

eyenovia

Making it Possible

December 18, 2020

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 SEC.

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 evolving COVID-19 pandemic and uncertainties arising from the recent U.S. elections; fluctuations in our financial results; our estimates regarding the potential market opportunity for our product candidates and platform technology and potential revenue from licensing transactions; 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 effective manufacturing, commercialization and marketing capabilities and strategies for certain of our product candidates; risks of our 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; the timing and our ability to submit applications for, obtain and maintain regulatory approvals for our product candidates; the potential impacts of COVID-19 on our supply chain; the potential advantages of our product candidates and platform technology; the rate and degree of market acceptance and clinical utility of our product candidates; our ability to raise additional capital; intellectual property risks; our ability to attract and retain key personnel; 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; 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, we do not undertake any obligation to update any forward-looking statements.

Investment Highlights

Late-stage therapeutics pipeline


MicroStat (Mydcombi™) for mydriasis (pupil dilation) - Phase 3 studies completed, planned NDA submission in 2020
MicroLine for presbyopia (improved near vision) - Phase 3 VISION-1 study commenced in 2020

Development and commercialization partnerships

with leading global eyecare companies validate technology and provide significant non-dilutive capital. **Arctic Vision** – Announced August 2020 for Greater China and South Korea
Bausch Health – Announced October 2020 for the US and Canada

Clinically validated
in multiple Phase 2 and Phase 3 studies

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
VP Commercial



Jennifer Clasby
VP Clinical Operations



Dr. Lee Kramm
Regulatory Affairs
Consultant



Luke Clauson
VP R&D,
Manufacturing



Late-Stage Ophthalmic Pipeline for US Registration

| 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

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.

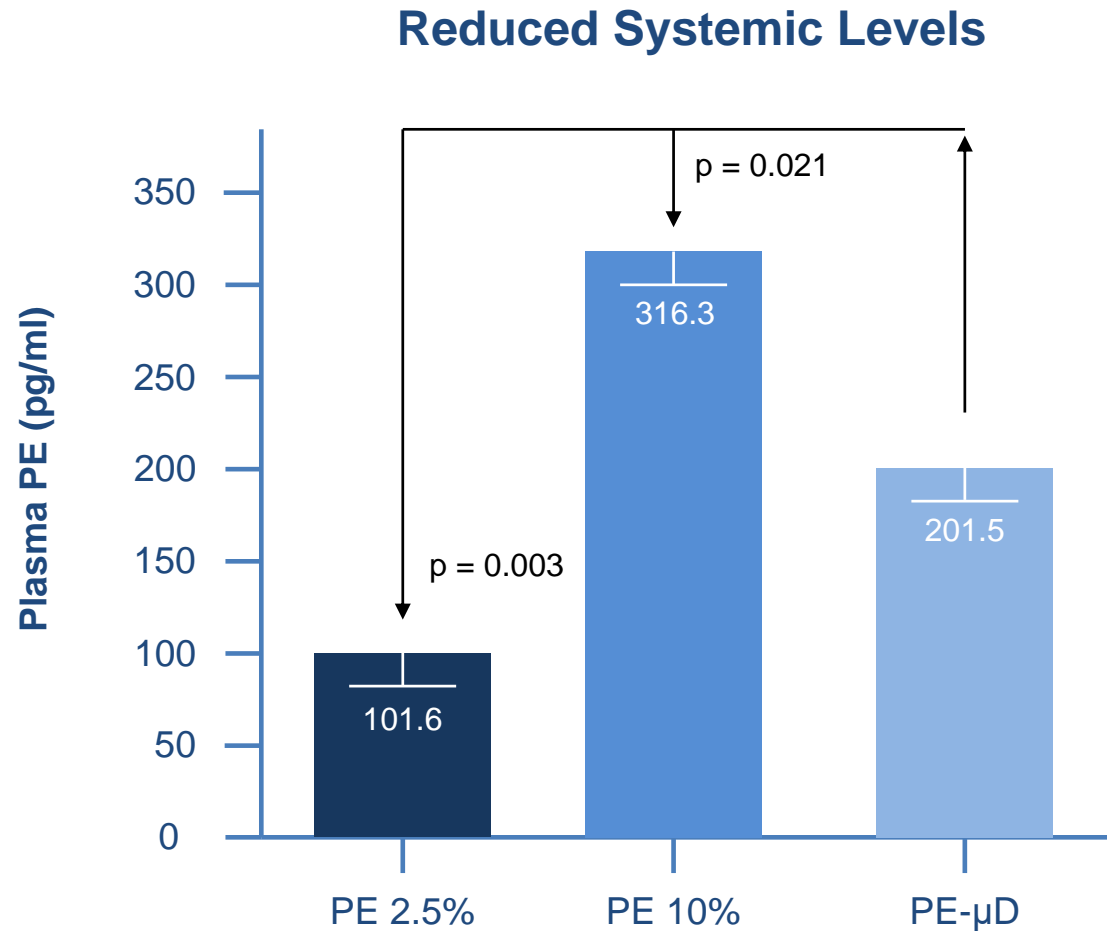
¹ Abelson, M., 2020. The Hows And Whys Of Pharmacokinetics. ReviewofOphthalmology.com; accessed 11/3/20

