

eyenovia

Making it Possible

May 2021

Forward-Looking Statements

Except for historical information, all of the statements, expectations and assumptions contained in this presentation are forward-looking statements. Forward-looking statements include, but are not limited to, statements that express our intentions, beliefs, expectations, strategies, predictions or any other statements relating to our future activities or other future events or conditions, including estimated market opportunities for our product candidates and platform technology. These statements are based on current expectations, estimates and projections about our business based, in part, on assumptions made by management. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Therefore, actual outcomes and results may, and are likely to, differ materially from what is expressed or forecasted in the forward-looking statements due to numerous factors discussed from time to time in documents which we file with the U.S. Securities and Exchange Commission.

In addition, such statements could be affected by risks and uncertainties related to, among other things: volatility and uncertainty in the global economy and financial markets in light of the COVID-19 pandemic; fluctuations in our financial results; the timing and our ability or the ability of our licensees to submit applications for, obtain and maintain regulatory approvals for our product candidates; changes in legal, regulatory and legislative environments in the markets in which we operate and the impact of these changes on our ability to obtain regulatory approval for our products; the potential impacts of COVID-19 on our supply chain; the potential advantages of our product candidates and platform technology and potential revenues from licensing transactions; the rate and degree of market acceptance and clinical utility of our product candidates; our estimates regarding the potential market opportunity for our product candidates; reliance on third parties to develop and commercialize certain of our product candidates; the ability of us and our partners to timely develop, implement and maintain manufacturing, commercialization and marketing capabilities and strategies for certain of our product candidates; risks of our ongoing clinical trials, including, but not limited to, the costs, design, initiation and enrollment (which could still be adversely impacted by COVID-19 and resulting social distancing), timing, progress and results of such trials; our ability to raise additional money to fund our operations for at least the next twelve months as a going concern; intellectual property risks; and our competitive position.

Any forward-looking statements speak only as of the date on which they are made, and except as may be required under applicable securities laws, Eyenovia does not undertake any obligation to update any forward-looking statements.

Investment Highlights

Late-stage therapeutics pipeline

MicroStat (Mydcombi™) for mydriasis (pupil dilation):

NDA PDUFA date expected October 28 2021

MicroPine for pediatric progressive myopia:

Phase 3 CHAPERONE study full enrollment expected 4Q 2021

MicroLine for presbyopia (improved near vision):

Phase 3 VISION-1 study results expected 2Q 2021

Clinically validated

in multiple Phase 2 and
Phase 3 studies

Development and commercialization partnerships

with leading global eyecare companies validate technology and provide significant non-dilutive capital.

Arctic Vision – Announced August 2020 with MicroPine and MicroLine for Greater China and South Korea

Bausch Health – Announced October 2020 for MicroPine in the US and Canada

Platform technology

allows for potential pipeline expansion into further high-value ophthalmic indications



A leading ophthalmic company
developing next-generation therapeutics
delivered using its proprietary Optejet®
microdose array print (MAP™) dispensing
technology

Leadership Team



Dr. Sean Ianchulev,
MD, MPH
CEO, CMO and Co-Founder

- Head of ophthalmology research and directed development and FDA approval of Lucentis, most successful ophthalmic drug for Genentech
- IanTech founder for cataract device approved by FDA in 2016 and inventor of Intra-operative Aberrometry at Wavetec-Alcon/Novartis
- CMO of Transcend Medical (acquired by Alcon/Novartis)



John Gandolfo
CFO



Michael Rowe
COO



Jennifer Clasby
VP Regulatory and Clinical



Luke Clauson
VP R&D,
Manufacturing



Late-Stage Ophthalmic Pipeline for US Registration in Markets Valued Over \$12.7 Billion

Product Candidate	Therapeutic Area	Pre-Clinical/ Formulation	Phase 1	Phase 2	Phase 3	NDA
MydCombi™ (trop+phen)	Pharmacologic Mydriasis	\$250M+ US market opportunity*				MIST-1 MIST-2
MicroLine ¹ (pilocarpine)	Improvement in near vision in patients with presbyopia	~\$7.7B US market opportunity ²				VISION-1 VISION-2
MicroPine ³ (atropine)	Reduction of pediatric myopia progression	\$5B+ US market opportunity*				CHAPERONE ⁴

* Estimate only

¹ Out-licensed to Arctic Vision in Greater China and South Korea

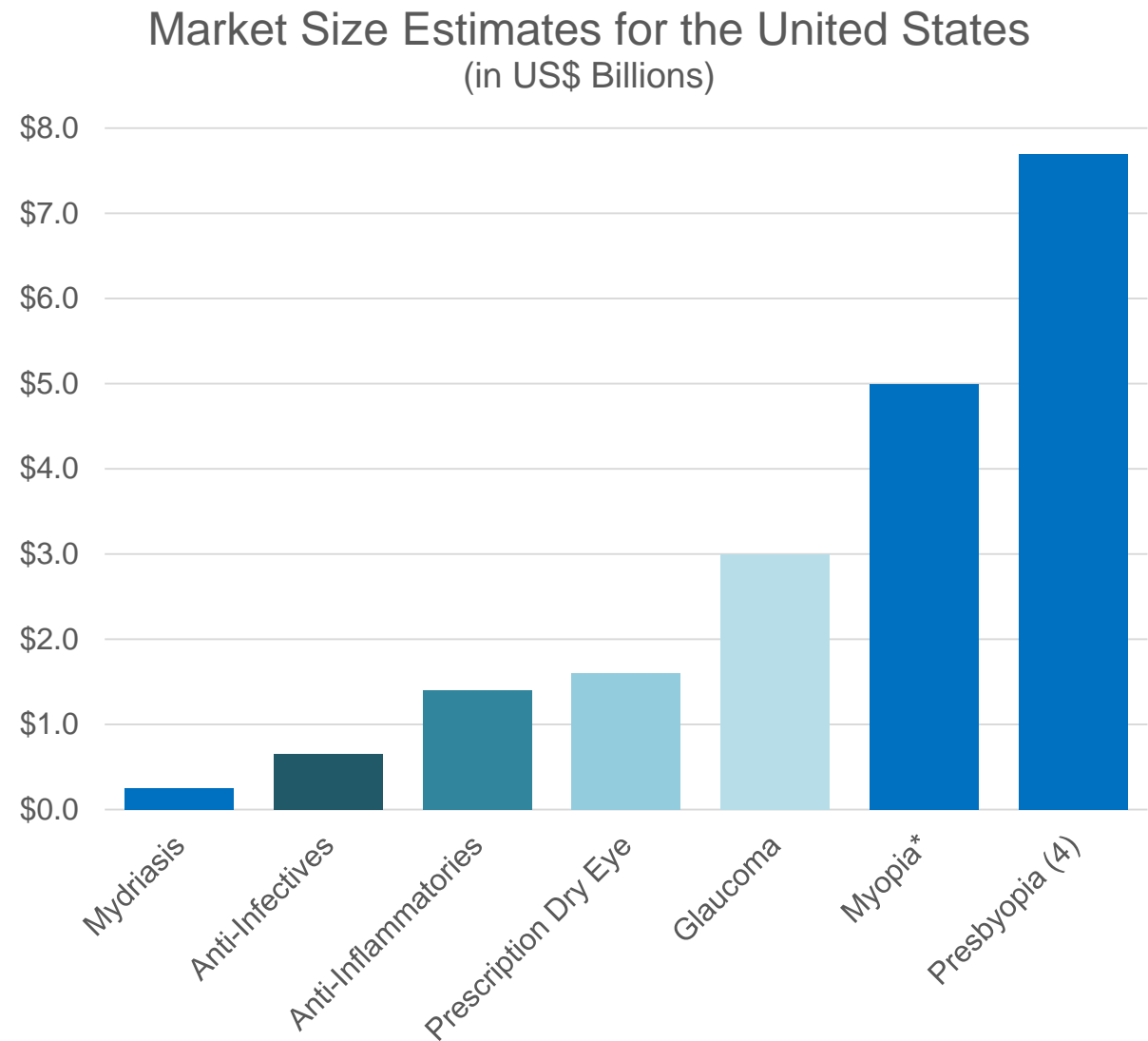
² Estimate from DelveInsight Presbyopia report; December 2020

³ Out-licensed to Bausch Health in the US and Canada, and Arctic Vision in Greater China and South Korea

⁴ CHAPERONE oversight and costs assumed by Bausch Health

Potential pipeline expansion activities leveraging Optejet technology are ongoing

Potential Topical US Ophthalmic Market For Platform Technology*



Current Portfolio: ~\$12.9 Billion*

Existing Eyenovia portfolio in mydriasis, presbyopia, and myopia, with late-stage, first-in-class therapeutics.

Anti-Infectives: ~\$650 Million¹

Eliminate contamination from poor usage of eyedropper bottles.

Anti-Inflammatories: ~\$1.4 Billion¹

Reduce IOP spikes due to high doses of steroids.

