

Subject to completion, dated August 18, 2020

Preliminary prospectus supplement
(To prospectus dated February 12, 2019)

Shares Common Stock

We are offering shares of our common stock. Our common stock is listed on the Nasdaq Capital Market under the symbol “EYEN”. The last reported sale price of our common stock on August 17, 2020 was \$4.52 per share.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page S-5 of this prospectus supplement and on page 12 of the accompanying prospectus, as well as the documents incorporated by reference into this prospectus supplement and accompanying prospectus, to read about factors you should consider before investing in our securities.

| | Per share | Total |
|---|-----------|-------|
| Price to the public | \$ | \$ |
| Underwriting discounts and commissions ⁽¹⁾ | \$ | \$ |
| Proceeds to us (before expenses) | \$ | \$ |

(1) We have agreed to reimburse the underwriters for certain expenses which are not reflected above. See “Underwriting”.

We intend to grant the underwriters an option to purchase up to _____ additional shares of common stock at the public offering price, less underwriting discounts and commissions, within 30 days from the date of this prospectus supplement. See “Underwriting” for more information.

As of August 13, 2020, the aggregate market value of our outstanding common stock held by non-affiliates, or the public float, was approximately \$61,256,233, which was calculated based on 12,011,026 shares of our outstanding common stock held by non-affiliates and at a price of \$5.10 per share, the last reported sale price for our common stock on August 12, 2020. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our common stock in a public primary offering with a value exceeding one-third of our public float in any 12-month period unless our public float subsequently rises to \$75.0 million or more. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus supplement.

Neither the U.S. Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus supplement. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on or about _____, 2020.

Sole Book-running Manager

William Blair

Prospectus supplement dated _____, 2020.

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting an offer to buy these securities, in any jurisdiction where the offer and sale is not permitted.

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Prospectus

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ABOUT THIS PROSPECTUS SUPPLEMENT

On January 25, 2019, we filed a Registration Statement on Form S-3 with the United States Securities and Exchange Commission (the “SEC”) using a shelf registration process. The Registration Statement on Form S-3 was declared effective by the SEC on February 12, 2019.

This prospectus supplement describes the specific terms of an offering of our common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The accompanying prospectus provides more general information. If the information in this prospectus supplement is inconsistent with the accompanying prospectus or any document incorporated by reference therein filed prior to the date of this prospectus supplement, you should rely on the information in this prospectus supplement.

The rules of the SEC allow us to incorporate by reference information into this prospectus supplement. This means that important information is contained in other documents that are considered to be a part of this prospectus supplement. Additionally, information that we file later with the SEC will automatically update and supersede this information. You should carefully read both this prospectus supplement and the accompanying prospectus together with the additional information that is incorporated or deemed incorporated by reference in this prospectus supplement before making an investment in our common stock. See “Incorporation of Documents by Reference” before making an investment in our common stock. This prospectus supplement contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. Copies of the documents referred to herein have been filed or will be filed or incorporated by reference as exhibits to the Registration Statement of which this prospectus supplement is a part. The Registration Statement, including the exhibits and documents incorporated or deemed incorporated by reference in this prospectus supplement, can be read on the SEC website mentioned under the heading “Where You Can Find Additional Information”.

Neither the delivery of this prospectus supplement or the accompanying prospectus, nor any sale made using this prospectus supplement or the accompanying prospectus implies that there has been no change in our affairs or that the information in this prospectus supplement or in the accompanying prospectus is correct as of any date after their respective dates. You should not assume that the information included in or incorporated by reference in this prospectus supplement or the accompanying prospectus, or any future prospectus supplement or free writing prospectus prepared by us, is accurate as of any date other than the date(s) on the front covers of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and any related free writing prospectus prepared by us. Neither we nor the underwriters have authorized anyone to give you different information, and if you are given any information that is not contained or incorporated by reference in this prospectus supplement, the accompanying prospectus or any related free writing prospectus prepared by us, you must not rely on that information. We are not making an offer to sell securities in any jurisdiction where the offer or sale of such securities is not permitted.

Unless otherwise indicated in this prospectus supplement or the context otherwise requires, all references to “we”, “us”, “our”, “the Company”, and “Eyenovia” refer to Eyenovia, Inc.

INDUSTRY AND MARKET DATA

We obtained the industry, statistical and market data in this prospectus supplement from our own internal estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. In presenting this information, we have made assumptions based on such data and other similar sources, and on our knowledge of, and our experience to date in, the potential markets for our product candidates. Although we believe the data from these third-party sources is reliable, we have not independently verified any third-party information. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled “Risk Factors”. These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained elsewhere in this prospectus supplement, or incorporated by reference into this prospectus supplement and the accompanying prospectus. It might not contain all the information that is important to you. You should carefully read the entire prospectus supplement, the accompanying prospectus, any applicable additional prospectus supplement or free writing prospectus we file with the SEC and the information incorporated herein by reference, including the financial data and related notes and the sections entitled "Risk Factors".

Our Business**Overview**

We are a clinical stage ophthalmic biopharmaceutical company developing a pipeline of microdose array print (MAP®) therapeutics. We aim to achieve clinical microdosing of next-generation formulations of well-established ophthalmic pharmaceutical agents using our high-precision targeted ocular delivery system, branded the Optejet®, which has the potential to replace conventional eye dropper delivery and improve safety, tolerability, patient compliance and topical delivery success for ophthalmic eye treatments. In the clinic, the Optejet has demonstrated the ability to horizontally deliver ophthalmic medication with a success rate significantly higher than traditional eye drops (~ 90% vs. ~ 50%). Our technology also can deliver up to a 75% reduction in ocular drug and preservative exposure and has demonstrated significant improvement in the therapeutic index in drugs used for mydriasis and IOP lowering through three Phase II and Phase III trials. Using the Optejet, we are developing the next generation of smart ophthalmic therapeutics which target new indications or new combinations where there are currently no comparable drug therapies approved by the U.S. Food and Drug Administration, or the FDA. Our microdose therapeutics follow the FDA-designated pharmaceutical registration and regulatory process. Our products are classified by the FDA as drugs, and not medical devices or drug-device combination products.

On October 29, 2019, we announced that we are advancing the development of our MicroLine program for the improvement in near vision in patients with presbyopia towards Phase III clinical studies. As a result of prioritizing MicroLine, in tandem with our MicroPine (progressive myopia) and MicroStat (mydriasis) programs, we deferred development activities for its MicroProst (glaucoma and ocular hypertension) and MicroTears (red eye and itch relief lubrication) programs.

MicroLine is our pharmacologic treatment for presbyopia. Presbyopia is a non-preventable, age-related hardening of the lens, which causes the gradual loss of the eye's ability to focus on nearby objects. There currently are no known FDA-approved drugs for the improvement of near vision in patients with presbyopia, although other companies have related therapies in their pipeline. We have two planned Phase III VISION trials for MicroLine, and subject to any impacts of the COVID-19 pandemic, we anticipate initiating our Phase III VISION trials in the coming months.

MicroPine is our first-in-class topical therapy for the treatment of progressive myopia, a back-of-the-eye ocular disease associated with pathologic axial elongation and sclero-retinal stretching affecting approximately five million people in the United States. In February 2019, the FDA accepted our investigational new drug application, or IND, to initiate a Phase III registration trial of MicroPine (the CHAPERONE study) to reduce the progression of myopia in children. We enrolled the first patient in the CHAPERONE study in June 2019. Due to the COVID-19 pandemic, we have previously experienced delays in trial enrollment and initiation as a result of reduced clinical trial activities and operations at investigator sites. However, we have since been able to resume enrollment in the CHAPERONE study.

MicroStat is our fixed combination formulation of phenylephrine-tropicamide for mydriasis, designed to be a novel approach for the estimated 80 million office-based comprehensive and diabetic eye exams performed every year in the United States. We have completed two Phase III trials for MicroStat and announced positive results from these studies, known as MIST-1 and MIST-2. We currently remain on track to file a new drug application, or NDA, with the FDA for MicroStat in 2020, subject to any impacts of the COVID-19 pandemic.

Results from our previous three Phase II clinical trials have been published in peer-reviewed literature. Two studies evaluating our mydriatic agents demonstrated how the Optejet consistently delivered precision

dosing at the volume of the eye's natural tear film capacity of 6-8 μ L, which reduced ocular and systemic drug and preservative exposure, while demonstrating pupil dilation comparable to conventional eye drops with fewer side effects. In the third study, we evaluated usability, patient tolerability and intraocular pressure (IOP) lowering of microdosed latanoprost administered with the Optejet. In this study, eyes receiving microdosed latanoprost achieved IOP reduction consistent with published literature on latanoprost eye drops, and administration of the medication was successful in a single attempt in more than 90% of cases. Based on the results from these clinical trials, we are advancing MicroLine, MicroPine, MicroStat, and MicroProst (should we resume the program) utilizing the 505(b)(2) pathway. Where possible, we also intend to use this pathway for future clinical trials in new indications with significant unmet needs.

Recent Developments

On August 10, 2020, we entered into a License Agreement (the "License Agreement") with Arctic Vision (Hong Kong) Limited ("Arctic Vision"), pursuant to which Arctic Vision may to develop and commercialize MicroPine for the treatment progressive myopia and MicroLine for the treatment of presbyopia in Greater China (mainland China, Hong Kong, Macau and Taiwan) and South Korea.

Under the terms of the License Agreement, we received an upfront payment of \$4.0 million before any payments to Senju Pharmaceutical Co., Ltd. ("Senju"). In addition, we may receive up to a total of \$41.75 million in additional payments, based on various development and regulatory milestones, including the initiation of clinical research and approvals in Greater China and South Korea, and development costs. Arctic Vision also will purchase its supply of MicroPine and MicroLine from us or, for such products not supplied by us, pay us a mid-single digit percentage royalty on net sales of such products, subject to certain adjustments. We will pay a mid-double digit percentage of such payments, royalties, or net proceeds of such supply to Senju pursuant to the Exclusive License Agreement with Senju dated March 8, 2015, as amended by the License Amendment dated April 8, 2020, and a Letter Agreement dated August 10, 2020.

Corporate Information

We were organized as a corporation under the laws of the State of Florida on March 12, 2014 under the name "PGP Holdings V, Inc." On May 5, 2014, we changed our name to Eyenovia, Inc. On October 6, 2014, we reincorporated in the State of Delaware by merging into Eyenovia, Inc., a Delaware corporation. Our principal executive office is located at 295 Madison Avenue, Suite 2400, New York, NY 10017, and our phone number is 917-289-1117. Our website is <http://www.eyenovia.com>. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus supplement, does not constitute part of this prospectus supplement and should not be relied upon in connection with making any investment in our securities.