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: 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-μD) **was associated with significantly less systemic exposure** than traditional eye drops (PE 10%).²

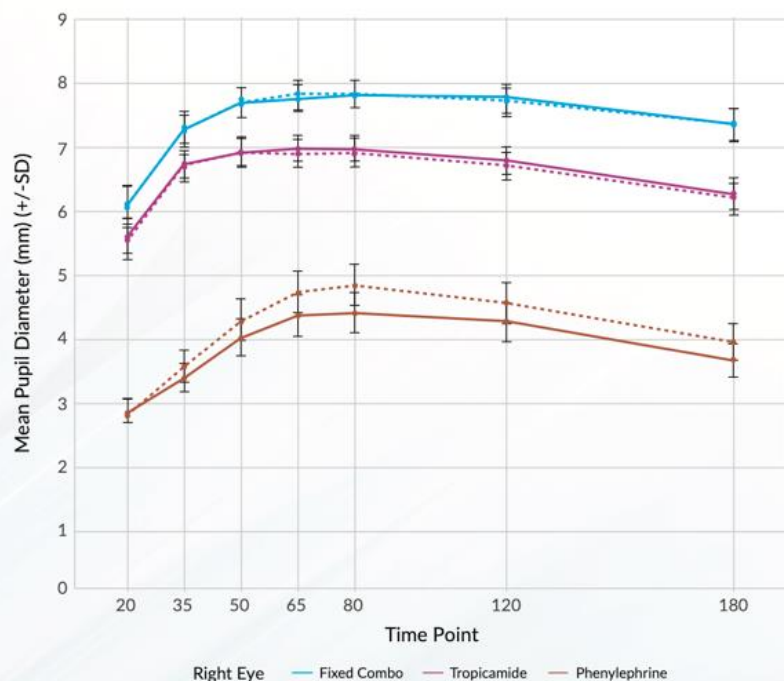
Optejet: Demonstrated Effectiveness in Multiple Phase 3 Studies

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 Platform: Potential High-Value Opportunities