Prescription Dry Eye: ~\$1.6 Billion²

Improve clinical probability of success. Enable patients, especially the elderly, to better instill medication for improved results. Multi-dose preservative free options.

Glaucoma: ~\$3 Billion³

Improve systemic safety profile and allow for development of PGA + BB fixed combinations. Improvement in topical (e.g., hyperemia) and systemic AE profile. Multi-dose preservative free options.

*All potential market opportunities are estimates only

¹ IMS, 2015

² Mixture of public information, IQVIA, Market Scope and estimates – Feb 2020

³ IQVIA, 2019

⁴ Estimate from Delveinsight Presbyopia Report, December 2020

Standard Eyedroppers Have Limited Therapeutic Approaches

- Potential overexposure to drug and preservatives
 - Conventional droppers can overdose the eye by as much as 300%+¹
 - Known to cause ocular and systemic side effects¹



- Protruding tip may create cross-contamination risk
 - More than 50% of administrations touch ocular surface²
- More difficult to use with poor compliance
 - Requires head tilting and aiming which may be compromised in pediatric and elderly populations
 - No dosage reminders or tracking which may lead to missed doses

¹ Abelson, M., 2020. The Hows And Whys Of Pharmacokinetics. ReviewofOphthalmology.com; accessed 11/3/20

² Brown MM, Brown GC, Spaeth GL. Improper topical self-administration of ocular medication among patients with glaucoma. Can J Ophthalmol. 1984 Feb;19(1):2-5. PMID: 6608974.

Optejet Microdose Array Print (MAP) Technology Designed for Optimal Drug Delivery

Precise, Physiological Dosing:

Directly coats the cornea with ~80% less exposure to drug and preservative toxicity (based on 8µL dose).¹
Designed to eliminate drug overflow for a more comfortable patient experience.

Efficacy:

Demonstrated statistical and clinically significant efficacy in both IOP reduction and pharmacological mydriasis.^{2,3}

Safety:

Low systemic drug absorption and good ocular tolerability.^{3,4}

Non-protruding nozzle for no-touch spray application, potentially minimizing risk of cross contamination seen with traditional eyedroppers.



Ease of Use:

Horizontal drug delivery means no need to tilt the head back.

Demonstrated first-time success with both medical professionals and patients.²

Compliance and Adherence:

Can be paired with smart devices to enable dosage reminders and tracking.



¹ Abelson, M., 2020. The Hows And Whys Of Pharmacokinetics. ReviewofOphthalmology.com; accessed 11/3/20

² Pasquale L. et al., Clinical Ophthalmology 2018

³ Wirta D. et al, Presentation at 2019 ASCRS meeting

⁴ Ianchulev T. et al, Therapeutic Delivery 2018

Optejet: Significant Clinical Experience and Validation

AMERICAN ACADEMY OF OPHTHALMOLOGY

EyeNet

APRIL 2019

Beyond Eyedrops

7 Next-Generation Options for the Anterior Segment

Clinical Evaluation of a Micro-Dosed Fixed Combination Phenylephrine 2.5% — Tropicamide 1% Ophthalmic Solution for Dilatation of the Pupil in Two Randomized, Controlled Phase 3 Trials (MIST-1 & MIST-2)

Background

Results

Conclusion

Methods

Safety

Background

Results

Conclusion

Methods

Safety

Future Science

JOURNALS BOOKS ABOUTS CONTACT US

THERAPEUTIC DELIVERY, VOL. 7, NO. 11 | RESEARCH ARTICLE

Pharmacodynamic profile of mydriatic agents delivered by ocular piezo-ejection microdosing compared with conventional eyedropper

Tsontcho Ianchulev^{1,2,3}, Arturo Chayet, Malik Kahook, Mark Packard, Louis Pasquale & Robert N Weinreb

Published Online: 13 Oct 2016 | <https://doi.org/10.4155/tde-2016-0061>

View Article

Tools

Share

Aim: Eyedroppers deliver medication volumes exceeding conjunctival absorptive capacity, causing spillage and risking ocular/systemic complications. We evaluated piezoelectric microdosing. **Results/methodology:** Subjects (n = 102) received precision microdroplet delivery of phenylephrine (2.5%) and tropicamide (1.0%): 1 × 1.5 µl, 1 × 6 µl or 2 × 3 µl of each (randomized 1:1:1), into one eye. Contralateral eyes received eyedropper doses of both drugs. Outcomes were pupil dilation (0–60 min) and patient satisfaction. Six-microliter microdosing achieved comparable, and 2 × 3 µl met/exceeded dilation speed and magnitude versus eyedropper. Separately, participants preferred piezoelectric saline self-delivery to eyedroppers, reporting better head-positioning comfort, reduced tearing/overflow and increased likelihood of adhering to ocular medication regimens. **Conclusion:** Piezoelectric microdosing achieves comparable effects as eyedroppers delivering 4–17-fold larger doses. Microdosing may enhance patient adherence to ocular medication regimens while minimizing side effects.

Keywords: microdroplet ejection system • mydriasis • ocular drug delivery • ocular medication • piezoelectric • precision eye dosing

tested for glaucoma as they play a VR-based video game or explore a virtual art gallery. “The possibilities are endless for making it an engaging experience, which would go a long way toward ensuring that people use it and receive the treatment they need,” he said.

In a partnership with Duke University, an NEI-funded study is being conducted to validate the diagnostic accuracy and reproducibility of the test. In addition to comparing NVG to SA, researchers will

be granted, launch of the product in the United States in 2020.

Microdose Latanoprost Delivery Set for Broad Patient Base

■ Eyenovia, an ophthalmic biopharmaceutical company developing a pipeline of microdose therapeutics utilizing its patented piezo-print targeted delivery technology, has confirmed a broad patient population for its phase 3 MicroPost program. MicroPost delivers microdose latanoprost with technology

that high-precision in-culinar over-pressing a targeted 6–8 µl, by microdosing surface tension to reduce volume and focus—where 80% of irritation occurs, reducing drug exposure to irritant eye drops or post-treatment with the population will be closure glaucoma, and ocular hypertension. In this study, we compared the Hydrex microdosing procedure of patients with mild to late stage disease. Results of 38% of patients treated. Hydrex procedure were free, compared to 18.7% in the Stent group. MA was reduced by 1.3 medications, or 52%, on average for Hydrex patients, while Stent patients saw reductions of 0.8, or 29%, Ianchulev reported.

Ivanis Reports 2-Year Trial Data

■ Ivanis has reported 24 from its 152-patient clinical trial. In this study, we compared the Hydrex microdosing procedure of patients with mild to late stage disease. Results of 38% of patients treated. Hydrex procedure were free, compared to 18.7% in the Stent group. MA was reduced by 1.3 medications, or 52%, on average for Hydrex patients, while Stent patients saw reductions of 0.8, or 29%, Ianchulev reported.

Latanoprost with high precision, piezo-print microdose delivery for IOP lowering: clinical results of the PG21 study of 0.4 µg daily microdose

Louis R. Pasquale¹, Robert N. Weinreb², James C. Tsai³, Robert L. Kram⁴, Tsontcho Ianchulev^{1,2,3}

¹Department of Ophthalmology, Harvard Medical School, Cambridge, MA, USA; ²Department of Ophthalmology, University of California, San Francisco, San Francisco, CA, USA; ³Department of Ophthalmology, University of California, San Diego, San Diego, CA, USA; ⁴Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY, USA; ⁵Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY, USA

Background: Topical high-precision piezo-print delivery of microdoses of latanoprost achieved significant IOP reduction consistent with the endophthalmitis effect but with a 75% reduced exposure to drug and preservatives. **Prostaglandin analogs are a mainstay glaucoma therapy.** However, conventional eyedroppers deliver 30–50 µl, drops that greatly exceed the pharmacologic T_{1/2}, ocular surface capacity. Eyedropper overexposure floods the eye with excess drug compounds and preservatives, resulting in ocular surface toxicity, photophobia, and other well-characterized ocular side effects. Piezoelectric high-precision microdosing provides targeted delivery that can reduce exposure to both drug and preservatives compared to conventional eyedropper delivery, with the potential to deliver similar biologic effect.

Methods: Both eyes (N=40) of 20 healthy volunteers received single 8-µl microdoses of 0.002% latanoprost (0.4 µg; jR-latanoprost) on the morning of Days 1 and 2 using a high-precision, piezo-print horizontal delivery system. Baseline IOP was measured before and 2 days after microdosing. Main efficacy outcomes were diurnal IOP change after jR-latanoprost microdosing and accurate microdosing success rates, and the primary safety outcome was adverse event (AE) incidence.

Results: jR-latanoprost reduced baseline IOP by 24% and 30% at 1 and 2 days post-administration, respectively. Successful topical dosing was achieved in 100% of techniques-assisted deliveries. All patients successfully self-administered microdoses after receiving training. Microdose administration was well tolerated and did not result in any AEs.