THE OFFERING

| | |
|---|--|
| Common stock offered by us | shares of common stock. |
| Option to purchase additional shares | The underwriters will be granted an option to purchase up to an additional shares of common stock from us. This option is exercisable, in whole or in part, for a period of 30 days following the date of this prospectus supplement. |
| Common stock to be outstanding immediately after this offering | shares (or shares if the underwriters exercise their option to purchase additional shares in full). |
| Use of proceeds | We estimate the net proceeds from this offering to be approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expense payable by us. We intend to use the net proceeds of this offering, together with other available funds, for the continued clinical development of MicroPine and MicroLine, initial commercialization activities for MicroStat, and for working capital and general corporate purposes. See the section of this prospectus supplement titled “Use of Proceeds” for a more complete description of the intended use of proceeds from this offering. |
| Risk factors | See “Risk Factors” beginning on page S-5 of this prospectus supplement and on page 12 of the accompanying prospectus, as well as the documents incorporated by reference into this prospectus supplement and accompanying prospectus, to read about factors you should consider before investing in our securities. |
| Nasdaq Capital Market symbol | “EYEN”. |

The number of shares of our common stock to be outstanding following this offering is based on 20,536,431 shares of our common stock outstanding as of August 13, 2020 and excludes:

- 3,290,357 shares of our common stock underlying outstanding options to purchase common stock under our 2014 Equity Incentive Plan (the “2014 Plan”) and our Amended and Restated 2018 Omnibus Stock Incentive Plan (the “2018 Plan”) with a weighted average exercise price of \$3.29 per share;
- 768,488 shares of our common stock reserved for future issuance under our 2014 Plan and 2018 Plan; and
- warrants for 2,583,742 shares of our common stock, with a weighted average exercise price of \$2.38 per share.

Unless otherwise noted, the information in this prospectus supplement reflects and assumes no exercise of outstanding options and warrants and no exercise of the underwriters’ over-allotment option to purchase additional shares.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider carefully the risks and uncertainties, as well as other information, in this prospectus supplement and the accompanying prospectus, including the risks described under “Risk Factors” in our [Annual Report on Form 10-K for the year ended December 31, 2019](#) which is incorporated herein by reference, and as updated by any other document that we subsequently file with the SEC and that is incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering. The risks set forth in this prospectus supplement and incorporated herein by reference are those which we believe are the material risks that we face. These risks are not the only ones facing us and there may be additional matters that we are unaware of or that we currently consider immaterial. The occurrence of any of such risks may materially and adversely affect our business, financial condition, results of operations and future prospects. In such an event, the market price of our common stock could decline, and you could lose part or all of your investment.

RISKS RELATED TO THIS OFFERING

We may be required to raise additional capital by issuing new securities with terms or rights superior to those of our existing securityholders, which could adversely affect your investment in our company, the market price of shares of our common stock and our business.

We might require additional financing to fund future operations, including our research and development activities and any possible sales and marketing activities. We may not be able to obtain financing on favorable terms, if at all. If we raise additional funds by issuing equity securities, the percentage ownership of our then current stockholders will be reduced, and the holders of the new equity securities may have rights superior to those of our then existing securityholders, which could adversely affect the market price of our common stock and the voting power of shares of our common stock. If we raise additional funds by issuing debt securities, the holders of these debt securities would similarly have some rights senior to those of our then existing securityholders, and the terms of these debt securities could impose restrictions on operations and create a significant interest expense for us which could have a materially adverse effect on our business.

Issuances of shares of our common stock or securities convertible into or exercisable for shares of our common stock following this offering, as well as the exercise of outstanding options and warrants, will dilute your ownership interests and may adversely affect the future market price of our common stock.

The issuance of additional shares of our common stock or securities convertible into or exchangeable for our common stock could be dilutive to stockholders if they do not invest in future offerings. We may seek additional capital through a combination of private and public equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements, which may cause your ownership interest to be diluted.

In addition, we have a substantial number of options and warrants to purchase shares of our common stock outstanding. If these securities are exercised, you may incur further dilution. Moreover, to the extent that we issue in the future more options or warrants to purchase shares of our common stock, or other securities convertible into or exchangeable for shares of our common stock such as convertible notes or convertible preferred stock, and those options, warrants or other securities are exercised, converted or exchanged, stockholders may experience further dilution.

Investors in this offering will pay a higher price than the book value of our common stock.

If you purchase common stock in this offering, you will pay more for your shares than the amounts paid by existing stockholders for their shares. You will incur immediate and substantial dilution of \$ per share, representing the difference between our net tangible book value per share after giving effect to this offering and an offering price of \$ per share. To the extent any outstanding options are ultimately exercised, you will sustain further dilution. For further information, see the section entitled “Dilution”.

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 are selling shares of common stock, which represents approximately % of our outstanding common stock as of June 30, 2020, after giving effect to the sale of the shares of common stock in this offering (or approximately % if the underwriter exercises its option to purchase additional shares of common stock in full). 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 on Nasdaq. 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.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our business, financial condition or results of operations or enhance the value of our common stock. See “Use of Proceeds” on page [S-9](#) of this prospectus supplement for a description of our proposed use of proceeds from this offering.

The failure by our management to apply these funds effectively could result in financial losses that could harm our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and accompanying prospectus contain a number of forward-looking statements. Specifically, all statements other than statements of historical facts included in this prospectus supplement and accompanying prospectus, or incorporated by reference into this prospectus supplement and accompanying prospectus, regarding our financial position, business strategy, development timelines and plans and objectives of management for future operations are forward-looking statements. These forward-looking statements are based on the beliefs of management at the time these statements were made, as well as assumptions made by and information currently available to management. When used in this prospectus supplement, accompanying prospectus and the documents incorporated by reference herein and therein, the words “anticipate”, “believe”, “estimate”, “expect”, “may”, “will”, “continue” and “intend”, and words or phrases of similar import are intended to identify forward-looking statements. These statements are subject to risks, uncertainties and assumptions related to various factors.

You should understand that the following important factors, in addition to those discussed in our periodic reports filed with the SEC under the Securities Exchange Act of 1934, as amended, or the Exchange Act, could affect our future results and could cause those results to differ materially from those expressed in such forward-looking statements:

- impacts of and uncertainty related to COVID-19;
- fluctuations in our financial results and stock price, particularly given market conditions and the potential economic impact of COVID-19;
- our need to raise additional money to fund our operations for the next twelve months as a going concern;
- risks of our clinical trials including, but not limited to, the costs, design, initiation and enrollment (which could be adversely impacted by COVID-19 and resulting social distancing), timing, progress and results of such trials;
- our expectations related to the use of proceeds from our financings;
- our expectations regarding our ability to fund our operating expenses and capital expenditure requirements with our cash on hand and proceeds from our financings;
- our estimates regarding expenses, future revenue, timing of any future revenue, capital requirements and needs for additional financing;
- the potential advantages of our reprioritized pipeline;
- our estimates regarding cost savings related to our reprioritized pipeline;
- our estimates regarding the potential market opportunity for our product candidates;
- our ability to develop and implement our anticipated commercialization, marketing and manufacturing capabilities and strategies;
- the potential advantages of our product candidates;
- the rate and degree of market acceptance and clinical utility of our products;
- our intellectual property position;
- our ability to identify additional products, product candidates or technologies with significant commercial potential that are consistent with our commercial objectives;
- our ability to attract and retain key personnel;
- the impact of government laws and regulations;
- our competitive position;
- developments relating to our competitors and our industry;
- our ability to maintain and establish collaborations or obtain additional funding;

- general or regional economic conditions;
- changes in U.S. GAAP; and
- changes in the legal, regulatory and legislative environments in the markets in which we operate, including impacts of United States government shut-downs on our ability to raise money and obtain regulatory approval for our products.

Although we believe that our expectations (including those on which our forward-looking statements are based) are reasonable, we cannot assure you that those expectations will prove to be correct. Should any one or more of these risks or uncertainties materialize, or should any underlying assumptions prove incorrect, actual results may vary materially from those described in our forward-looking statements as anticipated, believed, estimated, expected or intended.

Except for our ongoing obligations to disclose material information under the federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or any other reason.

All subsequent forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this prospectus supplement, accompanying prospectus and the documents incorporated by reference herein and therein might not occur.

USE OF PROCEEDS

We estimate that we will receive net proceeds from the sale of shares of common stock in this offering of approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us (or \$ million if the underwriters exercise in full their option to purchase additional shares), at a price of \$ per share in this offering.

We intend to use the net proceeds of this offering, together with other available funds, for the continued clinical development of MicroPine and MicroLine, initial commercialization activities for MicroStat, and for working capital and general corporate purposes.

The expected net proceeds of this offering will not be sufficient for us to fund commercialization of any of our product candidates (including marketing and sales). Therefore we will need to raise substantial additional capital to complete the commercialization of our product candidates, as well as to establish an in-house manufacturing facility and sales and marketing operation.

The amounts and timing of our actual expenditures will depend on numerous factors, including the progress of our clinical trials, registration activities and other development and commercialization efforts for our product candidates, as well as the amount of cash used in our operations. Although we have no present intention or commitment to do so, we may use a portion of the net proceeds for the acquisition of, or investment in, technologies, intellectual property or businesses that complement our business.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus supplement, we cannot predict with complete certainty all of the particular uses for the net proceeds to be received upon the completion of this or the actual amounts that we will spend on the uses set forth above. We may find it necessary or advisable to use the net proceeds for other purposes, and our management will retain broad discretion over the allocation of the net proceeds of this offering. Pending the uses described above, we plan to invest the net proceeds from this offering in corporate savings accounts with top tier commercial banks, short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

DILUTION

If you purchase shares of common stock in this offering you will experience dilution to the extent of the difference between the public offering price per share in this offering and our pro forma net tangible book value per share immediately after this offering.

Net tangible book value per share represents total tangible assets less total liabilities, divided by the number of shares of common stock outstanding. Our historical net tangible book value as of June 30, 2020 was \$8,319,306, or \$0.42 per share of common stock. After giving effect to the sale of shares of common stock in this offering at the offering price of \$ per share, and the receipt of an estimated \$ million of net proceeds therefrom, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, and excluding any additional shares of common stock that may be issuable upon the exercise of the underwriters' option to purchase additional shares, our net tangible book value as of June 30, 2020 would have been \$, or \$ per share. This represents an immediate increase in net tangible book value of \$ per share to existing stockholders and an immediate dilution in net tangible book value of \$ per share to investors in this offering. The following table illustrates this dilution on a per share basis:

| | |
|---|--------|
| Public offering price per share | \$ |
| Historical net tangible book value per share as of June 30, 2020 | \$0.42 |
| Increase in net tangible book value per share attributable to this offering | \$ |
| As adjusted tangible book value per share, after giving effect to this offering | \$ |
| Dilution per share to investors in this offering | \$ |

If the underwriters exercise in full their option to purchase additional shares of common stock in this offering, the net tangible book value per share after giving effect to this offering would be \$ per share, which amount represents an immediate increase in net tangible book value of \$ per share of our common stock to existing stockholders and an immediate dilution in net tangible book value of \$ per share of our common stock to investors purchasing shares in this offering.

The above discussion and tables are based on 19,943,683 shares of common stock outstanding as of June 30, 2020 and excludes the following:

- 3,290,357 shares of our common stock underlying outstanding options to purchase common stock with a weighted average exercise price of \$3.29 per share as of June 30, 2020;
- 768,488 shares of our common stock reserved for future issuance under our 2014 Plan and 2018 Plan; and
- warrants for 3,176,490 shares of our common stock, with a weighted average exercise price of \$2.34 per share.

To the extent that any of these options or warrants are exercised, new options are issued under our 2018 Plan or we issue additional shares of common stock, warrants or other equity securities in the future, there may be further dilution to investors participating in this offering.