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

82% - 94%

Next-Generation Ophthalmic Therapeutics

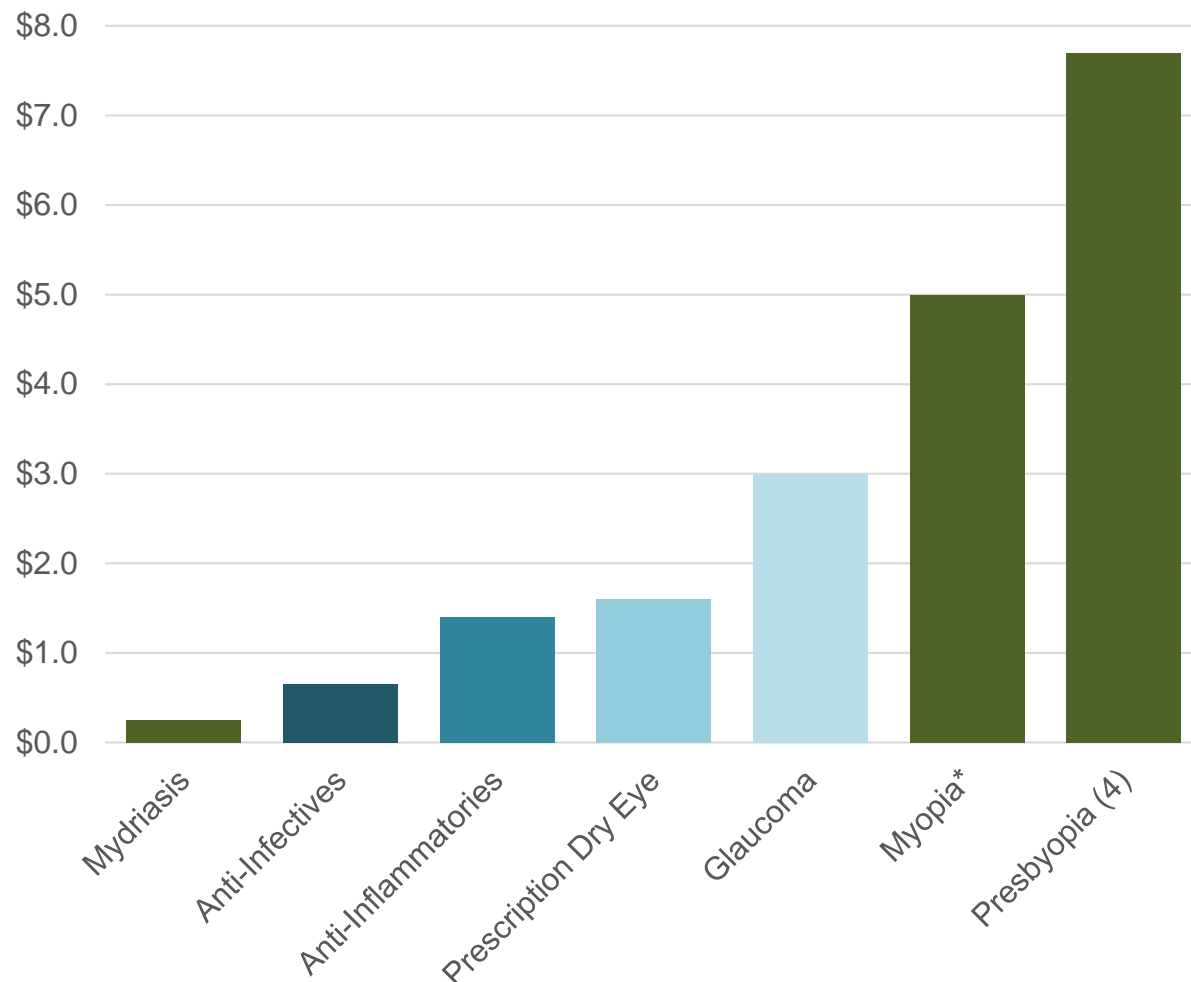
- Eyenovia's microdose therapeutics follow the 505(b)(2) registration pathway and are not currently regulated as medical devices or drug-device combinations
- The FDA categorizes the Optejet as a container closure system

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

Potential Topical US Ophthalmic Market For Platform Technology*

Market Size Estimates for the United States
(in US\$ Billions)



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

MicroLine for Presbyopia



Etiology

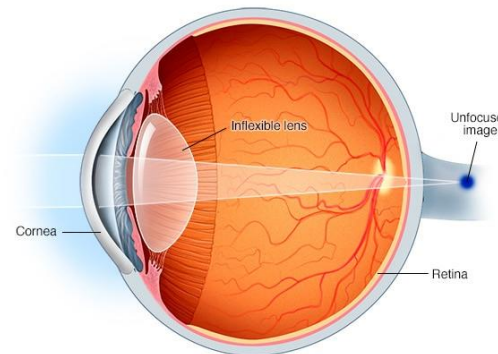
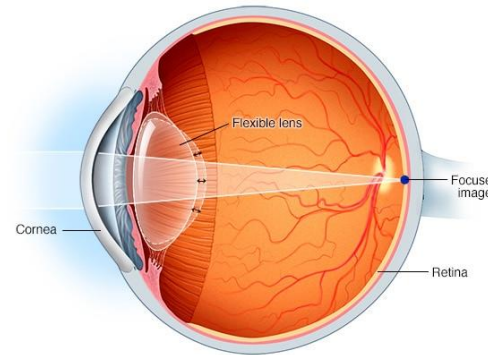
- The progressive loss of ability to focus on nearby objects
- Non-preventable, age-related hardening of the lens