Conclusion: Microdosing of 0.4 µg of jR-latanoprost achieved significant IOP reduction. Lower ocular exposure with topical prostaglandin analog microdosing can enable new therapeutic opportunities for optimizing glaucoma treatment. Microdosing may also be beneficial in reducing ocular side effects associated with excessive drug product and preservative often used to treat chronic ocular diseases such as glaucoma.

Keywords: microdosing, piezo-print system, latanoprost, IOP lowering, glaucoma, ocular drug delivery, chronic self-administration, usability

PharmTech

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Spotlight

COVID-19 Update

Analytics

Dosage Forms

Drug Development

Manufacturing

Outsourcing

Quality Systems

Packaging Delivers Micro Dose

March 14, 2021

Hallie Forcino

[f](#) [t](#) [in](#) [e](#)

Smart packaging opens doors to new products for diagnosis and treatment of eye problems.

Many ophthalmic products for the diagnosis and treatment of eye problems rely on droppers to deliver a dose to the eye. Physics limits the size of the smallest dose to approximately 40 microliters (µl), an amount that can cause side effects. Dropper delivery also requires the patient's head to be tilted, and the product can become contaminated if the dropper touches the eye or face. Product waste is common because it can be challenging to accurately aim a droplet into the eye, particularly when self-administering.

To overcome the disadvantages encountered with droppers, Eyenovia has developed the Optejet touchless dispenser, which is capable of repeatedly and precisely dispensing micro-doses of 7–9 µl directly on the cornea from four to five inches away. It works in a horizontal orientation rather than the vertical orientation of the dropper and is easy to operate, reports Michael Rowe, chief operating officer at Eyenovia.

Research Article

For reprint orders, please contact: reprints@futuremedicine.com

Therapeutic Delivery

High-precision piezo-ejection ocular microdosing: Phase II study on local and systemic effects of topical phenylephrine

Tsontcho Ianchulev^{1,2,3}, Robert Weinreb⁴, James C Tsai⁵, Shan Lin⁶ & Louis R Pasquale^{1,3}

New York Eye & Ear Infirmary of Mount Sinai, New York, NY, USA; ²Department of Ophthalmology, University of California, San Francisco, CA, USA; ³Department of Ophthalmology, University of California, San Diego, San Diego, CA, USA; ⁴Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY, USA; ⁵Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY, USA; ⁶Department of Ophthalmology, Mount Sinai School of Medicine, New York, NY, USA

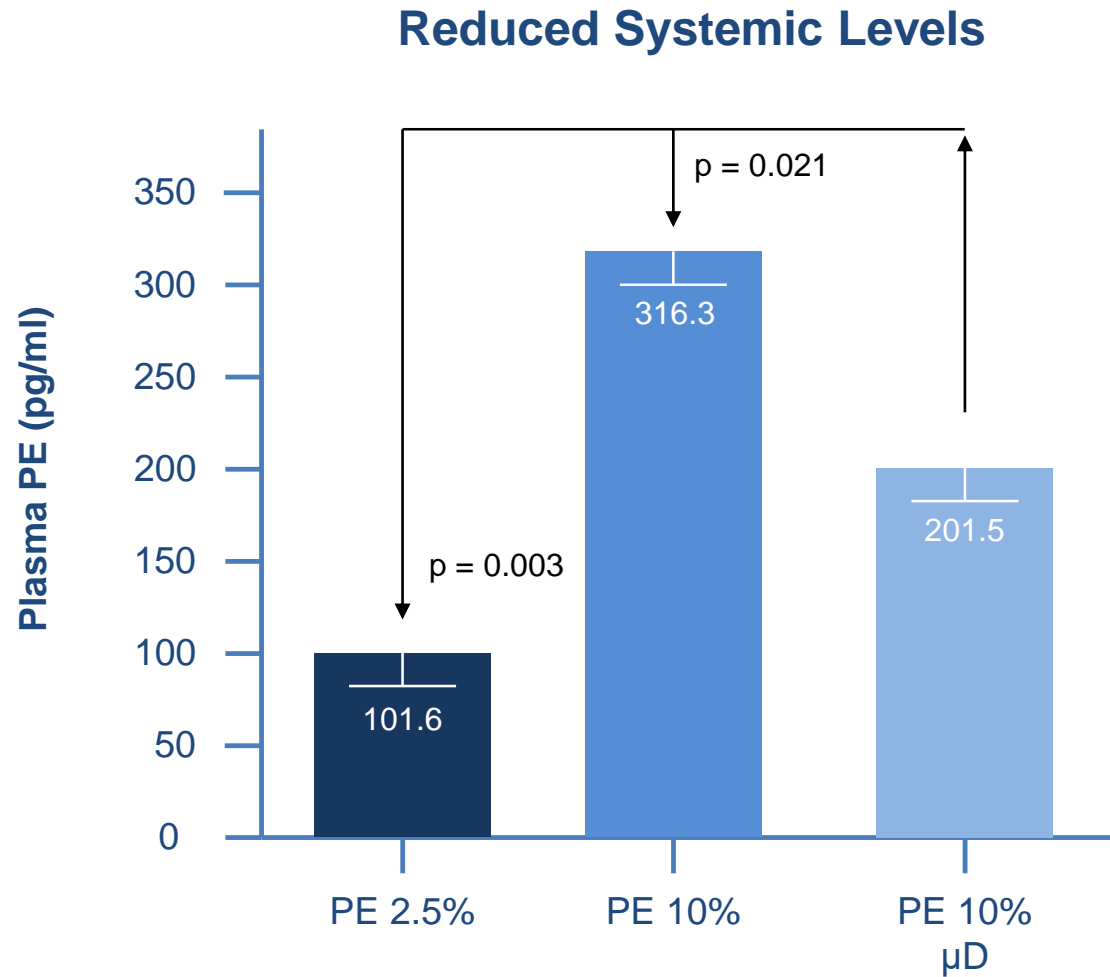
Aim: Conventional eyedropper-delivered volumes (25–50 µl) exceed the eye's usual tear film volume (7 µl) and preclude reservoir capacity, risking overflow and ocular/systemic complications. Piezoelectric high-precision microdosing may circumvent these limitations. **Results & methodology:** In this masked, randomized, cross-over study, subjects (n = 12) underwent pupil dilation with topical phenylephrine (PE) administered by 12-µl eyedropper (2.5% or 10% formulation) and 8-µl piezoelectric microdosing (10% formulation). Microdosing with PE 10% achieved comparable peak dilation as 10% eyedropper delivery and superior dilation to 2.5% eyedropper delivery (p = 0.009) at 75 min. Microdosing significantly reduced 20-min plasma PE levels versus PE 10% eyedropper, neither treatment altered heart rate/blood pressure. Eye irritation occurred significantly less frequently with microdosing than PE 10% eyedropper. **Conclusion:** Piezo-ejection PE microdosing achieves comparable biological effect as eyedropper dosing, reduced systemic absorption may decrease risk of systemic side effects.

First draft submitted: 15 September 2017; Accepted for publication: 16 October 2017; Published online: 27 October 2017

Five Phase 2 or Phase 3 clinical trials to date featured in dozens of publications and major meetings including ASCRS, AAO, AAOpt, OIS and EYEcelerator.



Optejet: Clinical Experience and Validation



Drugs in traditional eyedroppers can **enter systemic blood circulation** and may cause **significant side effects**.¹

Microdose delivery of phenylephrine 10% (PE- μ D) **was associated with significantly less systemic exposure** than traditional eye drops (PE 10%).²

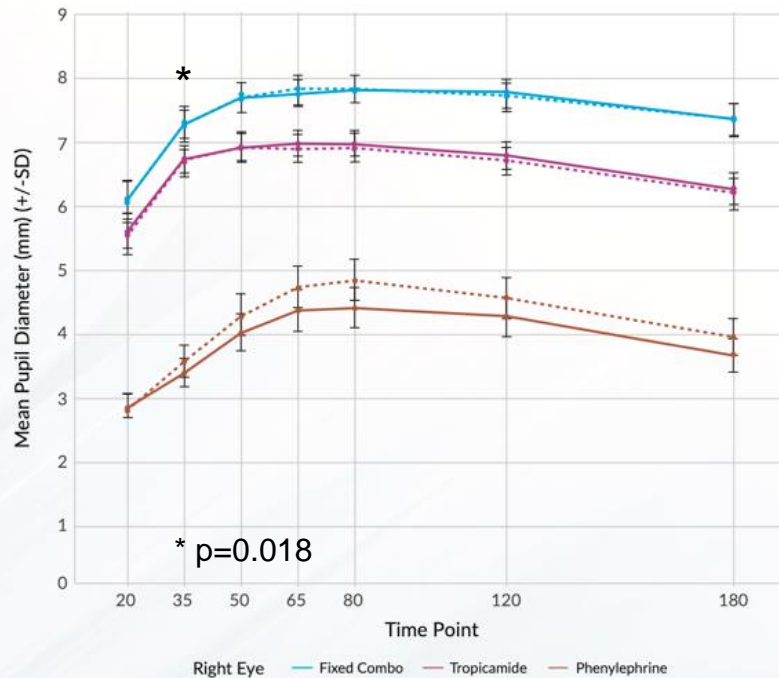
Optejet: Demonstrated Effectiveness in Multiple Phase 3 Studies

