eyenovia

Making it Possible | April 2022

Forward-Looking Statements

Except for historical information, all 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 in some cases 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.

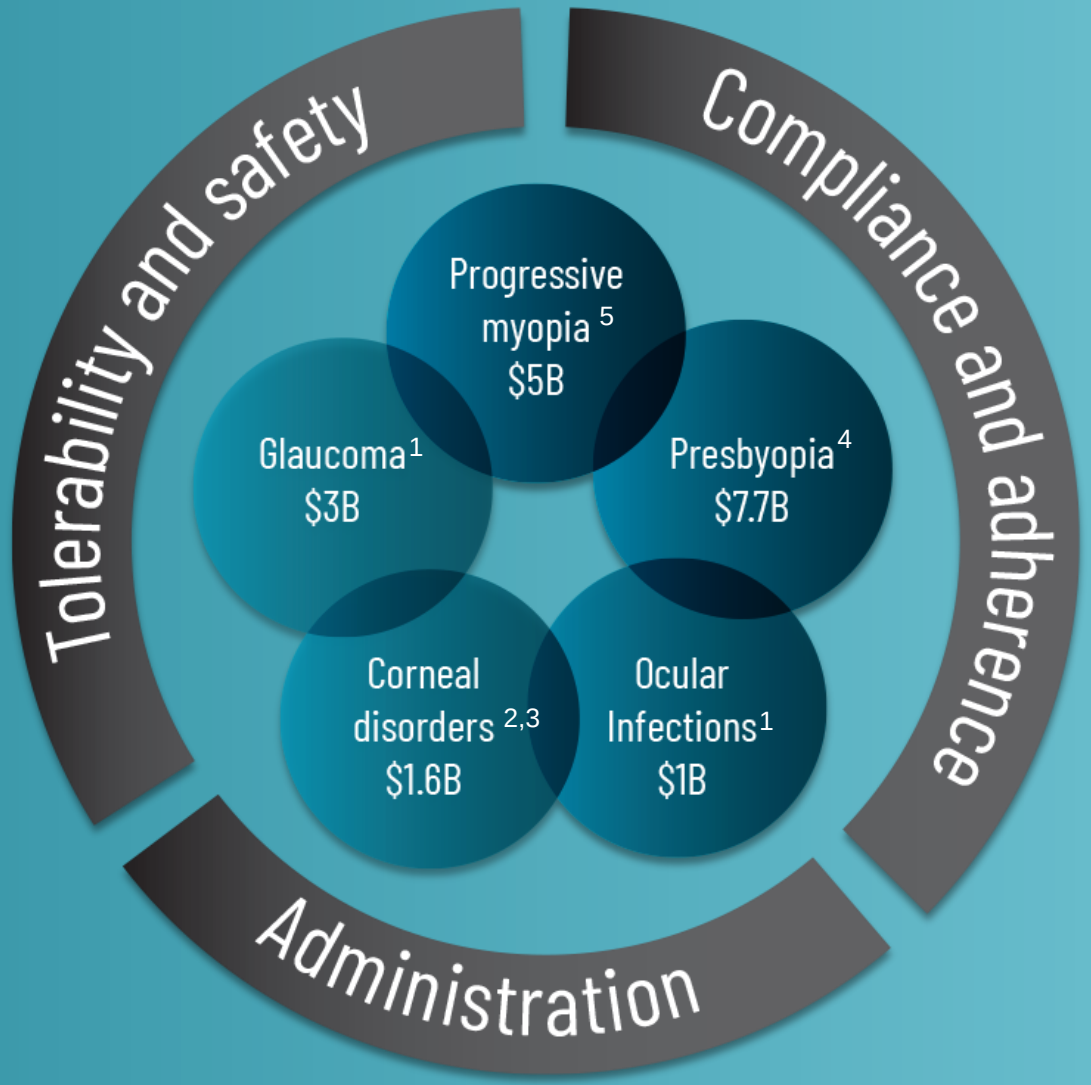
In addition, such statements could be affected by risks and uncertainties related to, among other things: risks of our clinical trials, including, but not limited to, the costs, design, initiation and enrollment (which could still be adversely impacted by the COVID-19 pandemic and resulting decrease in the number of enrolling patients), timing, progress and results of such trials; the timing of, and our ability to submit applications for, obtaining and maintaining regulatory approvals for our product candidates; the potential impacts of COVID-19 and related economic disruptions on our supply chain, including the availability of sufficient components and materials used in our product candidates; 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 estimates regarding the potential market opportunity for our product candidates; reliance on third parties to develop and commercialize our product candidates; the ability of us and our partners to timely develop, implement and maintain manufacturing, commercialization and marketing capabilities and strategies for our product candidates; intellectual property risks; changes in legal, regulatory, legislative and geopolitical 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, Eyenovia does not undertake any obligation to update any forward-looking statements.