UNDERWRITING

William Blair & Company, L.L.C. is acting as sole underwriter for the offering. Subject to the terms and conditions set forth in an underwriting agreement between us and the underwriter, we have agreed to sell to the underwriter, and the underwriter has agreed to purchase from us, _____ shares of our common stock. The underwriter has agreed to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased.

We have granted to the underwriter an option, exercisable for 30 calendar days from the date of this prospectus, to purchase up to _____ additional shares of common stock at the public offering price listed on the cover of this prospectus supplement, less underwriting discounts and commissions. Any shares issued or sold under the option will be issued and sold on the same terms and conditions as the other shares that are the subject of this offering.

We have agreed to indemnify the underwriter against certain liabilities, including liabilities under the Securities Act of 1933, as amended, or the Securities Act, relating to losses or claims resulting from material misstatements in or omissions from this prospectus supplement, the registration statement of which this prospectus supplement is a part, certain free writing prospectuses that may be used in the offering and in any marketing materials used in connection with this offering and to contribute to payments the underwriter may be required to make in respect of those liabilities.

Commissions and Discounts

The underwriter has advised us that it proposes initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus supplement and to dealers at that price less a concession not in excess of \$ _____ per share. After the public offering, the public offering price, concession or any other term of this offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriter of its option to purchase additional shares.

| | Per Share | Without Option | With Option |
|----------------------------------|-----------|-------------------|----------------|
| Public offering price | \$ | \$ | \$ |
| Underwriting discount | \$ | \$ | \$ |
| Proceeds, before expenses, to us | \$ | \$ | \$ |

The underwriting agreement provides that the obligation of the underwriter to pay for and accept delivery of the shares of common stock offered by this prospectus supplement are subject to the approval of certain legal matters by its counsel and to certain other conditions. The underwriter is obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are taken. However, the underwriter is not required to take or pay for the shares covered by the underwriter's option to purchase additional shares described above. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$ _____, which includes legal, accounting and printing costs and various other fees associated with the registration and listing of our common stock. We have agreed to reimburse the underwriter for certain additional expenses incurred in connection with this offering in an amount up to \$ _____. In addition, we have granted the underwriter a right to participate as a bookrunning manager or placement agent in any public or private offering of securities by us for a certain period of time, subject to certain limitations.

No Sales of Similar Securities

We have agreed with the underwriter, for 60 days after the date of this prospectus supplement, subject to specified exceptions not to (i) offer, sell, contract to sell, pledge, grant any option to purchase, make any

short sale or otherwise transfer or dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or any securities that are substantially similar to our common stock, including but not limited to any options or warrants to purchase shares of our common stock or any securities that are convertible into or exchangeable for, or that represent the right to receive, common stock or any such substantially similar securities, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, or any such other securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of our common stock or such other securities, in cash or otherwise, without the prior written consent of the underwriter.

Our directors and executive officers have agreed with the underwriter, for 60 days after the date of this prospectus supplement, subject to specified exceptions, not to (i) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, make any short sale or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into, exercisable or exchangeable for or that represent the right to receive our common stock (including without limitation, our common stock which may be deemed to be beneficially owned in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant), whether now owned or hereafter acquired, or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of our common stock, whether any such transaction is to be settled by delivery of our common stock or such other securities, in cash or otherwise, without the prior written consent of the underwriter.

Listing

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

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit the underwriter and selling group members from bidding for and purchasing shares of our common stock. However, the underwriter may engage in transactions that stabilize the price of our common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with this offering, the underwriter may purchase and sell shares of our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriter of a greater number of shares than it is required to purchase in this offering. "Covered" short sales are sales made in an amount not greater than the underwriter's option to purchase additional shares described above. The underwriter may close out any covered short position by either exercising this option or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriter will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which it may purchase shares through this option. "Naked" short sales are sales in excess of this option. The underwriter must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering. Stabilizing transactions consist of various bids for or purchases of shares of our common stock made by the underwriter in the open market prior to the closing of this offering.

Similar to other purchase transactions, the underwriter's purchases to cover short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriter may conduct these transactions on the Nasdaq Capital Market, in the over-the-counter market or otherwise.

Neither we nor the underwriter make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor the underwriter make any representation that the underwriter will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Offer, Sale and Distribution of Shares

In connection with this offering, the underwriter or securities dealers may distribute prospectuses by electronic means, such as e-mail. In addition, the underwriter may facilitate Internet distribution for this offering to certain of its Internet subscription customers. The underwriter may allocate a limited number of shares for sale to its online brokerage customers. An electronic prospectus is available on the Internet website maintained by the underwriter. The information on the website of such underwriter is not part of this prospectus.

Other Relationships

The underwriter and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriter and its affiliates may engage in from time to time in the future certain investment banking and other commercial dealings in the ordinary course of business with us or our affiliates, for which they have received and may continue to receive customary fees and commissions.

In the ordinary course of their various business activities, the underwriter and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of the issuer. The underwriter and its affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Selling Restrictions

Canada

Resale Restrictions

The distribution of shares of our common stock in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of shares of our common stock in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the securities.

Representations of Canadian Purchasers

By purchasing shares of our common stock in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the shares of common stock without the benefit of a prospectus qualified under those securities laws as it is an “accredited investor” as defined under National Instrument 45-106 — Prospectus Exemptions,
- the purchaser is a “permitted client” as defined in National Instrument 31-103 — Registration Requirements, Exemptions and Ongoing Registrant Obligations,

- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

Conflicts of Interest

Canadian purchasers are hereby notified that the underwriter is relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 — Underwriting Conflicts from having to provide certain conflict of interest disclosure in this document.

Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the offering memorandum (including any amendment thereto) such as this document contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

Taxation and Eligibility for Investment

Canadian purchasers of shares of our common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares of common stock in their particular circumstances and about the eligibility of shares of our common stock for investment by the purchaser under relevant Canadian legislation.

European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive, each referred to as a Relevant Member State, an offer to the public of any shares of our common stock may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- to any legal entity which is a "qualified investor" as defined in the Prospectus Directive;
- to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the underwriter for any such offer; or
- in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied

in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression “Prospectus Directive” means Directive 2003/71/EC (and amendments thereto, including by Directive 2010/73/EU) and includes any relevant implementing measure in each Relevant Member State.

United Kingdom

The underwriter has represented and agreed that:

- (a) it has not made or will not make an offer of shares of our common stock to the public in the United Kingdom within the meaning of section 102B of the Financial Services and Markets Act 2000 (as amended) (FSMA) except to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities or otherwise in circumstances which do not require the publication by us of a prospectus pursuant to the Prospectus Rules of the Financial Services Authority;
- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 or in circumstances in which section 21 of FSMA does not apply to us; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

Hong Kong

No securities have been offered or sold, and no securities may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance; or in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32) of Hong Kong. No document, invitation or advertisement relating to the securities has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the securities may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the securities will be required, and is deemed by the acquisition of the securities, to confirm that he is aware of the restriction on offers of the securities described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any securities in circumstances that contravene any such restrictions.

Singapore

This prospectus has not been, and will not be, registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares of common stock may not be circulated or distributed, nor may the shares of common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”)) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of

the SFA) pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the common stock is subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the common stock pursuant to an offer made under Section 275 of the SFA except:

- (a) to an institutional investor pursuant to Section 274 of the SFA or to a relevant person pursuant to Section 275(1) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (b) where no consideration is or will be given for the transfer;
- (c) where the transfer is by operation of law;
- (d) as specified in Section 276(7) of the SFA; or
- (e) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The shares of common stock may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares of common stock or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, or the shares of common stock have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of common stock will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of common stock has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. Accordingly, no public distribution, offering or advertising, as defined in CISA, its implementing ordinances and notices, and no distribution to any non-qualified investor, as defined in CISA, its implementing ordinances and notices, shall be undertaken in or from Switzerland, and the investor protection afforded to acquirers of interests in collective investment schemes under CISA does not extend to acquirers of common stock.

United Arab Emirates

This offering has not been reviewed, approved or licensed by the Central Bank of the United Arab Emirates (the "UAE"), the Emirates Securities and Commodities Authority of the UAE (the "SCA") and/or any other relevant licensing authority in the UAE including any licensing authority incorporated under the laws and regulations of any of the free zones established and operating in the territory of the UAE (the "Free

Zones”), in particular the Dubai Financial Services Authority (the “DFSA”), a regulatory authority of the Dubai International Financial Centre the (“DIFC”) or the Financial Services Regulatory Authority (the “FSRA”), a regulatory authority of Abu Dhabi Global Market (“ADGM”).

This offering is not intended to, and does not, constitute an offer, sale or delivery of shares or other securities under the laws of the UAE. The common stock has not been and will not be registered with or licensed by the SCA or with the UAE Central Bank, the Dubai Financial Market, the Abu Dhabi Securities Exchange or with any other UAE regulatory authority or exchange.

The issue and/or sale of the common stock has not been approved or licensed by the SCA, the UAE Central Bank or any other relevant licensing authority in the UAE, and does not constitute a public offer of securities in the UAE, DIFC, ADGM and/or any other Free Zone in accordance with the Commercial Companies Law, Federal Law No 2 of 2015 (as amended), the Markets Rules of the DFSA, (the “DFSA Markets Rules”), the Markets Rules of the FSRA (the “FSRA Markets Rules”) and/or Nasdaq Dubai Listing Rules or under any other law of the UAE. The common stock may not be offered to the public in the UAE and/or any of the Free Zones.

No marketing or promotion of the common stock has been or will be made from within the UAE and no sale of or subscription for the common stock may or will be consummated within the UAE. It should not be assumed that Vermillion, Inc., Vermillion, Inc.’s advisors, their advisors or any other person is a licensed broker, dealer or investment adviser under the laws of the UAE or that they advise as to the appropriateness of investing in or purchasing or selling securities or other financial products.

This offering is not intended to constitute a financial promotion, an offer, sale or delivery of shares or other securities under the DIFC Markets Law (DIFC Law No. 1 of 2012, as amended) (the “Markets Law”), the DFSA Markets Rules, the Collective Investment Law 2010 (DIFC Law No. 2 of 2010) (the “Collective Investment Law”), the ADGM Financial Services and Markets Regulations 2015 (the “FSMR”), the FSRA Markets Rules, the Funds Rules of the FSRA (“FSRA Funds Rules”), or any other laws and regulations of the DIFC, the DFSA, ADGM or the FSRA.

This offering and the issue or transfer of any securities related to it have not been approved or licensed by the DFSA, and do not constitute an offer of securities in the DIFC in accordance with the Markets Law or the DFSA Markets Rules or the Collective Investment Law or any other laws and regulations of the DIFC or the DFSA. This offering and the issue or transfer of any securities related to it have not been approved or licensed by the FSRA, and do not constitute an offer of securities in ADGM in accordance with the FSMR or the FSRA Markets Rules or the FSRA Funds Rules or any other laws and regulations of ADGM or the FSRA.