Microdosing a fixed combination of tropicamide-phenylephrine
had a superior mydriatic effect compared to either component formulation¹

Microdose Efficacy

MIST-1

Combined Visits (1, 2, 3)



MIST-2

Percent of Patients Attaining 6 mm or Greater Pupil Dilation (exploratory analysis)

35 Minutes Post-Administration
vs Baseline

Primary End Point

93%

≥6 mm Pupil Dilation

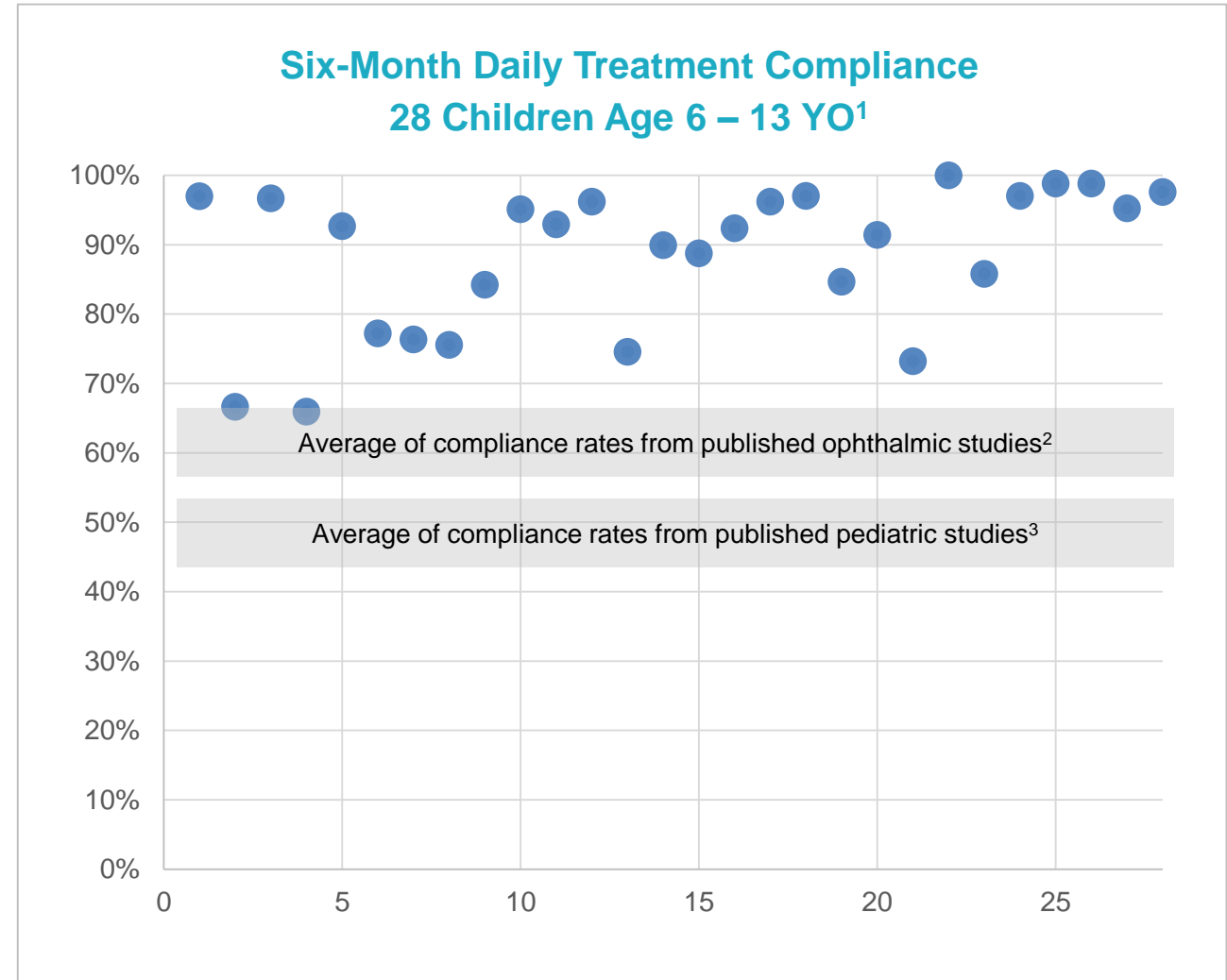
¹ Wirta, D. Presented at ASCRS Annual Meeting, 2019, San Diego CA

Optejet: Impressive Treatment Compliance

Real Improvement in Real World Use

In an ongoing late-stage trial, among the initial group of children using the Optejet once-daily, average compliance was nearly 90% during 6 consecutive months of Optejet use

This compares favorably to the approximately 50% compliance rate for pediatric medications as a whole, or the 59 – 69% range published for adult topical ophthalmic drug users



¹ Data on file with Eyenovia.

² Naito, 2018; Patel, 1995; Winfield, 1990

³ Matsui, 1997

Optejet Platform: Potential High-Value Opportunities

**Estimated Gross Margins Based
on \$100/Month Price¹**

82% - 94%

Next-Generation Ophthalmic Therapeutics

- Eyenovia's microdose therapeutics follow the 505(b)(2) registration pathway and are not currently regulated as medical devices or drug-device combinations
- The FDA categorizes the Optejet as a container closure system

Eyenovia Products Aim to Provide Competitive Pharmaceutical Margins:

- All pipeline products are Eyenovia's own proprietary micro-formulations
- Eyenovia currently owns the pharma-economics of the entire prescription value chain
- MicroLine has strong potential as a cash-pay cosmeceutical

MicroLine for Presbyopia



Etiology

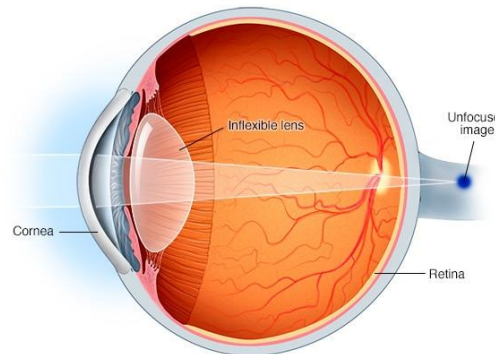
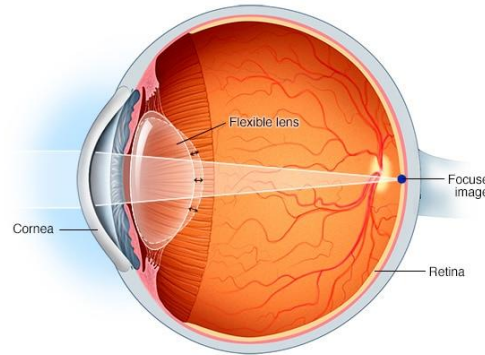
- The progressive loss of ability to focus on nearby objects
- Non-preventable, age-related hardening of the lens



Symptoms

- Tendency to hold reading material farther away to make the letters clearer
- Blurred vision at normal reading distance
- Eye strain, headaches after reading or doing close-up work

Normal Vision



Presbyopic Vision



Risk Factors

- Age
- Medical conditions and co-morbidities such as cardiovascular conditions, multiple sclerosis, and type 2 diabetes
- Drugs associated with premature symptoms include antidepressants, anti-histamines and diuretics