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



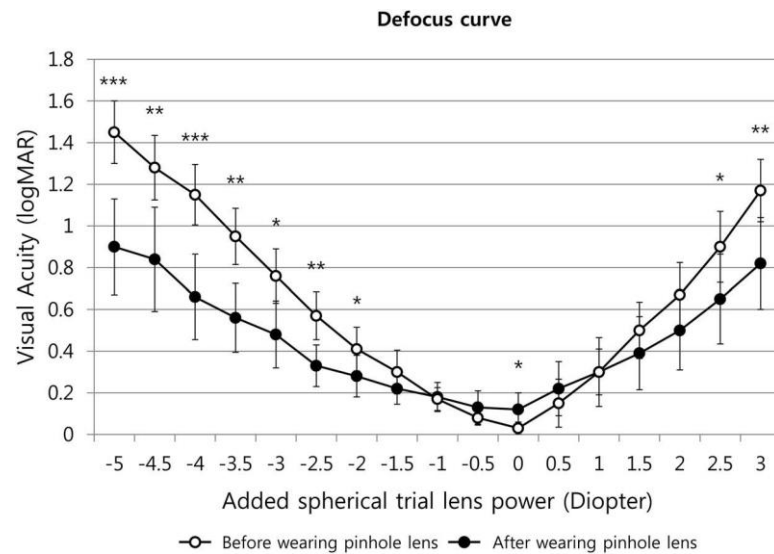
Diagnosis

- Basic eye exam, with refraction assessment

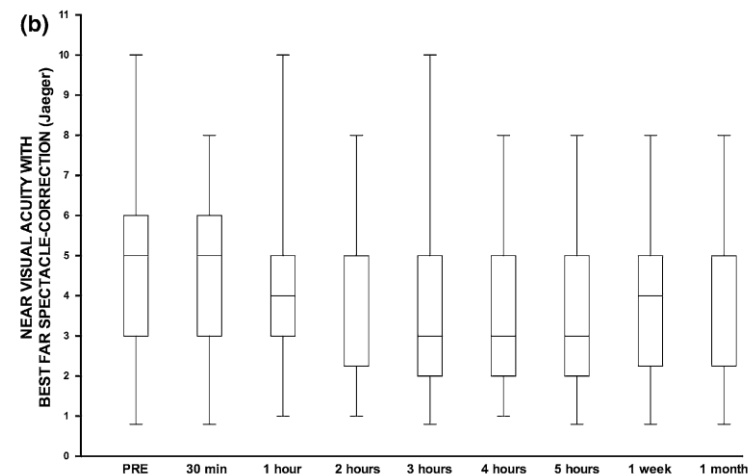
Pilocarpine: Dual Action Mechanism Improves Near Vision

