Company") in connection with the issuance and distribution of the securities being registered (other than placement agent fees and expenses) are set forth below. Each item listed is estimated, except for the Securities and Exchange Commission (the "SEC") registration fee.

Securities and Exchange Commission registration fee	\$2,490
FINRA Filing Fee	*
Legal fees and expenses	*
Accounting fees and expenses	*
Transfer agent fees and expenses	*
Miscellaneous	*
Total	\$ *

^{*} To be provided by amendment.

Item 14. Indemnification of Directors and Officers.

Our amended and restated certificate of incorporation contains provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of our directors for monetary damages for breach of their fiduciary duties as directors. Our amended and restated bylaws provide that we must indemnify our directors and officers and may indemnify our employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, officer, employee or agent of the corporation or is or was serving at the request of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

We have entered into indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our amended and restated bylaws, and intend to enter into indemnification agreements with any new directors and executive officers in the future. We have purchased and intend to maintain insurance on behalf of any person who is or was a director or officer of us against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions. See also "Undertakings" set out in response to Item 17 herein.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding the shares of common stock and preferred stock and the warrants issued, and options granted, by us in the three years preceding the filing of this registration statement that were not registered under the Securities Act.

(1) On March 7, 2016, we entered into a Stock Purchase Agreement whereby we acquired 100% of the outstanding equity interests of Jade Therapeutics, Inc. ("Jade") and Jade became a wholly-owned subsidiary of the Company (the "Acquisition"). The consideration payable by the Company to the

Sellers in connection with the Acquisition (subject to adjustment as provided in the Purchase Agreement) is 765,728 shares of the Company's common stock (the "EyeGate Shares"). The EyeGate Shares consist of (i) 689,157 shares of the Company's common stock issued at closing and (ii) 76,571 shares of the Company's common stock held back for a period of 18 months for potential post-closing working capital and/or indemnification claims relating to breaches of representations, warranties and covenants contained in the Purchase Agreement.

- (2) On June 30, 2016, we completed a registered direct offering of 441,000 shares of common stock and 2,776.5 shares of Series A Convertible Preferred Stock (convertible into 1,234,000 shares of common stock) (the "Series A Preferred Stock"), along with a concurrent private placement of warrants (collectively, the "June 2016 Offering"). The total net proceeds to us from the June 2016 Offering, after deducting the placement agent fees and offering expenses, were approximately \$3.4 million. The investor received, for each share of common stock or for each share of common stock issuable upon conversion of a share of Series A Preferred Stock purchased in the registered direct offering, a warrant to purchase one-half of a share of common stock at an exercise price of \$3.50 per share, totaling 837,500 common stock warrants. The warrant issued to the investor is initially exercisable six months following issuance and terminates five years following the initial exercise date. In addition, we issued to H.C. Wainwright & Co., LLC, the exclusive placement agent for the June 2016 Offering, warrants to purchase 33,500 shares of common stock. The warrants and the shares of common stock underlying the warrants issued in the June 2016 Offering were not registered under the Securities Act of 1933, as amended (the "Securities Act"), or applicable state securities laws.
- (3) In July 2016, we issued 22,674 shares of our common stock in connection with entering into a License Agreement with the University of Utah.

The offer, sale, and issuance of the securities described in paragraphs (1), (2), and (3) were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act in that the issuances of the securities to the accredited investors did not involve a public offering. The recipients of the securities in these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the securities issued in these transactions.

Item 16. Exhibits and Financial Statement Schedules.

A list of exhibits filed with this registration statement on Form S-1 is set forth on the Exhibit Index and is incorporated herein by reference.

Item 17. Undertakings.

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 Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

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

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

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof:
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - 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, the undersigned registrant undertakes that 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:
 - 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:

(6) That:

- (i) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective; and
- (ii) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus 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.
- (7) 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; and
- (8) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Commonwealth of Massachusetts, on this 23rd day of March, 2018.

EYEGATE PHARMACEUTICALS, INC.