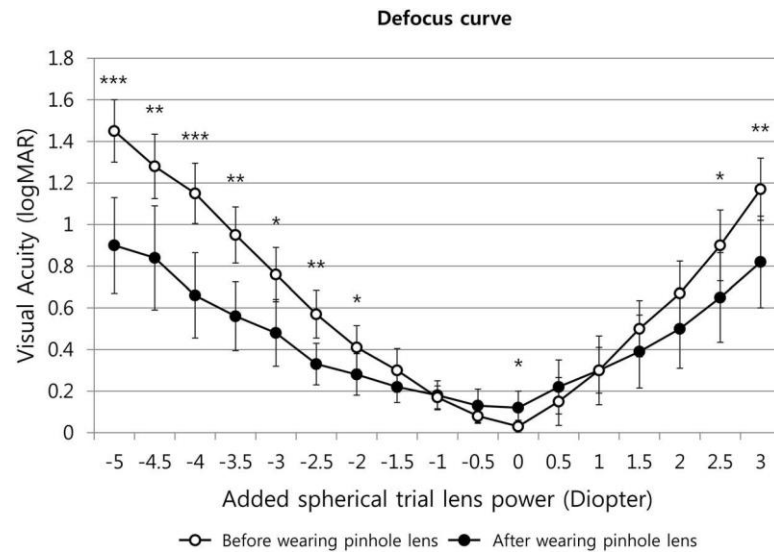
Diagnosis

- Basic eye exam, with refraction assessment

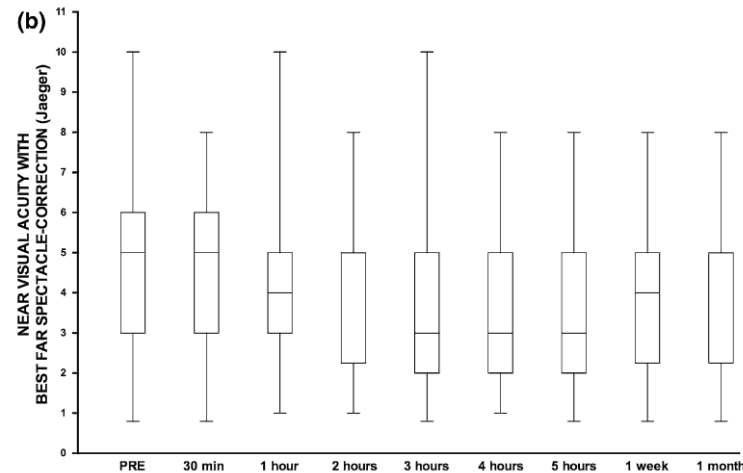
Pilocarpine: Dual Action Mechanism Improves Near Vision

- Pilocarpine is a Miotic (cholinergic) and has a clinically established dual action mechanism
- Accommodation and extended-depth of focus
- Optimized profile through microdose

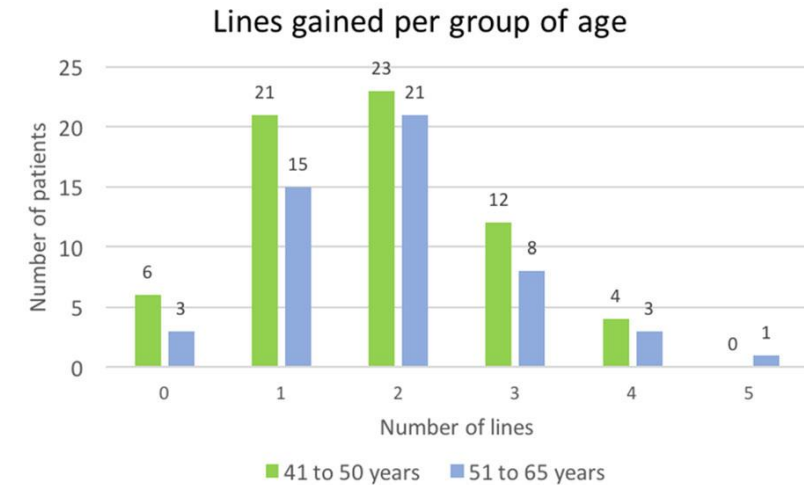
Pin-Hole Effect Improves Near Vision¹



Pilocarpine Topical Near Vision Effect²



Pilocarpine Topical Near Vision Effect³



Number of lines gained in near vision 2h after instillation of one eye drop to each eye according to age group

¹ Seminars in Ophthalmology, 2019; 34(2): 106–114

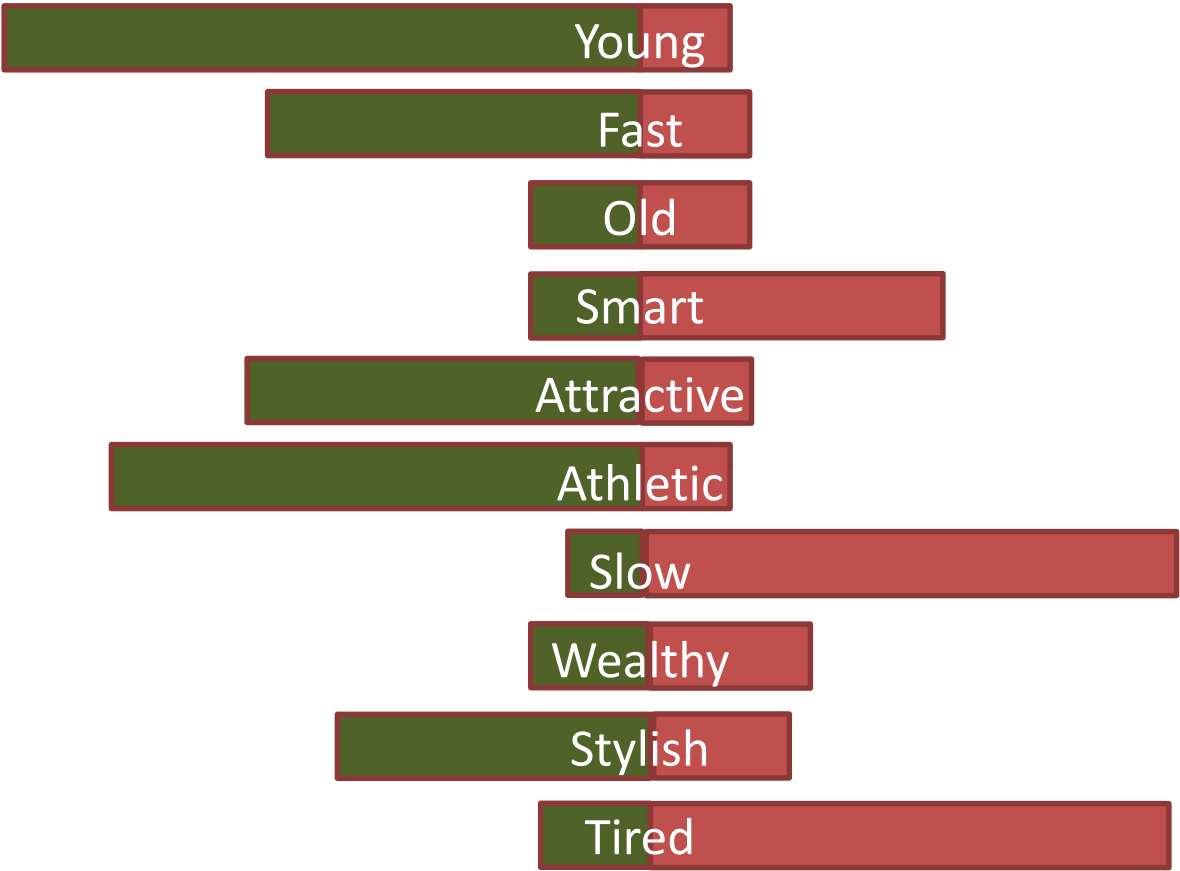
² Ophthalmol Ther (2016) 5:63–73

³ Ophthalmol Ther (2019) 8:31–39

People Have Preconceptions About People Who Wear Reading Glasses

Percentage of Participants Assigning the Descriptor to Each Image

This image was seen as “young,” “athletic,” and “attractive.”

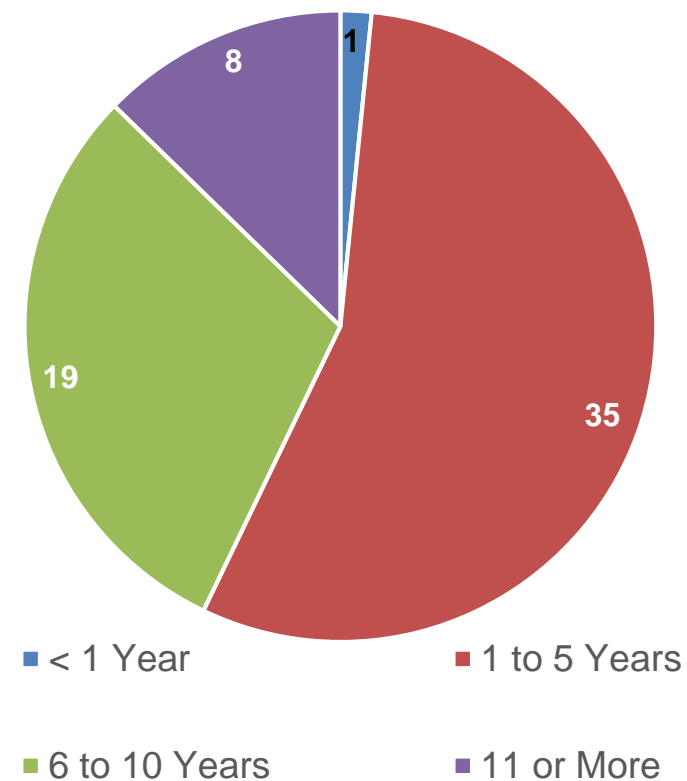


This image was seen as “slow,” “tired,” and “smart.”



Attitudes Towards Wearing Reading Glasses

How Long Have You Used Reading Glasses?