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

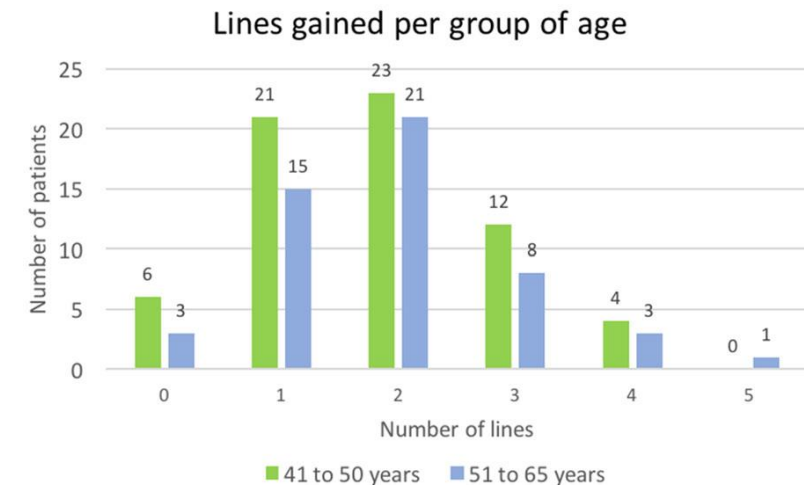
Pin-Hole Effect Improves Near Vision¹



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

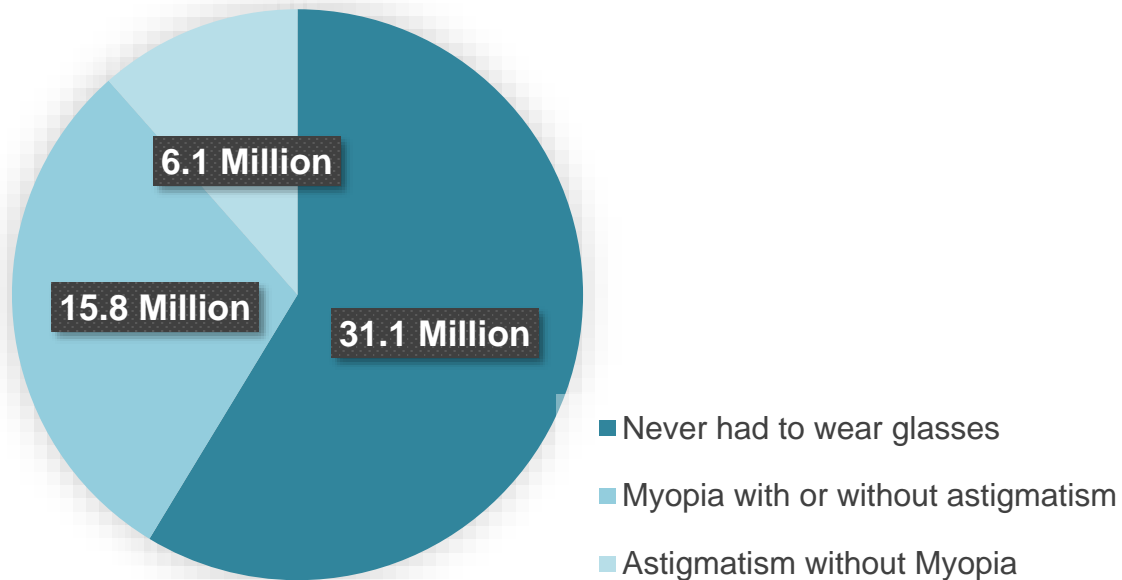
³ Ophthalmol Ther (2019) 8:31–39

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 45 and 60 years of age, ~31 million previously never had to wear glasses



- 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
 - “On Demand”

MicroLine: Phase 3 Program

- Two double-masked, placebo-controlled, cross-over superiority trials
 - Phase 3 (microdosed pilocarpine 1.0%, 2.0% and placebo)
- Primary endpoint: binocular distance corrected near visual acuity



Eyenovia Offers Value Beyond Other Late-Stage Pilocarpine Therapies

Optejet MAP Technology



Traditional Eye Drops



Eyenovia is differentiated from competitors through unique combination of factors including:

- *Optejet MAP Technology for ease of administration¹*
- *80% less corneal exposure to drug and preservatives²*
 - *Low systemic drug absorption³*
- *Smart device compatibility designed for customized applications*

¹ Wirta, D. et al., Presentation at 2019 ASCRS annual meeting

² Pasquale L. et al., Clinical Ophthalmology 2018

³ Ianchulev T. et al, Therapeutic Delivery 2018

MicroPine for Progressive Myopia



Progressive of Myopic Maculopathy

Affects ~25M children in the US alone, with ~3M 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