By: /s/ Stephen From
Stephen From
President and Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Stephen From and Sarah Romano, and each of them singly (with full power to each of them to act alone), as such person's true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any or all amendments (including, without limitation, post-effective amendments) to this registration statement (or any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or any substitute or substitutes of them, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Stephen From Stephen From	President, Chief Executive Officer and Director (principal executive officer)	March 23, 2018
/s/ Sarah Romano Sarah Romano	Chief Financial Officer (principal financial and accounting officer)	March 23, 2018
/s/ Paul Chaney Paul Chaney	Chairman	March 23, 2018
/s/ Morton Goldberg Morton Goldberg	Director	March 23, 2018
/s/ Praveen Tyle Praveen Tyle	Director	March 23, 2018
/s/ Thomas E. Hancock	Director	March 23, 2018
/s/ Bernard Malfroy-Camine Bernard Malfroy-Camine	Director	March 23, 2018

EXHIBITS

Exhibit Number	Description of Exhibit
2.1(1)	Stock Purchase Agreement, dated as of March 7, 2016, by and among the Registrant and the Sellers named therein.
3.1 ⁽²⁾	Restated Certificate of Incorporation of the Registrant.
3.2(2)	Amended and Restated By-laws of the Registrant.
3.3(7)	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock.
<u>3.4⁽¹⁴⁾</u>	Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock.
3.5**	Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock.
<u>4.1⁽³⁾</u>	Specimen Stock Certificate evidencing the shares of common stock.
<u>4.2⁽⁷⁾</u>	Form of Common Stock Purchase Warrant, dated June 30, 2016.
<u>4.3⁽¹⁵⁾</u>	Form of Common Stock Purchase Warrant, dated June 14, 2017.
4.4**	Form of Warrant.
5.1**	Opinion of Burns & Levinson LLP.
<u>10.1⁽⁴⁾</u>	2005 Equity Incentive Plan, as amended.
<u>10.2⁽¹⁶⁾</u>	2014 Equity Incentive Plan, as amended.
<u>10.3⁽¹⁶⁾</u>	Employee Stock Purchase Plan, as amended.
<u>10.4†⁽⁴⁾</u>	Transaction Protocol (License Agreement), by and between Optis B.V., Optis France SA, and Mrs. Francine Behar-Cohen, dated as of July 23, 1999.
<u>10.5†⁽⁴⁾</u>	Amended and Restated License Agreement, by and between University of Miami and EyeGate Pharma SA (f/k/a Optis France SA), dated as of December 16, 2005.
<u>10.6†⁽⁴⁾</u>	First Amendment to First Amended and Restated License Agreement of and between EyeGate Pharma SA and University of Miami, dated as of July 7, 2014.
<u>10.7†⁽⁵⁾</u>	License Agreement made as of July 9, 2015, by and among the Registrant, EyeGate Pharma S.A.S., a wholly owned subsidiary of the Registrant and Valeant Pharmaceuticals Luxembourg S.à r.l., a société à responsabilité limitée.
<u>10.8⁽⁶⁾</u>	Form of Warrant Agency Agreement, dated August 5, 2015, by and between the Registrant and VStock Transfer, LLC.
<u>10.9⁽⁴⁾</u>	Form of Indemnification Agreement.
<u>10.10⁽⁴⁾</u>	Form of Notice of Stock Option Grant pertaining to the 2014 Equity Incentive Plan.
<u>10.11⁽⁴⁾</u>	Form of Notice of Stock Unit Award pertaining to the 2014 Equity Incentive Plan.
<u>10.12#⁽⁴⁾</u>	Form of Amended and Restated Offer of Employment by and between the Registrant and Michael Manzo.
<u>10.13#(12)</u>	Second Amended and Restated Employment Agreement, dated February 25, 2016, by and between the Registrant and Stephen From.
<u>10.14#⁽¹⁷⁾</u>	Third Amended and Restated Employment Agreement, dated November 29, 2017, by and between the Registrant and Stephen From.
<u>10.15⁽⁷⁾</u>	Form of Securities Purchase Agreement, dated as of June 27, 2016, by and among the Registrant and the Purchasers named therein.
<u>10.16⁽⁷⁾</u>	Engagement Letter, dated as of June 24, 2016, by and between the Registrant and Rodman & Renshaw, a unit of H.C. Wainwright & Co.
<u>10.17⁽⁸⁾</u>	At the Market Offering Agreement, dated as of May 24, 2016, by and between the Registrant and H.C. Wainwright & Co., LLC.