What One Word Describes How You Feel About Needing to Wear Reading Glasses?

Old	40%
Annoyed	16%
Constrained or Dependent	10%
Frustrated or Stressed	10%
Slow	5%
I'm OK or Fine	8%
Good or Better	10%

In What Situations Would You Prefer Not to Wear Your Reading Glasses?

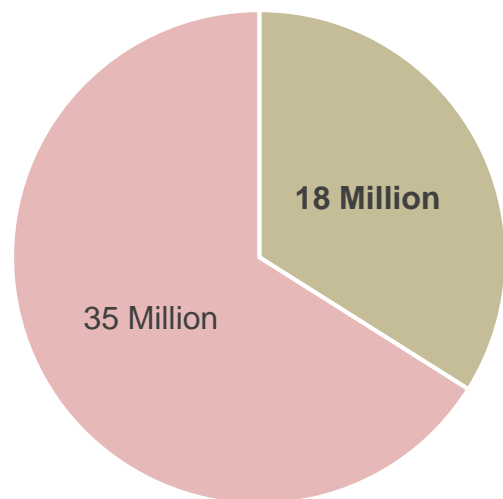
Reading Menus/Books/Labels	56%
At Work	19%
Other Activities	14%
Always	5%
I'm OK Wearing my Glasses	6%

Pharmacologic Treatment of Presbyopia: Targeting Millions of Patients Who “Never Wore Glasses”



~113 million people in the US are presbyopic

Of the ~53 million adults between 40 and 55 years of age, ~18 million previously never had to wear glasses

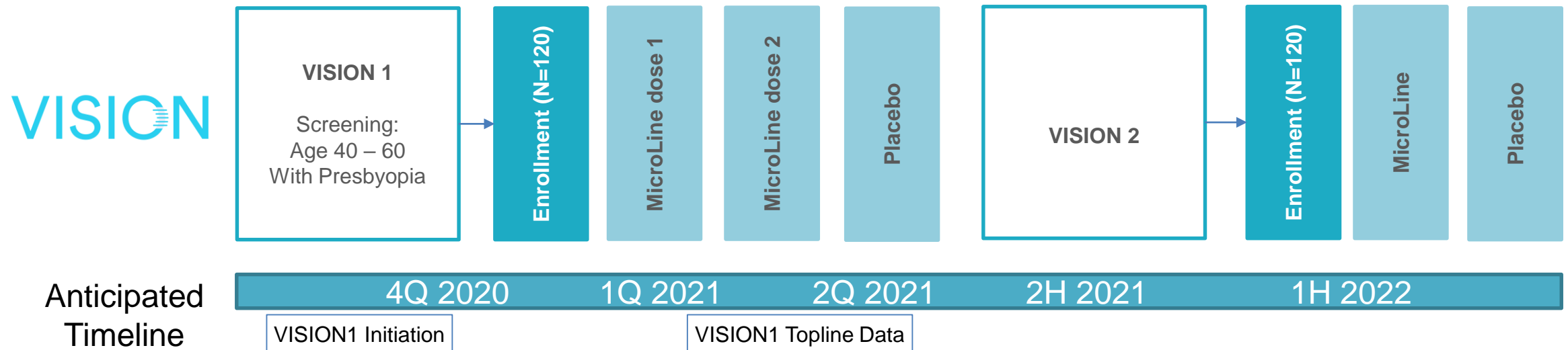


■ Never had to wear glasses ■ Needed spectacles or contacts

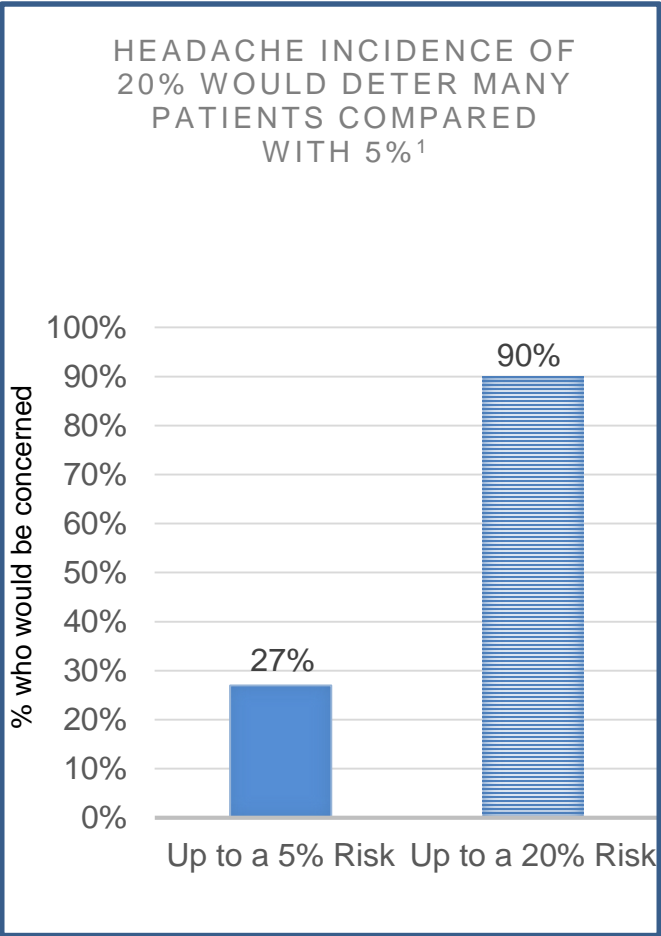
- Majority of presbyopia patients have never had to wear glasses prior to having difficulty with near vision
- Having to wear glasses can be an inconvenience and an outward signal of aging
- A “no glasses” option may be valuable and more convenient to patients
- Eyenovia’s MicroLine is intended to be a companion product to spectacles, not a replacement
 - Provides freedom to use the product as needed

MicroLine: Phase 3 Program

- Two double-masked, placebo-controlled, cross-over superiority trials
 - Phase 3 (microdosed pilocarpine dose 1, dose 2 and placebo)
- Primary endpoint: binocular distance corrected near visual acuity
- First patient enrolled in VISION 1: December 2020



MicroLine Compared with the Standard Presbyopia Drop

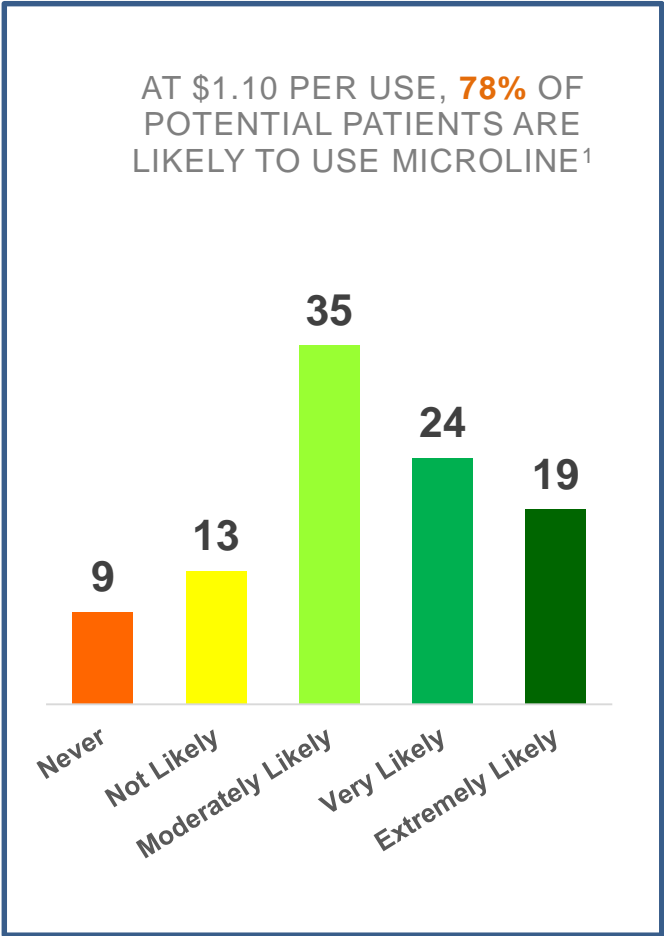


3 : 1

Prefer the Optejet¹

2 : 1









Find the Optejet Easier to Use²



¹ Reckner and Associates, 2021 (data on file)