Israel

The securities offered by this prospectus supplement and the accompanying prospectus have not been approved or disapproved by the Israeli Securities Authority (the “ISA”), nor have such securities been registered for sale in Israel. The ISA has not issued permits, approvals or licenses in connection with the offering or publishing this prospectus supplement and the accompanying prospectus; nor has it authenticated the details included herein, confirmed their reliability or completeness, or rendered an opinion as to the quality of the securities being offered. The ordinary shares will not be offered or sold, directly or indirectly, to the public in Israel, except that the underwriter may offer and sell such shares to Israeli investors who qualify, in accordance with the Israeli Securities Law as “qualified investors” (as defined in the First Appendix to the Israeli Securities Law) and completed and signed a questionnaire regarding such qualification and delivered it to the underwriter. Any resale in Israel, directly or indirectly, to the public of the securities offered by this prospectus supplement and the accompanying prospectus is subject to restrictions on transferability and must be effected only in compliance with the Israeli securities laws and regulations.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by Wyrick Robbins Yates & Ponton LLP, Raleigh, North Carolina. Goodwin Procter LLP, New York, New York, is representing the underwriters in connection with the offering. Certain partners of Wyrick Robbins Yates & Ponton LLP own an aggregate of 43,165 shares of the Registrant's common stock as of the date of the filing of this prospectus supplement.

EXPERTS

The financial statements of Eyenovia, Inc. included in the Company's Annual Report on Form 10-K as of [December 31, 2019](#) and [2018](#) and for each of the two years in the period ended December 31, 2019 have been audited by Marcum LLP, independent registered public accounting firm, as set forth in their report, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, thereon and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance on such report given upon the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus supplement, which constitutes a part of the registration statement on Form S-3 that we have filed with the SEC under the Securities Act, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the securities offered by this prospectus supplement, you should refer to the registration statement and the exhibits filed as part of that document. Statements contained in this prospectus supplement 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.

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings and the documents incorporated by reference and any exhibits, including the registration statement, over the Internet at the SEC's website at <http://www.sec.gov>. We also maintain a website at <http://www.eyenovia.com>, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus supplement.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. 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 prior to the termination of any offering, except as to any portion of any future report or document that is not deemed filed under such provisions:

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, filed with the SEC pursuant to Section 13\(a\) of the Exchange Act on March 30, 2020](#);
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2020 and June 30, 2020, filed with the SEC pursuant to Section 13(a) of the Exchange Act on [May 14, 2020](#) and [August 14, 2020](#), respectively;
- our Current Reports on Form 8-K, filed with the SEC pursuant to Section 13(a) of the Exchange Act on [March 25](#) (Form 8-K addressing the Company's private placement in Items 1.01, 3.02, and 9.01 only), [April 13](#), [May 8](#), [June 30](#), [July 2](#) and [August 11, 2020](#);
- our [proxy statement on Schedule 14A for the 2020 Annual Meeting of Stockholders, filed with the SEC on April 29, 2020](#), as amended by definitive additional materials filed on [June 5, 2020](#) and [June 11, 2020](#); and

- The description of our common stock contained in our Registration Statement on Form S-1, which description is incorporated by reference into the Form 8-A filed with the SEC on January 24, 2018, pursuant to the Exchange Act and any amendment or report filed for the purpose of updating such description.

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

We will furnish without charge to you, on written or oral request, a copy of any filing or report incorporated by reference, including exhibits to the document. You should direct any requests for documents to Eyenovia, Inc., 295 Madison Avenue, Suite 2400, New York, NY 10017, (917) 289-1117, Attention: Corporate Secretary.

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

Prospectus



**\$75,000,000 of
Common Stock
Preferred Stock
Debt Securities
Warrants
Units and/or
Rights**

We may offer and sell from time to time up to \$75,000,000 of our shares of common stock; shares of preferred stock; debt securities; warrants; rights to purchase common stock, preferred stock, debt securities or units; and units that include any of these securities, in one or more offerings in amounts, at prices and on terms that we will determine at the time of offering.

This prospectus provides you with a general description of the securities we may offer. A prospectus supplement containing specific information about the terms of the securities being offered and the offering, including the compensation of any underwriter, agent or dealer, will accompany this prospectus. Any prospectus supplement may also add, update or change information contained in this prospectus. If information in any prospectus supplement is inconsistent with the information in this prospectus, then the information in that prospectus supplement will apply and will supersede the information in this prospectus.

Our common stock is listed on the Nasdaq Capital Market under the symbol “EYEN”. The last reported sale price of our common stock on January 22, 2019 was \$2.91 per share. We recommend that you obtain current market quotations for our common stock prior to making an investment decision.

As of January 22, 2019, the aggregate market value of our outstanding common stock held by non-affiliates, or the public float, was approximately \$20,441,193, which was calculated based on 7,024,465 shares of our outstanding common stock held by non-affiliates and on a price of \$2.91 per share, the last reported sale price for our common stock on January 22, 2019. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell our common stock in a public primary offering with a value exceeding one-third of our public float in any 12-month period unless our public float subsequently rises to \$75.0 million or more. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus.

This prospectus may not be used by us to consummate a sale of securities unless accompanied by the applicable prospectus supplement. You should carefully read both this prospectus and any prospectus supplement, together with additional information described in “Where You Can Find More Information” and “Incorporation of Certain Information by Reference”, before you invest in our securities.

Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page 12 of this prospectus, in any accompanying prospectus supplement and in the documents incorporated by reference into this prospectus, to read about factors you should consider before investing in our securities.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Prospectus dated February 12, 2019.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. Under this shelf registration process, we may offer shares of our common stock; shares of our preferred stock; debt securities; warrants for such securities; rights to purchase common stock, preferred stock, debt securities or units; and units that include any of these securities, in one or more offerings, up to a total dollar amount of \$75,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

We may sell the securities (a) through agents; (b) through underwriters or dealers; (c) directly to one or more purchasers; or (d) through a combination of any of these methods of sale. We and our agents reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. See “Plan of Distribution” below. A prospectus supplement (or pricing supplement), which we will provide to you each time we offer securities, will provide the names of any underwriters, dealers, or agents involved in the sale of the securities, and any applicable fee, commission or discount arrangements with them.

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

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

To the extent there are inconsistencies between this prospectus, any prospectus supplement and any documents incorporated by reference, the document with the most recent date will control.

This prospectus may not be used to consummate sales of our securities, unless it is accompanied by a prospectus supplement.

Unless otherwise indicated in this prospectus or the context otherwise requires, all references to “we,” “us,” “our,” “the Company,” and “Eyenovia” refer to Eyenovia, Inc.

INDUSTRY AND MARKET DATA

We obtained the industry, statistical and market data in this prospectus from our own internal estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. In presenting this information, we have made assumptions based on such data and other similar sources, and on our knowledge of, and our experience to date in, the potential markets for our product candidates. Although we believe the data from these third-party sources is reliable, we have not independently verified any third-party information. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled “Risk Factors”. These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus, or incorporated by reference into this prospectus. It might not contain all the information that is important to you. You should read the entire prospectus carefully, including the section entitled “Risk Factors” and our financial statements and the related notes included elsewhere in this prospectus or incorporated by reference into this prospectus, before making an investment decision to purchase shares of our securities.

Our Business

Overview

We are a clinical stage ophthalmic biopharmaceutical company developing a pipeline of microdose therapeutics utilizing our patented piezo-print delivery technology, which we recently branded the Optejet™. Eyenovia aims to achieve clinical microdosing of next-generation formulations of well-established ophthalmic pharmaceutical agents using its high-precision targeted ocular delivery system, which has the potential to replace conventional eyedropper delivery and improve safety, tolerability, patient compliance and topical delivery success for ophthalmic eye treatments. In the clinic, Optejet has demonstrated up to a 75% reduction in ocular drug and preservative exposure, with successful topical delivery that generally exceeded the efficacy of traditional eyedrop administration. Using our proprietary delivery technology, Eyenovia is developing the next generation of smart ophthalmic therapies while targeting new indications for which there are currently no drug therapies approved by the U.S. Food and Drug Administration (the “FDA”). Eyenovia’s microdose therapeutics follow the FDA-designated pharmaceutical registration and regulatory process. Our products are not classified by the FDA as medical devices or drug-device combination products.

Eyenovia recently initiated Phase III trials for MicroStat. MicroStat is a fixed combination formulation of phenylephrine-tropicamide for mydriasis (pupil dilation), designed to be a novel approach for the estimated 80 million office-based comprehensive and diabetic eye exams performed every year in the United States. Additionally, we have received clear feedback from the FDA regarding the requirements for Phase III trials for our MicroPine and MicroProst programs. MicroPine is a first-in-class topical therapy for the treatment of progressive myopia, a back-of-the-eye ocular disease associated with pathologic axial elongation and sclero-retinal stretching affecting approximately 5 million people in the United States. MicroProst is a novel latanoprost formulation for lowering intraocular pressure (“IOP”) in patients with ocular hypertension (“OHT”), primary open angle glaucoma (“POAG”) and chronic angle closure glaucoma (“CACG”). MicroTears, our over-the-counter (“OTC”) product candidate for dry eye, will not require Phase III trials. We plan to proceed with registration activities for MicroTears this year.

We have completed three Phase II trials, with results from two published in peer-reviewed literature and a third in press publication. In two studies evaluating mydriatic agents, the Optejet consistently delivered precision dosing at the volume of the eye’s natural tear film capacity of 6 – 8 μ L, which reduced ocular and systemic drug and preservative exposure, while demonstrating pupil dilation comparable to conventional eyedrops with fewer side effects. In the third study, we evaluated usability, patient tolerability and intraocular pressure lowering of microdosed latanoprost administered with the Optejet. In this study, eyes receiving microdosed latanoprost achieved IOP reduction consistent with published literature on eyedrops and administration of the medication was successful in a single attempt in more than 90% of cases. Based on the results from these clinical trials, we have advanced MicroStat into Phase III utilizing the 505(b)(2) pathway and plan to do the same with MicroPine and MicroProst. Where possible, we also intend to use this pathway for future clinical trials in new indications with significant unmet needs.

Our Solution

Ophthalmic drugs delivered as eyedrops can fail to provide the prescribed dose more than 50% of the time and, even when the prescribed dose is delivered to the ocular surface, eyedrops can overdose the ocular surface by more than 300%. The average tear volume of the eye is 6 – 8 μ L, yet conventional eyedrops deliver fluid volume of approximately 30 – 50 μ L. Even among bottles of the same size and shape, eyedrop sizes vary significantly depending on the angle of the bottle and the amount of ophthalmic solution remaining. The large drop size can result in overflow from the eye into the nasolacrimal canal, where the active drug product becomes available systemically. Ocular drugs that are absorbed by the nasolacrimal mucosa mimic

intravenous injection delivery insofar as they are not susceptible to first-pass hepatic metabolism. Additionally, ocular medication in swallowed nasolacrimal secretions is theoretically available for absorption in the gastrointestinal tract. As such, only a small fraction of the applied medication is actually absorbed directly into the eye, while there remain multiple opportunities for unintended local and systemic exposure. Additionally, excess drug (and preservative in some instances) in the eye is more likely to cause ocular surface toxicity and tolerability issues and spillage to the periorbital skin can cause dermatological changes.

Instillation of eyedrops also stimulates lacrimation, and can increase tear turnover rate from 16% per minute to 30% per minute once eyedrops have been instilled, thereby diluting the drug product. If the eyedrop stings, the loss rate can be even higher. Approximately 80% of a medication instilled as an eyedrop is lost to drainage during the first 15 – 30 seconds after instillation.