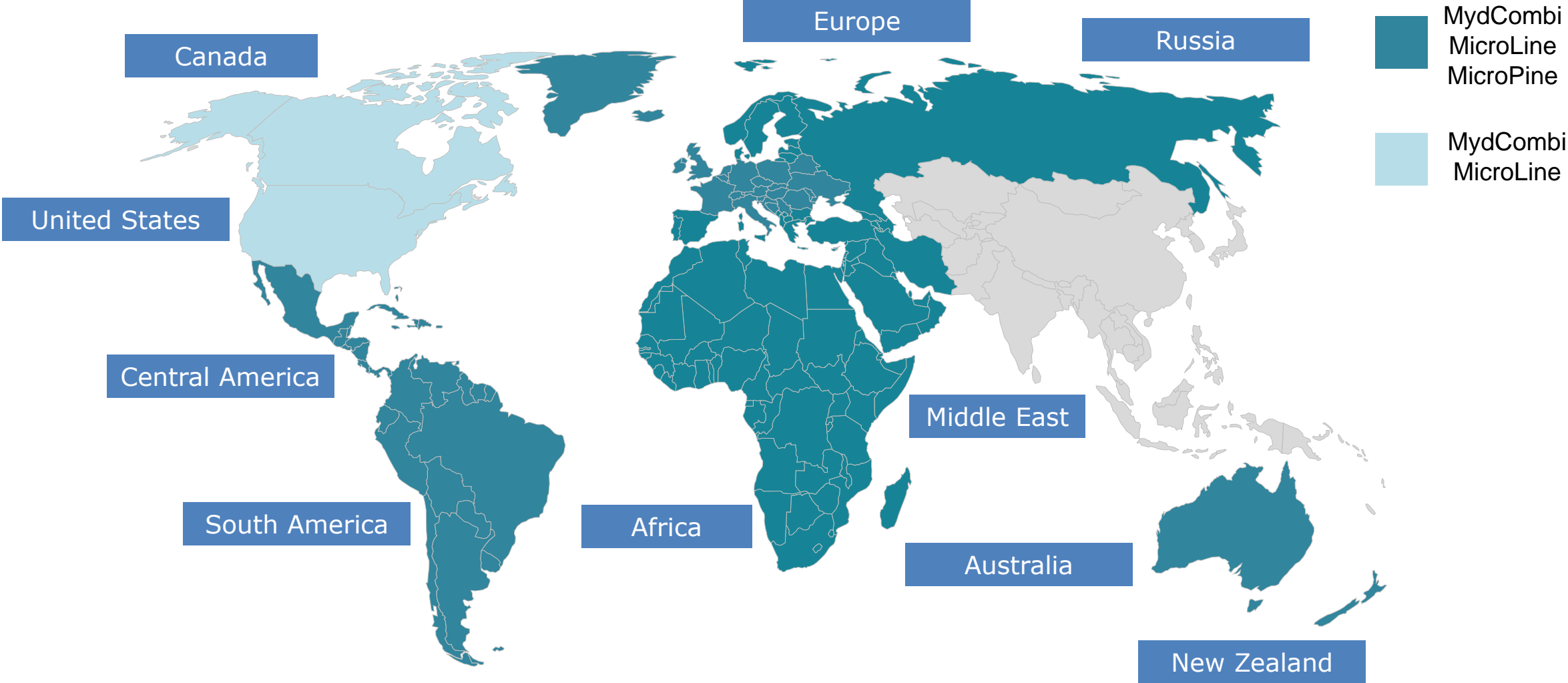
US impacted population with high myopia estimated at approx. 3M^{2,3}

¹Min Chen, 2018

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

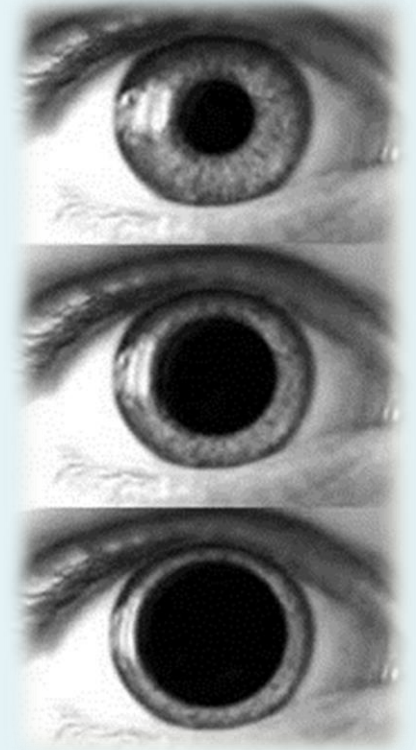
³U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2019.

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 filing expected by end of Q4 2020