² VISION-1 Post-Study Survey

Late Stage Presbyopia Competitive Landscape

Trial	API	Company	Primary EP (3 Line Gain)	Safety	Completion Date
VISION-1 PIII (40-60 YO)	Pilocarpine MAP™ Technology	 eyenovia	Gain of 3 lines or more in mesopic, high contrast, binocular (DCNVA) at Hour 2 versus the vehicle (placebo)	Not yet reported	Fully Enrolled
VISION-2 PIII	Pilocarpine MAP™ Technology	 eyenovia	Gain of 3 lines or more in mesopic, high contrast, binocular (DCNVA) at Hour 2 versus the vehicle (placebo)	Not yet reported	Start Q4 2021
GEMINI-1 PIII (40-55 YO)	Pilocarpine 1.25% formulation	abbvie	Gain of 3 lines or more in mesopic, high contrast, binocular (DCNVA) at Day 30, Hour 3 versus the vehicle (placebo).	~20% Headache No Serious Aes	Completed Q3 2020 PDUFA H2 2021
GEMINI-2 PIII (40-55 YO)	Pilocarpine 1.25% formulation	abbvie	Gain of 3 lines or more in mesopic, high contrast, binocular DCNVA without loss of greater than five letters in (CDVA) with the same refraction at Day 30, Hour 3 versus the vehicle.	~20% Headache No Serious AEs	Completed Q3 2020 PDUFA H2 2021
PRX-100 (48-64 YO)	Aceclidine + Tropicamide	<i>Presbyopia Therapies</i>	Proportion of subjects with at least a 3-line (15 letter) improvement in the study eye [Time Frame: up to 7 hours post-treatment]	Not yet reported	Phase IIb Completed May 2018
NEAR-1 PIII (45-64 YO)	Pilocarpine 0.2% + NSAID	 ORASIS PHARMACEUTICALS	≥ 3-line gain in BDCVA at 40cm and no loss in BDCVA ≥ 5 letters at 4m. [Time Frame: Day 8]	Not yet reported	Actively Recruiting Q2 2021
NEAR-2 PIII (45-64 YO)	Pilocarpine 0.2% + NSAID	 ORASIS PHARMACEUTICALS	≥ 3-line gain in BDCVA at 40cm and no loss in BDCVA ≥ 5 letters at 4m. [Time Frame: Day 8]	Not yet reported	Actively Recruiting Q2 2021
UNR844-CI (45-55 YO)	Lipoic acid choline ester 1.5%	 NOVARTIS	Change in Binocular DNCVA From Baseline [Baseline to Month 3]	Not yet reported	Not Yet Recruiting
NYXOL+PILO (40-64 YO)	Phentolamine 0.75% + Pilocarpine	 Ocuphire PHARM	Percent of subjects with ≥ 15 letters of improvement in photopic binocular DCNVA [Time Frame: up to 6 hours]	Not yet reported	
Not Available	Alpha-crystallin stabilizing molecule	 VIEWPOINT THERAPEUTICS		N/A	
BRIMOCHOL (45-80 YO)	Bimochol Carbachol/Brimonodine	 VISUS THERAPEUTICS	Change from baseline in near VA [Time Frame: Baseline]	Not yet reported	Actively Recruiting

MicroPine for Progressive Myopia



Progressive of Myopic Maculopathy

Affects ~25M children in the US alone, with ~5M considered to be at high risk⁴

- Back-of-the-eye disease
- Mostly begins in early childhood, with a genetic link to myopic parents¹
- Pathologic elongation of sclera/retina which can lead to significant morbidity and visual sequelae²
 - Retinal detachment
 - Myopic retinopathy
 - Vision loss
 - Quality of life
- Currently, no FDA-approved drug therapies to slow myopia progression
- Atropine may slow myopia progression by 60% or more³

¹ Jones LA, Sinnott LT, Mutti DO, Mitchell GL, Moeschberger ML, Zadnik K. Parental history of myopia, sports and outdoor activities, and future myopia. Invest Ophthalmol Vis Sci. 2007 Aug;48(8):3524-32.

² Eye and Contact Lens. 2004; 30

³ Chia A, Chua WH, Cheung YB, et al. Atropine for the treatment of childhood Myopia: Safety and efficacy of 0.5%, 0.1%, and 0.01% doses (Atropine for the Treatment of Myopia 2). Ophthalmology 2012;119:347-354

⁴ Theophanous C. Myopia Prevalence and Risk Factors in Children. Clinical Ophthalmology. December 2018. U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2019.

Strategic Partnerships to Potentially Extend Commercial Reach



Arctic Vision

Validating partnership for the development and commercialization of **MicroPine** and **MicroLine**

Upfront payment: \$4M

Potential milestone payments and reimbursed development costs: \$41.75M

Commercial supply terms or royalties: mid-single digits

Territory: Greater China (mainland China, Hong Kong, Macau and Taiwan) and South Korea

Impacted population estimated at approx. more than 8x the US¹



Bausch Health

Strategic partnership for the development and commercialization of **MicroPine**

Upfront payment: \$10M

Potential milestone payments and reimbursed development costs: \$50M *(Reimbursed development costs associated with Phase 3 CHAPERONE trial to begin immediately)*

Royalties on gross profit: mid-single digit to mid-teen percentages

Territory: US and Canada

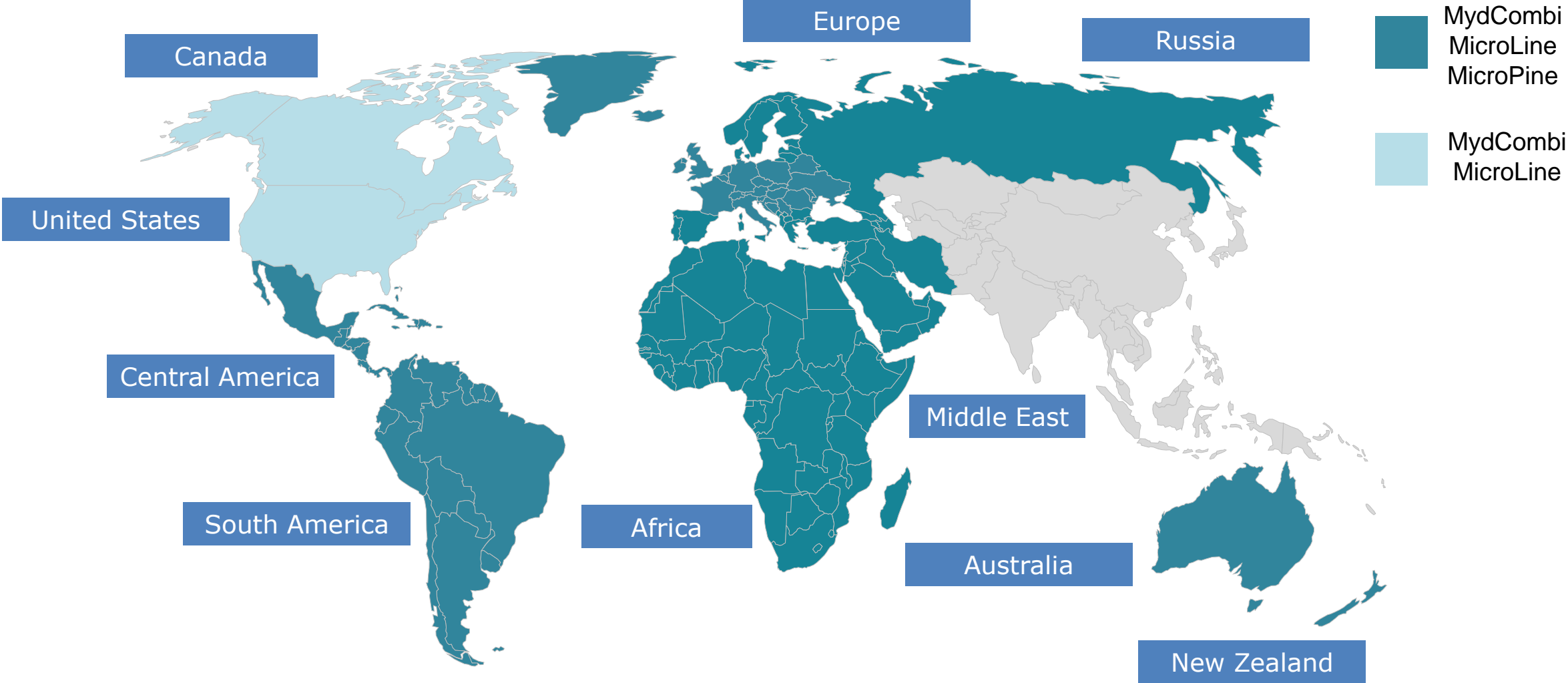
US impacted population with high myopia estimated at approx. 3M^{2,3}

¹Min Chen, 2018

²Theophanous C. Myopia Prevalence and Risk Factors in Children. Clinical Ophthalmology. December 2018.