The Optejet



The Optejet delivers doses of 6 – 8 μL , directly coating the corneal surface where 80% of intraocular drug penetration occurs. We believe that microdosing may reduce drug and toxic preservative exposure by more than 75%, thus reducing ocular irritation, and resulting in potentially gentler treatments without compromising the desired clinical effect. Our approach could also reduce waste associated with conventional macrodose drops — a problem that has been highlighted by recently introduced legislation in the U.S. Senate to address this specific concern.

We believe that we are one of the only companies with clinical stage technology for targeted microdosing of ophthalmic investigational therapies. The Optejet is based on piezo-print technology, which is also used for pixel-sharp high-precision inkjet printing. The technology is optimized for and applied in ophthalmic delivery to achieve microdosing that can be many times more precise than conventional eyedroppers. In addition, our smart, electronic system provides the capability to track when patients administer their

medications and deliver this information to patients and physicians via Bluetooth connectivity. Thus, physicians can make decisions regarding therapeutic regimens with knowledge of patient compliance.

The FDA has provided written feedback that our clinical development activities will be treated as drug development programs, because only the drug comes into contact with the eye. Consequently, we do not anticipate needing separate FDA approval for the Optejet or being required to comply with FDA medical device regulations.

Microdose administration of topical ophthalmic drugs with the Optejet has been tested in preclinical models and clinical trials and shown to provide many advantages over administrations of eyedrops. Key advantages include:

- **Dose reduction:** Our microdose delivery technology achieves precise volumetric control at the microliter level to deliver 6 – 8 μL , which is the physiologic capacity of the tear film. This compares favorably to the volume of an eyedrop (30 – 50 μL), which can result in overdosing, ocular toxicity and systemic leaching into the plasma.
- **Targeted dose instillation:** The Optejet allows for targeted delivery to the ocular surface and cornea, avoiding the conjunctival cul-de-sac. The micro-jet spray created by the piezo-electric vibrations is columnated and focused to provide precise delivery to the corneal surface where the majority of ocular penetration occurs. Additionally, the Optejet is designed with an LED targeting mechanism to facilitate proper positioning and objective alignment, thus increasing the likelihood of successful dose delivery.
- **Speed of delivery:** Our piezo-electric technology is similar to pixel-sharp precision ink jet printing. Unlike a simple aerosolized mechanism, our patented technology is designed with ejection control that creates a fast and targeted micro-jet delivery. Solution is delivered to the ocular surface in less than 80 milliseconds beating the typical eye's 100-millisecond blink reflex.
- **Smart electronics:** Our smart electronics and mobile e-health technology are designed to track when a patient administers treatment. This enables physicians to objectively monitor patient compliance. We believe this technology will improve compliance and chronic disease management by empowering patients and physicians with access to dynamic, real-time monitoring and compliance data for a more intelligent and personalized therapeutic paradigm.

Our Pipeline

The following summarizes our product pipeline and expected milestones:

| Product Candidate | Indication | Next Expected Milestones |
|-------------------|---|--|
| MicroStat | Mydriasis (Pupil Dilation) | Report Phase III Trial Results H1 2019 |
| MicroPine | Pediatric Myopia Progression (Near Sightedness) | Initiate Phase III Trial H1 2019 |
| MicroProst | Chronic Angle Closure Glaucoma | Initiate Phase III Trial H1 2019 |
| MicroTears | Dry Eye | OTC Registration H1 2019 |

MicroStat

MicroStat is the potentially first-in-class fixed combination micro-formulation product candidate for mydriasis (eye dilation) intended to facilitate the estimated 80 million office-based comprehensive and diabetic eye exams performed every year in the United States. Our fixed combination product has been developed to help achieve efficient pupil dilation while reducing unintended effects of conventionally administered mydriatic agents. We believe the market exceeds \$150 million annually in the United States alone.

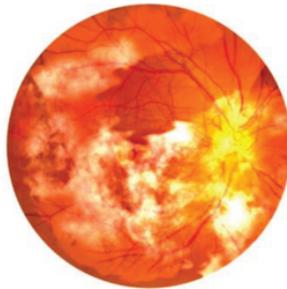
Phase III Clinical Development Program

Our New Drug Application (“NDA”) has been accepted by the FDA and we initiated Phase III clinical trials of fixed-combination microdosed phenylephrine 2.5% and tropicamide 1% administered for mydriasis in November 2018.

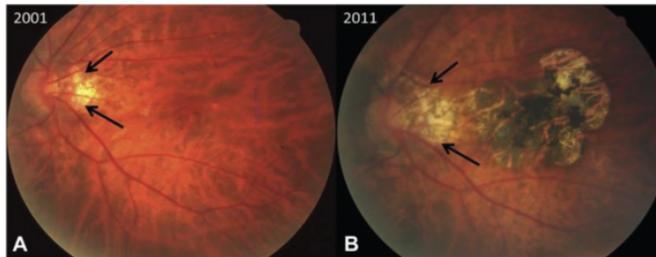
The MicroStat program consists of two Phase III randomized, controlled, cross-over clinical studies evaluating pupil dilation with our fixed combination product in comparison with the individual drug components (phenylephrine 2.5% and tropicamide 1%, respectively), and with a placebo. The primary endpoint for each study is the mean change in pupil diameter at 35 minutes post-drug administration. If the primary objectives of our Phase III program are met, we plan to submit an NDA to the FDA for marketing approval in the United States. Outside of the United States, we have entered into a licensing partnership for MicroStat with one of our largest stockholders and a leading ophthalmology company in Japan, Senju Pharmaceuticals, Co. Ltd. ("Senju Pharmaceuticals"), for commercialization in Asia, including China, Japan and India.

MicroPine

A key therapeutic program for Eyenovia is our first-in-class topical treatment for progressive myopia, a back-of-the-eye disease. Progressive myopia is estimated to affect close to 5 million patients in the United States who suffer from uncontrolled axial elongation of the sclera leading to increasing levels of myopia and in some cases major pathologic changes such as retinal atrophy, macular staphylomas, retinal detachment and visual impairment.



Progressive Myopia with Retinal Atrophy Changes



Fundus photographs showing the progression of myopic maculopathy from (A) category 2 (diffuse atrophy) to (B) category 4 (macular atrophy) Ophthalmology 2018;:-:1e11

Academic groups have demonstrated that high efficacy with low dose atropine reduces myopia progression 60 – 70%, with sustained effect through three years. A recent therapeutic evidence assessment and review by the American Academy of Ophthalmology, indicates Level 1 (highest) evidence of efficacy for the role of low dose atropine for progressive myopia (Ophthalmology 2017;124:1857-1866; Ophthalmology 2016; 123(2) 391:399). While atropine 1% ophthalmic solution is commercially available, we believe the significant side effects associated with its use in the pediatric population make its use undesirable for the treatment of progressive myopia.

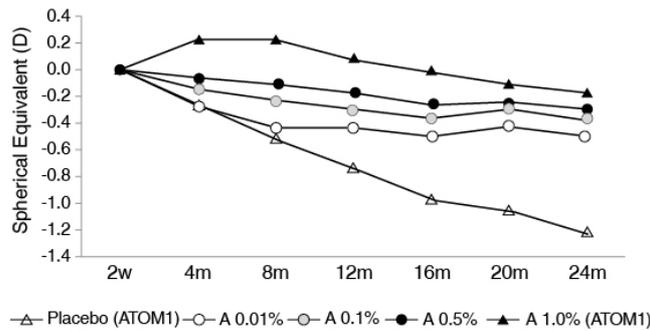


Figure 2. Mean change in spherical equivalent for groups from baseline, 2 weeks, and 4 to 24 months with atropine 0.01%, 0.1%, and 0.5% from the ATOM2 study, and placebo and atropine 1.0% from the ATOM1 study. A = atropine; ATOM = Atropine for the Treatment of Myopia; D = diopter; m = month; w = week.

Ophthalmology 2012;119:347–354

Phase III Clinical Development Program

MicroPine is Eyenovia's clinical development program involving the formulation and the Optejet microdose administration of low-dose atropine for reduction of progressive myopia. Based on FDA feedback, we anticipate initiation of the single required Phase III trial enrolling children and adolescents who will use MicroPine therapy daily. The primary assessment of efficacy is based on reduction in myopia progression at three years, at which point the data will be analyzed and submitted in an NDA for FDA review, with a follow-up in the fourth year required to assess any rebound effects associated with a change in the medication regimen.

MicroProst

MicroProst is our proprietary latanoprost formulation product candidate, which we are developing as a first-line treatment for reduction of IOP in patients with OHT, POAG and CACG. Currently, there are no FDA-approved therapies for CACG, even though it accounts for an estimated 10% and 50% of all glaucoma diagnoses in the United States and China, respectively. We believe that the market for MicroProst exceeds \$700 million annually in the United States alone.

Phase III Clinical Development Program

Subsequent to the completion of early phase clinical trials, we met with the FDA to discuss our Phase III plans for MicroProst. The FDA outlined the necessary clinical trials for approval and we are preparing to initiate a Phase III registration program for MicroProst relying on the 505(b)(2) pathway in the first half of 2019. If approved, we believe MicroProst could have the widest indication of commercially available IOP-lowering therapies, including the first FDA-approved treatment for CACG. Based on the results of our earlier study of Optejet-administered latanoprost (PG-21), we believe MicroProst will achieve similar clinical efficacy without the adverse effects seen with conventional drops, which overdose the eye with potentially harmful preservatives and active pharmaceutical ingredient.

We anticipate that the MicroProst clinical program will require a single Phase III randomized controlled clinical trial involving patients with OHT, POAG and/or CACG, with a three-month primary endpoint evaluating IOP reduction and follow-up through six months for safety. We plan to begin the clinical trial for MicroProst in the first half of 2019. We have entered into a licensing partnership for our MicroProst program with Senju Pharmaceuticals for Asia, including China where CACG accounts for up to 50% of all glaucoma.

MicroTears

MicroTears is a micro-droplet ocular surface tear replenishment product candidate for the estimated \$2 billion-plus (200 million units) annual OTC artificial tear market. The Optejet can enable accurate delivery

of MicroTears directly to the ocular surface, which we believe will enhance its effectiveness. The lower volume of MicroTears could also lower the incidents of droplet overflow. While no FDA studies are required for registration of a monograph formulation, we expect to conduct multiple Phase IV post-marketing studies to demonstrate the benefits of MicroTears. We plan to complete formulation and manufacturing scale-up activities for an expected market introduction in mid-to-late 2019.

Our Strategy

Our goal is to become a leading ophthalmic biopharmaceutical company focused on developing and commercializing a strong pipeline of first-in-class microdose therapeutics and a digital health platform for interactive patient care. The key elements of our strategy to achieve this goal are:

Establish a portfolio of first-in-class piezo-print micro-therapeutic products for front-of-the-eye treatments through the 505(b)(2) pathway with the FDA. We are initially focused on integrating our next-generation technology with therapeutic compounds already well-established in the topical treatment of ophthalmic indications. We believe that the 505(b)(2) registration pathway, which reduces development risk compared to new molecular entity programs by working with known compounds with well-established safety and efficacy profiles, will be available for our initial development pipeline. We believe our pipeline of patented micro-therapeutic product candidates will be highly differentiated by our improved tolerability and enhanced compliance profile, and our late-stage development programs could lead to NDA submissions in novel indications where the products can have unique dosing and therapeutic profiles. We believe that this could lead to favorable pricing and reimbursement, and a reduced risk of generic substitution.