Exhibit Number	Description of Exhibit
10.18 ⁽⁹⁾	Offer Letter, dated as of April 25, 2016, by and between the Registrant and Ryan Brenneman.
<u>10.19#(10)</u>	Separation Agreement, dated as of December 21, 2016, by and between the Registrant and Ryan Brenneman.
10.20#(11)	Offer Letter, dated as of February 1, 2017, by and between the Registrant and Sarah Romano.
10.21#(18)	Offer Letter, dated as of January 1, 2018, by and between the Registrant and Sarah Romano.
10.22†(13)	License Agreement, dated February 21, 2017, by and among the Registrant, EyeGate Pharma S.A.S., a wholly owned subsidiary of the Registrant and Valeant Pharmaceuticals Ireland.
10.23(15)	Engagement Letter, dated June 2, 2017, by and between the Registrant and Rodman & Renshaw, a unit of H.C. Wainwright & Co., LLC.
<u>10.24⁽¹⁴⁾</u>	Form of Securities Purchase Agreement, dated as of June 14, 2017, by and between the Registrant and the Purchasers named therein.
10.25#(17)	EyeGate Pharmaceuticals, Inc. Change in Control Severance Plan.
10.26**	Form of Engagement Letter with H.C. Wainwright.
10.27**	Form of Securities Purchase Agreement.
21.1 ⁽¹⁹⁾	Subsidiaries of the Registrant.
23.1*	Consent of EisnerAmper LLP.
23.2**	Consent of Burns & Levinson LLP (included in Exhibit 5.1).
<u>24.1*</u>	Power of Attorney.

- Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed March 7, 2016) and incorporated by reference thereto.
- (2) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed February 20, 2015) and incorporated by reference thereto.
- (3) Previously filed as an exhibit to Amendment No. 2 to the Company's Registration Statement on Form S-1 (filed August 29, 2014) and incorporated by reference thereto.
- (4) Previously filed as an exhibit to the Company's Registration Statement on Form S-1 (filed July 30, 2014) and incorporated by reference thereto.
- (5) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed July 10, 2015) and incorporated by reference thereto.
- (6) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed August 5, 2015) and incorporated by reference thereto.
- (7) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed June 27, 2016) and incorporated by reference thereto.
- (8) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed May 25, 2016) and incorporated by reference thereto.
- (9) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed April 29, 2016) and incorporated by reference thereto.
- (10) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed December 22, 2016) and incorporated by reference thereto.
- (11) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed February 6, 2017) and incorporated by reference thereto.
- (12) Previously filed as an exhibit to the Company's Annual Report on Form 10-K (filed March 30, 2016) and incorporated by reference thereto.

- (13) Previously filed as an exhibit to the Company's Annual Report on Form 10-K (filed February 23, 2017) and incorporated by reference thereto.
- (14) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed June 14, 2017) and incorporated by reference thereto.
- (15) Previously filed as an exhibit to Amendment No. 2 to the Company's Registration Statement on Form S-1 (filed June 5, 2017) and incorporated by reference thereto.
- (16) Previously filed as an appendix to the Company's Definitive Proxy Statement (filed April 28, 2017) and incorporated by reference thereto.
- (17) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed November 29, 2017) and incorporated by reference thereto.
- (18) Previously filed as an exhibit to the Company's Current Report on Form 8-K (filed January 4, 2018) and incorporated by reference thereto.
- (19) Previously filed as an exhibit to the Company's Annual Report on Form 10-K (filed March 2, 2018) and incorporated by reference thereto.
- * Filed herewith.
- ** To be filed by amendment.
- † Confidential treatment requested as to portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.
- # Management contract or compensatory plan or arrangement.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of EyeGate Pharmaceuticals, Inc. on Form S-1 to be filed on or about March 23, 2018 of our report dated March 2, 2018, on our audits of the consolidated financial statements as of December 31, 2017 and 2016 and for each of the years then ended, which report was included in the Annual Report on Form 10-K filed March 2, 2018. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. We also consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-1.

/s/EisnerAmper LLP

EISNERAMPER LLP New York, New York March 23, 2018