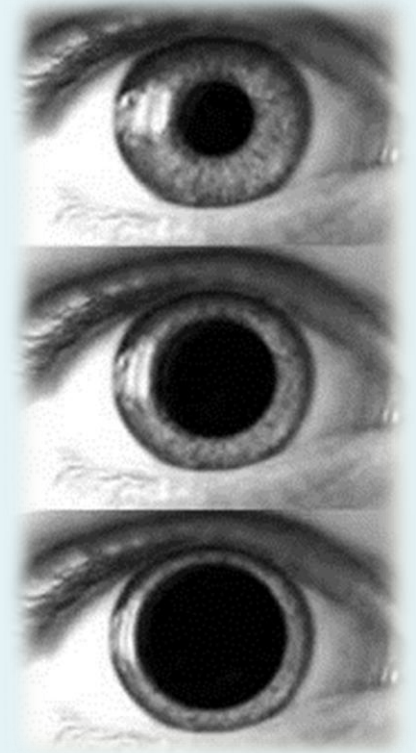
³U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2019.

Future Licensing Opportunities



MydCombi for Mydriasis

- Pharmacologic mydriasis (pupil dilation) is part of the comprehensive eye exam
 - Estimated 80 million office-based comprehensive and diabetic eye exams and 4 million ophthalmic surgical dilations performed annually in the United States
 - Essential for diabetic retinopathy, glaucoma and retina disease screening
 - An estimated \$250 million US market opportunity¹
- Places technology at the initial point-of-care with prescribers (ophthalmologists and optometrists)
- No direct contact increases patient safety by reducing potential cross contamination associated with the use of shared dilating drops in OD/OPH offices
- No anticipated reimbursement hurdles; expect to sell directly to ophthalmology and optometry practices
- NDA accepted March 2021



MydCombi

It Will Make Your Eyes Dilate



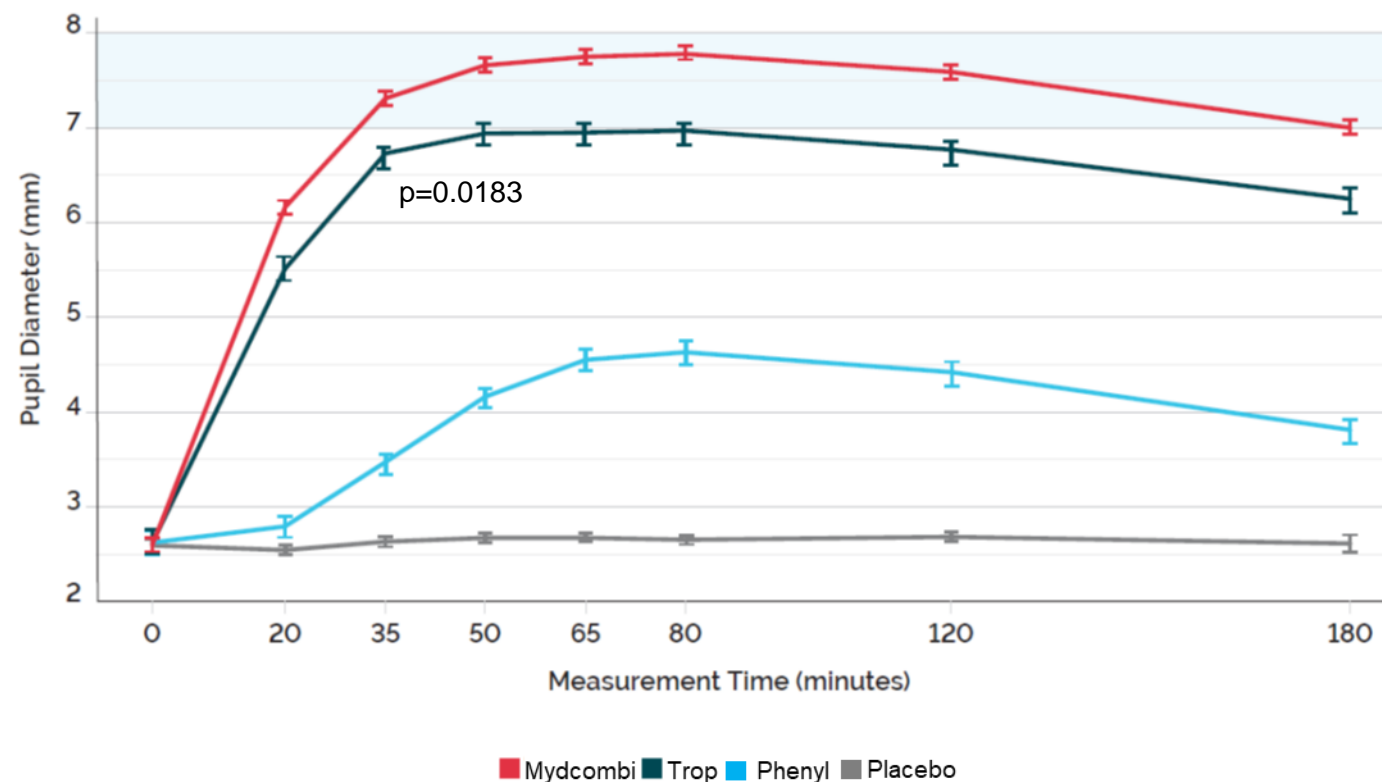
MydCombi

Tropicamide 1%/Phenylephrine 2.5%
Ophthalmic Spray

- If approved, the only fixed combination of the two leading mydriatic medications in the US
- Administered with the push of a button, saving up to ten minutes of technician time¹
- Touch-free, comfortable application with fewer than 1% of patients experiencing stinging discomfort²
- Lower drug and preservative exposure, including systemic absorption of phenylephrine, which can be problematic in hypertensive patients^{2,3}
- Reliable in numerous patient practices. More than 9 out of 10 patients achieved clinically significant mydriasis at 35 minutes post-dosage²

MydCombi has a Superior Mydriatic Effect vs. Single Agents

Pupil Diameter at Each Study Measurement Time by Treatment
(Pooled PP Population)



Prompt Mydriasis

Mydriasis >5mm achieved in 88% of patients at 20 minutes, without the delay of instilling multiple drops

Superior Efficacy

MydCombi achieved superior efficacy over single-agent components

Office & Surgical Use

Mydriasis >6 mm achieved in >93% of patients at 35 minutes post-dosage which is clinically meaningful for both office retinal exam and surgical dilation

MydCombi Launch Expenses: A Fraction of a Typical Ophthalmic Drug Launch



Big Eye Pharma

11 FTE for \$2.2 million Calling on large group practices in largest population centers for 50% reach at launch	Salesforce 	100 FTE for \$20.0 million Calling on 18,000 doctors across the US for 80% reach at launch
Not needed. Product is a diagnostic bought by the practice.	Managed Care Group 	8 FTE for \$1.6 million Often delay of up to 1 year to obtain formulary access.
\$2.0 million Glossy pieces and interactive programs are not needed. Key Account People will train and leave a sample for evaluation.	Promotion 	\$10.0 million Dinner meetings, large convention booths, investigational grants, advertising, lunch and learns.
Total: ~\$4.2 million		Total: ~\$31.6 million

Technology that has Multiple Layers of IP, Clinical and Regulatory Protection

Worldwide patents are granted on the dispenser, the drop size, velocity of delivery and data capture from the base unit are in effect **until late 2031**

Provisional patents have been filed on the Gen 2 dispenser and if approved will bring protection **through 2040**

An **additional barrier** is the clinical and regulatory hurdles a competitor would have to meet to gain approval for an 8 μ dose

Financial Snapshot

Nasdaq: EYEN

Common Shares Outstanding	25.6M
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Equity Grants Outstanding Under Stock Plans	3.5M
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Warrants	2.0M
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Fully Diluted Shares	31.1M
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Cash	\$28.4M
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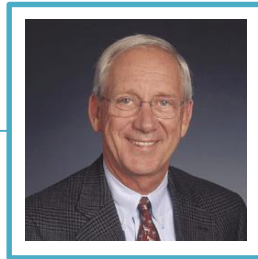
Debt (PPP loan)	\$0.5M
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Board of Directors



Dr. Fred Eshelman
Chairman

Founder and former CEO of PPDI, founding chairman of Furiex Pharmaceuticals, and founder of Eshelman Ventures



Dr. Ernest Mario
Board Member

Former Chairman and CEO of Reliant Pharmaceuticals, ALZA, and Glaxo Holdings



Dr. Curt LaBelle
Board Member

Managing Director of GHIF venture fund and Co-Founder of Eyenovia



Kenneth Lee Jr.
Board Member

General partner of Hatteras Venture Partners



Charles Mather IV
Board Member

Managing Director, Equity Capital Markets at Suntrust Robinson Humphrey



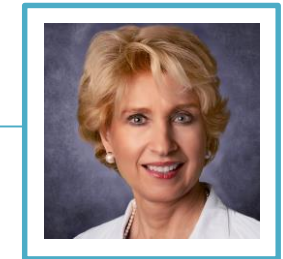
Dr. Anthony Sun
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CEO, Zentalis Pharmaceuticals, Inc.



Dr. Sean Ianchulev
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CEO, CMO and Co-Founder of Eyenovia



Dr. Julia Haller
Board Member

Ophthalmologist-in-Chief
Wills Eye Hospital



eyenovia

Making it Possible

May 2021