Improve clinical outcomes and patient experiences while providing an improved tolerability profile with our micro-therapeutics. We believe the Optejet will allow for high-precision targeted microdosing for front-of-the-eye treatments, while eliminating ophthalmic over-dosing and reducing ocular exposure to toxic preservatives and pharmacologic ingredients compared to conventional eyedrop delivery mechanisms. Our clinical trials have demonstrated equivalent efficacy to eyedrops, improved side effect profile and enhanced patient experience with the Optejet as compared to conventional eyedrops.

Leverage our electronic, smartphone-enabled “e-health” technology to introduce and develop patient-specific compliance monitoring program. The mobile e-health technology within the Optejet is designed to track when a patient administers treatments, allowing physicians to track patient compliance more accurately. We believe this may enhance patient compliance and improve compliance monitoring by empowering patients and physicians with access to dynamic, real-time monitoring and compliance data for a more intelligent, informed and personalized therapeutic paradigm.

Develop microdose treatments for other ophthalmic diseases independently or in collaboration with third parties. The Optejet is also suitable for new molecular entities. Leveraging our existing platform technology, we plan to continue developing, either independently or through strategic relationships with third parties, other product candidates for front-of-the-eye diseases that can be administered using the Optejet. We have entered into an exclusive agreement with Senju Pharmaceuticals for the Asian development and commercial rights to our therapies and technology.

Develop solutions for ophthalmic conditions with high unmet needs and no approved therapy. We plan to target chronic ophthalmic conditions with a high unmet medical need. By leveraging our piezo-print microdosing technology, we aim to reach conditions where there are no approved drug therapies. For example, our MicroPine program involves a proprietary formulation of low-dose atropine intended to slow myopia progression in the pediatric population. There are currently no commercially-available therapies in the United States to treat this indication.

Our Team

Our management team is a critical component to the execution of our overall strategy and business model and is led by our Chief Executive Officer and Chief Medical Officer, Dr. Tsontcho Ianchulev. Dr. Ianchulev has over 15 years of experience in public health, life-science and medical technology. He is a physician-executive and public health expert who has been at the core of developing medical products and technologies that have transformed the ophthalmic field and impacted medical care for thousands of

patients each year. His intellectual property was a core asset to WaveTec's (acquired by Alcon) technology for intraoperative aberrometry. He is currently a Professor of Ophthalmology at the New York Eye and Ear Infirmary and sits on the Boards of Kurobe Pharmaceuticals and The American Society of Cataract and Refractive Surgery Foundation. Dr. Ianchulev spent five years at Genentech, where he headed the ophthalmology research group and directed the development and FDA approval of Lucentis, a successful specialty biologic in the field of ophthalmology with more than \$4 billion of annual sales in 2015. Most recently, he headed all clinical development of Transcend Medical's (acquired by Alcon) micro-stent for glaucoma. We believe Dr. Ianchulev's clinical experience, combined with development and commercial work in both biopharmaceuticals and medical devices make him well suited to lead Eyenovia. Dr. Ianchulev is a graduate of Harvard Medical School and has an MPH degree from the Harvard School of Public Health.

In addition to Dr. Ianchulev, the management team includes professionals with significant experience in translational science, drug evaluation, clinical development, regulatory affairs, finance, marketing and business development. Our management team is supported by our Board of Directors, which has extensive professional experience in strategic development, executive, operational and financial leadership in the pharmaceutical and healthcare industries, including several successful ophthalmology companies.

Corporate Information

We were organized as a corporation under the laws of the State of Florida on March 12, 2014 under the name "PGP Holdings V, Inc." On May 5, 2014, we changed our name to Eyenovia, Inc. On October 6, 2014, we reincorporated in the State of Delaware by merging into Eyenovia, Inc., a Delaware corporation. Our principal executive office is located at 295 Madison Avenue, Suite 2400, New York, NY 10017, and our phone number is 917-289-1117. Our website is <http://www.eyenoviabio.com>. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, does not constitute part of this prospectus and should not be relied upon in connection with making any investment in our securities.

Offerings Under This Prospectus

We may offer shares of our common stock; shares of our preferred stock; debt securities; warrants for such securities; rights to purchase common stock, preferred stock, debt securities or units; and units that include any of these securities, with a total value of up to \$75,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities.

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

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

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

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

Common Stock

Our Third Amended and Restated Certificate of Incorporation, as amended, or certificate of incorporation, authorizes the issuance of 90,000,000 shares of common stock, of which 11,782,682 shares were issued and outstanding as of January 22, 2019. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Each election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends declared by our Board of Directors, subject to any preferential dividend rights of outstanding preferred stock.

In the event of our liquidation or dissolution, the holders of our common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any of our outstanding preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Preferred Stock

Our certificate of incorporation authorizes the issuance of 6,000,000 shares of blank check preferred stock with such designation, rights and preferences as may be determined from time to time by our Board of Directors. No shares of preferred stock are currently designated and outstanding. Our Board of Directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, redemption, voting or other rights, which could adversely affect the voting power or other rights of the holders of common stock. We may issue some or all of the preferred stock to effect a business transaction. In addition, the preferred stock could be utilized as a method of discouraging, delaying or preventing a change in control of us.

If we sell any series of preferred stock under this prospectus and applicable prospectus supplements, we will fix the rights, preferences, privileges and restrictions of the preferred stock of such series in a certificate of amendment to our certificate of incorporation relating to that series. We will also incorporate by reference from reports that we file with the SEC, the form of any certificate of amendment that describes the terms of series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement related to the series of preferred stock being offered, as well as the complete certificate of amendment that contains the terms of the applicable series of preferred stock.

Warrants

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities (described below) in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. We will evidence each series of warrants by warrant certificates that we will issue under a separate agreement. We may enter into warrant agreements with a bank or trust company that we select to be our warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

In this prospectus, we have summarized certain general features of warrants. We urge you, however, to read the applicable prospectus supplement related to the particular series of warrants being offered, as well as the warrant agreements and warrant certificates that contain the terms of the warrants. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement and warrant certificate containing the terms of the warrants we are offering before the issuance of the warrants.

Debt Securities

We may offer debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any

other unsecured and unsubordinated debt. Any subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Any convertible debt securities will be convertible into or exchangeable for our common stock or our other securities. Conversion may be mandatory or at your option or both and would be at prescribed conversion rates.

With respect to any debt securities that we issue, we will issue such debt securities under an indenture, which we would enter into with the trustee named in the indenture. The form of indenture is filed as an exhibit to the registration statement of which this prospectus is a part and is incorporated herein by reference. Any indenture would be qualified under the Trust Indenture Act of 1939, as amended.

Units

We may issue units consisting of some number and/or combination of shares of our common stock; shares of our preferred stock; debt securities; warrants for such securities; or rights for the purchase of common stock, preferred stock, debt securities or units, in one or more series. In this prospectus, we have summarized certain general features of units. We urge you, however, to read the applicable prospectus supplement related to the series of units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference reports that we file with the SEC, the form of unit agreement, unit certificate, as may be applicable, and any supplemental agreements that describe the terms of the units we are offering before the issuance of the units.

Rights

We may offer rights to our existing stockholders to purchase additional shares of our common stock, shares of our preferred stock, debt securities or units. For any particular subscription rights, the applicable prospectus supplement will describe the terms of such rights, including the period during which such rights may be exercised, the manner of exercising such rights, the transferability of such rights and the number of shares of common stock, shares of preferred stock, debt securities or units that may be purchased in connection with each right and the subscription price for the purchase of such common stock, preferred stock, debt securities or units. In connection with a rights offering, we may enter into a separate agreement with one or more underwriters or purchasers to purchase any shares of our common stock, preferred stock, debt securities or units not subscribed for in the rights offering by existing stockholders, which will be described in the applicable prospectus supplement.

In this prospectus, we have summarized certain general features of rights. We urge you, however, to read the applicable prospectus supplement related to the rights being offered and the rights agreement that contains the terms of the rights, and the rights certificate. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of rights agreement containing the terms of the rights and rights certificate we are offering before the issuance of rights.

Listing

If any securities are to be listed or quoted on a securities exchange or quotation system, the applicable prospectus supplement will so indicate. Our common stock is listed on the Nasdaq Capital Market and trades under the symbol "EYEN".

RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider carefully the risks and uncertainties described in “Risk Factors” in our most recently filed Annual Report on Form 10-K filed with the SEC, in each case as these risk factors are amended or supplemented by subsequent [Annual Reports on Form 10-K](#), [Quarterly Reports on Form 10-Q](#), or [Current Reports on Form 8-K](#) that have been or will be incorporated by reference in this prospectus. The prospectus supplement relating to a particular offering of our securities may also discuss certain risks of investing in that offering. The risks set forth in any prospectus supplement and incorporated herein by reference are those which we believe are the material risks that we face. The occurrence of any of such risks may materially and adversely affect our business, financial condition, results of operations and future prospects. In such an event, the market price of our common stock could decline, and you could lose part or all of your investment.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains a number of forward-looking statements. Specifically, all statements other than statements of historical facts included in this prospectus, or incorporated by reference into this prospectus, regarding our financial position, business strategy, development timelines and plans and objectives of management for future operations are forward-looking statements. These forward-looking statements are based on the beliefs of management at the time these statements were made, as well as assumptions made by and information currently available to management. When used in this prospectus and the documents incorporated by reference herein, the words “anticipate”, “believe”, “estimate”, “expect”, “may”, “will”, “continue” and “intend”, and words or phrases of similar import are intended to identify forward-looking statements. These statements are subject to risks, uncertainties and assumptions related to various factors.

You should understand that the following important factors, in addition to those discussed in our periodic reports filed with the SEC under the Securities Exchange Act of 1934, as amended, or the Exchange Act, could affect our future results and could cause those results to differ materially from those expressed in such forward-looking statements:

- risks involved in clinical trials, including, but not limited to, the costs, initiation, timing, progress and results of such trials;
- our estimates regarding the potential market opportunity for our product candidates;
- our ability to develop and implement our commercialization, marketing and manufacturing capabilities and strategies;
- our expectations related to the use of proceeds from any offering;
- our expectations regarding our ability to fund our operating expenses and capital expenditure requirements with our cash on hand and proceeds from any offering;
- the potential advantages of our product candidates;
- the rate and degree of market acceptance and clinical utility of our products;
- our intellectual property position;
- our ability to identify additional products, product candidates or technologies with significant commercial potential that are consistent with our commercial objectives;
- our estimates regarding expenses, future revenue, timing of any future revenue, capital requirements and needs for additional financing;
- our ability to attract and retain key personnel;
- the impact of government laws and regulations;
- our competitive position;
- developments relating to our competitors and our industry;
- our ability to maintain and establish collaborations or obtain additional funding;
- general or regional economic conditions;
- changes in U.S. GAAP; and
- changes in the legal, regulatory and legislative environments in the markets in which we operate, including impacts of U.S. government shut-downs on our ability to raise money and obtain regulatory approval for our products.