MydCombi

Does So Much with So Little



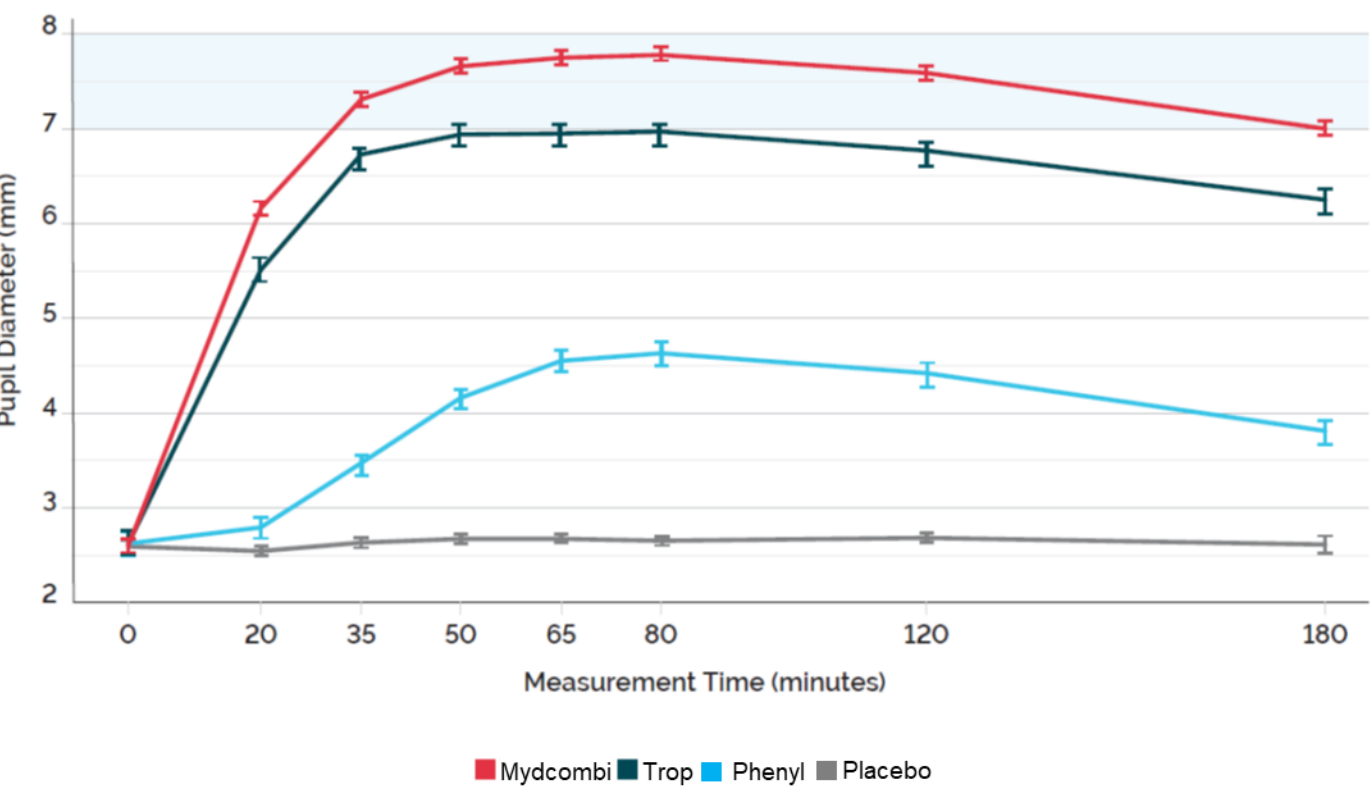
MydCombi

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 less than 2% 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

Significant, prompt mydriasis achieved with microdose fixed-combination Phen-Trop

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 Commercialization Strategy



Single Distribution Partner

Single specialty pharmacy distribution partner to maximize efficiencies and control costs

- Ecommerce site, all purchases by credit card
- No third-party billing, reimbursement, etc.



Targeted Account Management

Targeted Account Management team focused on the highest population centers

- 10 account managers to cover the equivalent of 80 million lives
- Model can be scaled up as demand grows



Streamlined Sales Process

Streamlined sales process designed to increase cost efficiency and improve productivity

- One evaluation sample per office
- Offices may be able to recover any additional cost through reduced “chair time”
- Real-time sales data to help inform account team of customer status

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

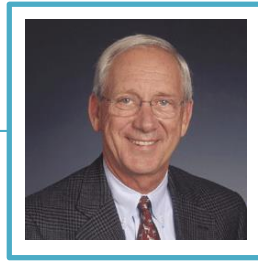
| Nasdaq: | EYEN |
|--|-------------|
| Common Shares Outstanding | 24.9M |
| Equity Grants Outstanding Under Stock Plans | 3.5M |
| Warrants | 2.3M |
| Fully Diluted Shares | 30.7M |
| | |
| Cash | \$22.9M |
| Pro-forma cash as of Nov. 10, 2020 | \$31.0M |
| Debt | None |

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



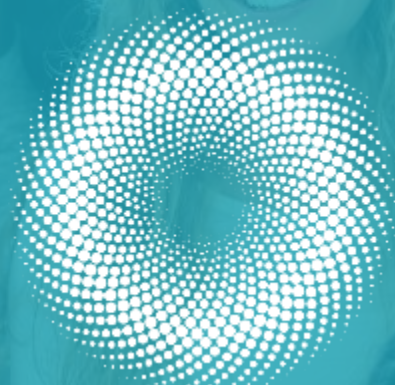
Dr. Anthony Sun
Board Member

CEO, Zentalis Pharmaceuticals, Inc.



Dr. Sean Ianchulev
Board Member

CEO, CMO and Co-Founder of Eyenovia



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