Although we believe that our expectations (including those on which our forward-looking statements are based) are reasonable, we cannot assure you that those expectations will prove to be correct. Should any one or more of these risks or uncertainties materialize, or should any underlying assumptions prove incorrect, actual results may vary materially from those described in our forward-looking statements as anticipated, believed, estimated, expected or intended.

Except for our ongoing obligations to disclose material information under the federal securities laws, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or any other reason. All subsequent forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to herein. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this prospectus and the documents incorporated by reference herein might not occur.

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with securities offered by us pursuant to this prospectus. Unless otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of our securities by us under this prospectus for general corporate purposes, including to cover expenses related to our clinical trials and development programs and our operating expenses. We will set forth in the applicable prospectus supplement our intended use for the net proceeds received from the sale of any securities by us. Pending the application of the net proceeds, we intend to invest the net proceeds generally in corporate savings accounts with top tier commercial banks, short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

PLAN OF DISTRIBUTION

We may sell securities offered under this prospectus:

- through underwriters or dealers;
- through agents;
- directly to one or more purchasers; or
- through a combination of any of these methods for sale.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time, or at negotiated prices. For each type and series of securities offered, the applicable prospectus supplement will set forth the terms of the offering, including, without limitation:

- the names of any underwriters, dealers or agents;
- the purchase price of the securities;
- the use of proceeds to us from the sale of the securities;
- any underwriting discounts, agency fees or other compensation payable to underwriters or agents;
- any discounts or concessions allowed or re-allowed or repaid to dealers; and
- the securities exchanges on which the securities will be listed, if any.

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. If we use underwriters in any sale of securities offered under this prospectus, the underwriters will buy the securities for their own account. The underwriters may then resell the securities in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale or thereafter. The underwriters may sell the securities directly or through underwriting syndicates managed by managing underwriters. The obligations of the underwriters to purchase the securities will be subject to certain conditions. The underwriters will be obligated to purchase all the securities offered if they purchase any securities. The offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time. In connection with an offering, underwriters and their affiliates may engage in transactions to stabilize, maintain, or otherwise affect the market price of the securities in accordance with applicable law.

Underwriters or agents may make sales in privately negotiated transactions and/or any other method permitted by law, including sales deemed to be an “at-the-market” offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act, which includes sales made directly on the Nasdaq Capital Market, the existing trading market for our common stock, or sales made to or through a market maker other than on an exchange.

If we use dealers in any sale of securities offered under this prospectus, the securities will be sold to such dealers as principals. The dealers may then resell the securities to the public at varying prices to be determined by such dealers at the time of resale. If agents are used in any sale of securities offered under this prospectus, they will generally use their reasonable best efforts to solicit purchases for the period of their appointment. If securities offered under this prospectus are sold directly, no underwriters, dealers or agents would be involved. We are not making an offer of securities in any state that does not permit such an offer.

Underwriters, dealers and agents that participate in any distribution of securities may be deemed to be underwriters as defined in the Securities Act. Any discounts, commissions or profit they receive when they resell the securities may be treated as underwriting discounts and commissions under the Securities Act. We expect that any agreements we may enter into with underwriters, dealers and agents will include provisions indemnifying them against certain civil liabilities, including certain liabilities under the Securities Act, or providing for contributions with respect to payments that they may be required to make.

We may authorize underwriters, dealers or agents to solicit offers from certain institutions whereby the institution contractually agrees to purchase the securities offered under this prospectus from us on a future date at a specific price. This type of contract may be made only with institutions that we specifically approve. Such institutions could include banks, insurance companies, pension funds, investment companies, and educational and charitable institutions. The underwriters, dealers or agents will not be responsible for the validity or performance of these contracts.

Sales of securities offered under this prospectus also may be effected by us from time to time in one or more types of transactions (which may, without limitation, include block transactions, special offerings, exchange distributions, secondary distributions, purchases by a broker or dealer, or other direct sales by us to one or more purchasers) on the Nasdaq Capital Market or any other national securities exchange or automated trading and quotation system on which our common stock or other securities are listed, in the over-the-counter market, in transactions otherwise than on such exchanges and systems or the over-the-counter market, including negotiated transactions, through options transactions relating to the shares, or a combination of such methods of sale, at market prices prevailing at the time of sale, at negotiated prices, or at fixed prices. Such transactions may or may not involve brokers or dealers. Any shares of our common stock offered under this prospectus will be listed on the Nasdaq Capital Market, subject to notice of issuance.

Each issue of a new series of debt securities, preferred stock, warrants, units and rights will be a new issue of securities with no established trading market. It has not been established whether the underwriters, if any, of the securities offered under this prospectus will make a market in these securities. If a market in any series of debt securities, preferred stock, warrants, units and rights is made by any such underwriters, such market-making may be discontinued at any time without notice. We can give no assurance as to the liquidity of the trading market of these securities.

In order to facilitate the offering of any of the securities offered under this prospectus, the underwriters with respect to any such offering may, as described in the prospectus supplement, engage in transactions that stabilize, maintain, or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on these securities. Specifically, the underwriters may over-allot in connection with the offering, creating a short position in these securities for their own accounts. In addition, to cover over-allotments or to stabilize the price of these securities or of any other securities, the underwriters may bid for, and purchase, these securities or any other securities in the open market. Finally, in any offering of the securities offered under this prospectus through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing these securities in the offering, if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions, or otherwise. Any of these activities may stabilize or maintain the market price of these securities above independent market levels. The underwriters are not required to engage in these activities, and may end any of these activities at any time, all as described in the applicable prospectus supplement.

If so indicated in the applicable prospectus supplement, one or more firms, which we refer to as “remarketing firms”, acting as principals for their own accounts or as agents for us, may offer and sell the securities offered under this prospectus as part of a remarketing upon their purchase, in accordance with their terms. We will identify any remarketing firm, the terms of its agreement, if any, with us and its compensation in the applicable prospectus supplement.

Remarketing firms, agents, underwriters and dealers may be entitled under agreements with us to indemnification by or contribution from us against some civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

Any person participating in the distribution of securities will be subject to applicable provisions of the Exchange Act, and the rules and regulations under the Exchange Act, including without limitation, Regulation M, which may limit the timing of transactions involving the securities offered under this prospectus. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of such securities to engage in market-making activities with respect to the particular securities being

distributed. All of the above may affect the marketability of the securities offered under this prospectus and the ability of any person or entity to engage in market-making activities with respect to such securities.

Under the securities laws of various states, the securities offered under this prospectus may be sold in those states only through registered or licensed brokers or dealers. In addition, in various states the securities offered under this prospectus may not be offered and sold unless such securities have been registered or qualified for sale in the state or an exemption from such registration or qualification is available and is complied with.

DESCRIPTION OF OUR CAPITAL STOCK

Common Stock

Our certificate of incorporation, authorizes the issuance of 90,000,000 shares of common stock, of which 11,782,682 shares were issued and outstanding as of January 22, 2019. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Each election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends declared by our Board of Directors, subject to any preferential dividend rights of outstanding preferred stock.

In the event of our liquidation or dissolution, the holders of our common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any of our outstanding preferred stock. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

The transfer agent for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent's address is American Stock Transfer & Trust Company, LLC 6204 15th Avenue, Brooklyn, New York 11219 and its telephone number is 800-937-5449.

Options

As of January 22, 2019, options to purchase an aggregate of 1,924,432 shares of our common stock, with a weighted average exercise price of \$3.27 per share, were outstanding under our 2014 Equity Incentive Plan and 2018 Omnibus Stock Incentive Plan.

Preferred Stock

Our certificate of incorporation authorizes the issuance of 6,000,000 shares of blank check preferred stock with such designation, rights and preferences as may be determined from time to time by our Board of Directors. No shares of preferred stock are currently designated and outstanding. Our Board of Directors is empowered, without stockholder approval, to issue preferred stock with dividend, liquidation, redemption, voting or other rights, which could adversely affect the voting power or other rights of the holders of common stock. We may issue some or all of the preferred stock to effect a business transaction. In addition, the preferred stock could be utilized as a method of discouraging, delaying or preventing a change in control of us.

If we issue preferred stock, we will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in a certificate of amendment to our certificate of incorporation relating to that series. We will also incorporate by reference into the registration statement, of which this prospectus is a part, the form of any certificate of amendment that describes the terms of series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the prospectus supplement related to any series of preferred stock we may offer, as well as the complete certificate of amendment that contains the terms of the applicable series of preferred stock.

It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of our common stock until our board of directors determines the specific rights of the holders of the preferred stock. However, these effects might include restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock, and delaying or preventing the completion of a merger, tender offer or other takeover attempt. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

All shares of preferred stock offered will, when issued, be fully paid and nonassessable, including shares of preferred stock issued upon the exercise or exchange of any other securities described in this prospectus.

Registration Rights

We are subject to an Investor's Rights Agreement, as amended (the "Rights Agreement"), between us and the previous holders of our Series A preferred stock, Series A-2 preferred stock and Series B preferred stock, which shares were all converted to shares of our common stock immediately following the January 2018 initial public offering of our common stock ("IPO"). Under the Rights Agreement, beginning in July 2018, the holders of approximately 4,301,946 shares of our common stock are entitled to demand registration rights. At any time, the holders of more than specified amounts of these shares can, on not more than two occasions, request that we register all or a portion of their shares. We will not be required to effect a demand registration during the period beginning 60 days prior to our good faith estimate of the date of filing and 180 days following the effectiveness of a company-initiated registration statement relating to a public offering of our securities, such as our registration statement on Form S-1, filed with the SEC on December 12, 2018 and effective December 18, 2019.

In addition, in the event that we propose to register any of our securities under the Securities Act of 1933, as amended ("Securities Act"), either for our own account or for the account of other security holders, the holders of approximately 4,301,946 shares of our common stock are entitled to certain "piggyback" registration rights allowing such holders to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to a registration related to employee benefit plans, debt securities or corporate reorganizations, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration. The holders of these rights have waived them with respect to this Registration Statement.

We will pay the registration expenses of the holders of the shares registered pursuant to the registrations described above.

The registration rights described above will expire upon the earlier of (i) January 2021, or (ii) with respect to any particular stockholder, the date on which such stockholder can sell all of its shares under Rule 144 of the Securities Act during any 90-day period.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and any related warrant agreement and warrant certificate. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the specific terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions as follows and will be filed, along with a form of warrant certificate, as exhibits to the registration statement of which this prospectus is a part, or will be incorporated by reference from reports that we file with the SEC:

- the specific designation and aggregate number of, and the price at which we will issue, the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, the exercise price for shares of our common stock or preferred stock and the number of shares of common stock or preferred stock to be received upon exercise of the warrants;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or the common stock issuable upon exercise of the warrants on any securities exchange;
- if applicable, the date from and after which the warrants and the common stock or preferred stock will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- the redemption or call provisions, if any;
- whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Each warrant will entitle the holder of the warrant to purchase for cash, or via net exercise, an amount of securities at the exercise price set forth in the applicable prospectus supplement. Holders may exercise warrants at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will be void.

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

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of any debt securities that we may offer under this prospectus. While the terms we have summarized below will apply generally to any future debt securities we offer, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities we may offer under a prospectus supplement may differ from the terms described below. For any debt securities that we offer, an indenture (and any relevant supplemental indenture), if required, will contain additional important terms and provisions, the form of which we filed as an exhibit to the registration statement of which this prospectus is a part and is incorporated therein by reference. We will file any definitive indenture as an exhibit to reports that we file with the SEC and incorporate by reference in this prospectus and the applicable prospectus supplement. Any indenture would be qualified under the Trust Indenture Act of 1939, as amended.

With respect to any debt securities that we issue, we will describe in each prospectus supplement the following terms relating to a series of debt securities:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
- any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, and if so, the terms and who the depository will be;
- the maturity date;
- the principal amount due at maturity;
- whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be convertible into shares of our common stock or our preferred stock and, if so, the terms of such conversion;
- whether or not the debt securities will be secured or unsecured by some or all of our assets, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment or interest and the maximum length of any such deferral period;
- the date, if any, after which and the conditions upon which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- whether the indenture will restrict our ability to pay dividends, or will require us to maintain any asset ratios or reserves;

- whether we will be restricted from incurring any additional indebtedness, issuing additional securities, or entering into a merger, consolidation or sale of our business;
- a discussion of any material or special United States federal income tax considerations applicable to the debt securities;
- information describing any book-entry features;
- any provisions for payment of additional amounts for taxes;
- whether the debt securities are to be offered at a price such that they will be deemed to be offered at an “original issue discount” as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;
- the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
- events of default;
- whether we and/or the indenture trustee may change an indenture without the consent of any holders;
- the form of debt security and how it may be exchanged and transferred;
- description of the indenture trustee and paying agent, and the method of payments; and
- any other specified terms, preferences, rights or limitations of, or restrictions on, the debt securities and any terms that may be required by us or advisable under applicable laws or regulations.

We summarize below the material terms of the form of indenture, if required, or indicate which material terms will be described in the applicable prospectus supplement. The indenture:

- does not limit the amount of debt securities that we may issue;
- allows us to issue debt securities in one or more series;
- does not require us to issue all of the debt securities of a series at the same time;
- allows us to reopen a series to issue additional debt securities without the consent of the holders of the debt securities of such series; and
- provides that the debt securities may be secured or unsecured, as may be set forth in the applicable prospectus supplement.

DESCRIPTION OF THE UNITS

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

We may choose to evidence each series of units by unit certificates that we would issue under separate agreements. If we choose to evidence the units by unit certificate, we will enter into unit agreements with a unit agent and will indicate the name and address of the unit agent in the applicable prospectus supplement related to the particular series of units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement, unit certificate, as may be applicable, and any supplemental agreements that describe the terms of the units we are offering before the issuance of the units.

DESCRIPTION OF THE RIGHTS

The following is a general description of the terms of the rights we may issue from time to time unless we provide otherwise in the applicable prospectus supplement. Particular terms of any rights we offer will be described in the prospectus supplement relating to such rights.

General

We may issue rights to purchase common stock, preferred stock, debt securities or units. Rights may be issued independently or together with other securities and may or may not be transferable by the person purchasing or receiving the rights. In connection with any rights offering to our stockholders, we may enter into a standby underwriting, backstop or other arrangements with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering. In connection with a rights offering to our stockholders, we would distribute certificates evidencing the rights and a prospectus supplement to our stockholders on or about the record date that we set for receiving rights in such rights offering.

The applicable prospectus supplement will describe the following terms of any rights we may issue, including some or all of the following:

- the title and aggregate number of the rights;
- the subscription price or a formula for the determination of the subscription price for the rights and the currency or currencies in which the subscription price may be payable;
- if applicable, the designation and terms of the securities with which the rights are issued and the number of rights issued with each such security or each principal amount of such security;
- the number or a formula for the determination of the number of the rights issued to each stockholder;
- the extent to which the rights are transferable;
- in the case of rights to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one right;
- in the case of rights to purchase common stock or preferred stock, the type of stock and number of shares of stock purchasable upon exercise of one right;
- in the case of rights to purchase units, the type and number of securities comprising the units, and the number of units purchasable upon exercise of one right;
- the date on which the right to exercise the rights will commence, and the date on which the rights will expire (subject to any extension);
- if applicable, the minimum or maximum amount of the rights that may be exercised at any one time;
- the extent to which such rights include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the procedures for adjusting the subscription price and number of shares of common stock or preferred stock purchasable upon the exercise of each right upon the occurrence of certain events, including stock splits, reverse stock splits, combinations, subdivisions or reclassifications of common stock or preferred stock;
- the effect on the rights of any merger, consolidation, sale or other disposition of our business;
- the terms of any rights to redeem or call the rights;
- information with respect to book-entry procedures, if any;
- the terms of the securities issuable upon exercise of the rights;
- if applicable, the material terms of any standby underwriting, backstop or other purchase arrangement that we may enter into in connection with the rights offering;
- if applicable, a discussion of material U.S. federal income tax considerations; and

- any other terms of the rights, including terms, procedures and limitations relating to the exchange and exercise of the rights.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of rights agreement and rights certificate that describe the terms of the rights we are offering before the issuance of rights.

Exercise of Rights

Each right will entitle the holder to purchase for cash or other consideration such shares of stock or principal amount of securities at the subscription price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the rights offered thereby. Rights may be exercised as set forth in the applicable prospectus supplement beginning on the date specified therein and continuing until the close of business on the expiration date set forth in the prospectus supplement relating to the rights offered thereby. After the close of business on the expiration date, unexercised rights will become void.

Upon receipt of payment and a rights certificate properly completed and duly executed at the corporate trust office of the subscription agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchased upon such exercise. If less than all of the rights represented by such subscription certificate are exercised, a new subscription certificate will be issued for the remaining rights. If we so indicate in the applicable prospectus supplement, holders of the rights may surrender securities as all or part of the exercise price for rights.

We may determine to offer any unsubscribed offered securities directly to stockholders, to persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting, backstop or other arrangements, as described in the applicable prospectus supplement.

Prior to exercising their rights, holders of rights will not have any of the rights of holders of the securities purchasable upon subscription, including, in the case of rights to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise any voting rights or, in the case of rights to purchase debt securities, the right to receive principal, premium, if any, or interest payments, on the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture.

**CERTAIN PROVISIONS OF DELAWARE LAW, OUR
CERTIFICATE OF INCORPORATION AND BYLAWS**

Provisions of our Certificate of Incorporation on Choice of Forum

Unless we consent to the selection of an alternative forum, our certificate of incorporation provides that the Court of Chancery of the State of Delaware, or the Court of Chancery, will be, to the fullest extent permitted by law, the sole and exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees or agent to the Company or our stockholders; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, or DGCL, or our certificate of incorporation or bylaws; any action to enforce or determine the validity of our certificate of incorporation or bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Since the choice of forum provisions are only applicable to “the fullest extent permitted by law”, as provided in our certificate of incorporation, the provisions do not designate the Court of Chancery as the exclusive forum for any derivative action or other claim for which the applicable statute creates exclusive jurisdiction in another forum. As such, the choice of forum provisions do not apply to any actions arising under the Securities Act or the Exchange Act.

We believe the choice of forum provisions in our certificate of incorporation may benefit us by providing increased consistency in the application of Delaware law, where permitted, by chancellors and judges particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, these provisions may have the effect of discouraging lawsuits against our directors and officers in other forums. The enforceability of similar choice of forum provisions in other companies’ certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our certificate of incorporation to be inapplicable or unenforceable in such action.

Provisions of our Certificate of Incorporation and Bylaws, and Delaware Law that May Have an Anti-Takeover Effect

Certain provisions set forth in our certificate of incorporation and bylaws and Delaware law could have the effect of discouraging potential acquisition proposals or making a tender offer or delaying or preventing a change in control, including changes a stockholder might consider favorable. Such provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management.

Certificate of Incorporation and Bylaws

In particular, our certificate of incorporation and bylaws, among other things:

- provide that stockholders must provide advance notice to nominate persons for election to our Board of Directors or submit proposals for consideration at stockholder meetings;
- specify that special meetings of our stockholders can be called only by the chairman of the Board of Directors, the President or such other persons designated by the Board of Directors; and
- provide that vacancies on the Board of Directors may be filled by a majority of directors in office, although less than a quorum, or by the sole remaining director.

Delaware Law

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, DGCL Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years following the date on which the person became an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder: (i) shares owned by persons who are directors and also officers; and (ii) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66.67% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction or series of transactions together resulting in a financial benefit to the interested stockholder. 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 outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our Board of Directors does not approve in advance. We also anticipate that DGCL Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Certain provisions set forth in our certificate of incorporation and bylaws and Delaware law could have the effect of discouraging potential acquisition proposals or making a tender offer or delaying or preventing a change in control, including changes a stockholder might consider favorable. Such provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by Wyrick Robbins Yates & Ponton LLP, Raleigh, North Carolina.

EXPERTS

The financial statements of Eyenovia, Inc. included in the Company's [Annual Report on Form 10-K as of and for the years ended December 31, 2017 and 2016](#) have been audited by Marcum LLP, independent registered public accounting firm, as set forth in their report thereon and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance on such report given upon the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus, which constitutes a part of the registration statement on Form S-3 that we have filed with the SEC under the Securities Act, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the securities offered by this prospectus, you should refer to the registration statement and the exhibits filed as part of that document. 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 reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at <http://www.sec.gov>. We also maintain a website at <http://www.eyenoviabio.com>, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus and any applicable accompanying prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act with the SEC with respect to the securities being offered pursuant to this prospectus and any applicable accompanying prospectus supplement. This prospectus omits certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits, for further information about us and the securities being offered pursuant to this prospectus and any applicable accompanying prospectus supplement. Statements in this prospectus and any applicable accompanying prospectus supplement regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained over the Internet at the SEC’s website at <http://www.sec.gov>. We also maintain a website at <http://www.eyenoviabio.com>, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus. 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 prior to the termination of any offering, except as to any portion of any future report or document that is not deemed filed under such provisions:

- [our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on April 2, 2018;](#)
- [our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed with the SEC on May 9, 2018;](#)
- [our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, filed with the SEC on August 14, 2018;](#)
- [our Quarterly Report on Form 10-Q for the quarter ended September 30, 2018, filed with the SEC on November 13, 2018;](#)
- our Current Reports on Form 8-K filed with the SEC on [January 29](#), [March 12](#), [March 26](#), [June 14](#), [November 13](#) (only as it pertains to Item 8.01), [November 26](#), [December 3](#), and [December 21, 2018](#);
- [our preliminary proxy statement on Schedule 14A for our 2018 Annual Meeting of Stockholders, filed with the SEC on April 10, 2018;](#)
- [our proxy statement on Schedule 14A for our 2018 Annual Meeting of Stockholders, filed with the SEC on April 30, 2018;](#) and
- [the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on January 24, 2018.](#)

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

We will furnish without charge to you, on written or oral request, a copy of any filing or report incorporated by reference, including exhibits to the document. You should direct any requests for documents to Eyenovia, Inc., 295 Madison Avenue, Suite 2400, New York, NY 10017, (917) 289-1117, Attention: Corporate Secretary.

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

Shares



Common Stock

Prospectus Supplement

Sole Book-running Manager

William Blair

August , 2020