Eyenovia at a Glance

We have designed our microdose array print (MAP™) technology to improve the lives of patients with ophthalmic diseases and disorders

- Advanced options for diseases and disorders with no or few existing therapies
- Therapies that reduce patient burden due to tolerability, safety or administration issues
- Therapies that improve compliance and adherence



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
[5] Eyenovia estimate

Investment Highlights

Transforming ophthalmology through the development and commercialization of high-value therapeutics based upon our proprietary Optejet® Microdose Array Print (MAP™) technology

CLINICALLY TESTED
in multiple Phase 2 and Phase 3 studies

LATE-STAGE THERAPEUTICS PIPELINE

Mydcombi™ for mydriasis / pupil dilation:
- Planned NDA submission 3Q 2022

MicroPine for pediatric progressive myopia:
- Phase 3 CHAPERONE study now managed by Bausch+Lomb

MicroLine for presbyopia / improved near vision:
- Phase 3 VISION-1 study successfully completed 2Q 2021
- Second Phase 3 VISION-2 study completion targeted 2Q 2022

DEVELOPMENT AND COMMERCIALIZATION PARTNERSHIPS

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

Arctic Vision – MicroPine, MicroLine and MydCombi for Greater China and South Korea; clinical study enrollment expected 1H 2022

Bausch Health – MicroPine in the US and Canada

PLATFORM TECHNOLOGY
for potential pipeline expansion into further high-value ophthalmic indications

Eyenovia Leadership Team

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

John Gandolfo
CFO

Michael Rowe
COO

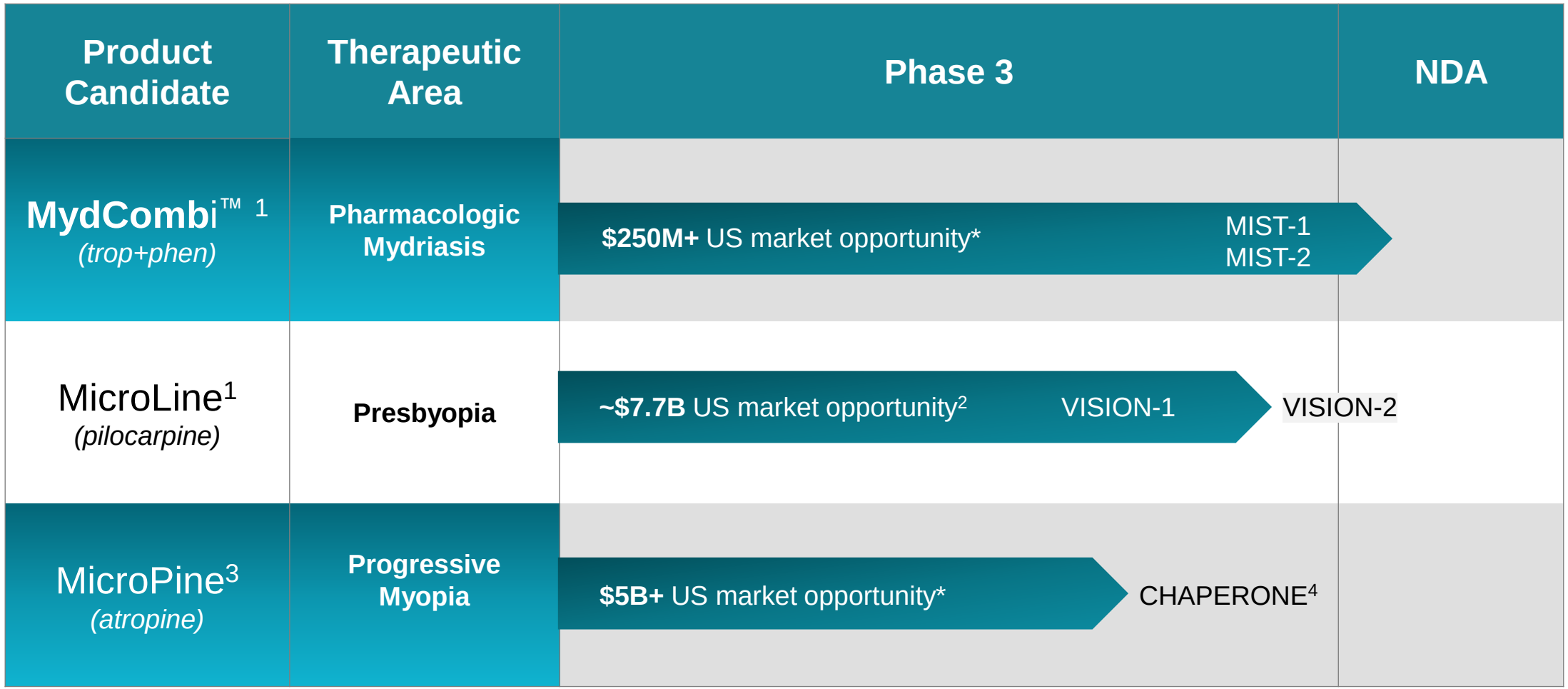
Malini Batheja
VP, Pharmaceutical R&D

Beth Scott
VP, Regulatory and Medical Affairs

Norbert Lowe
VP Sales & Marketing

Jennifer Clasby
CVP, Development

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



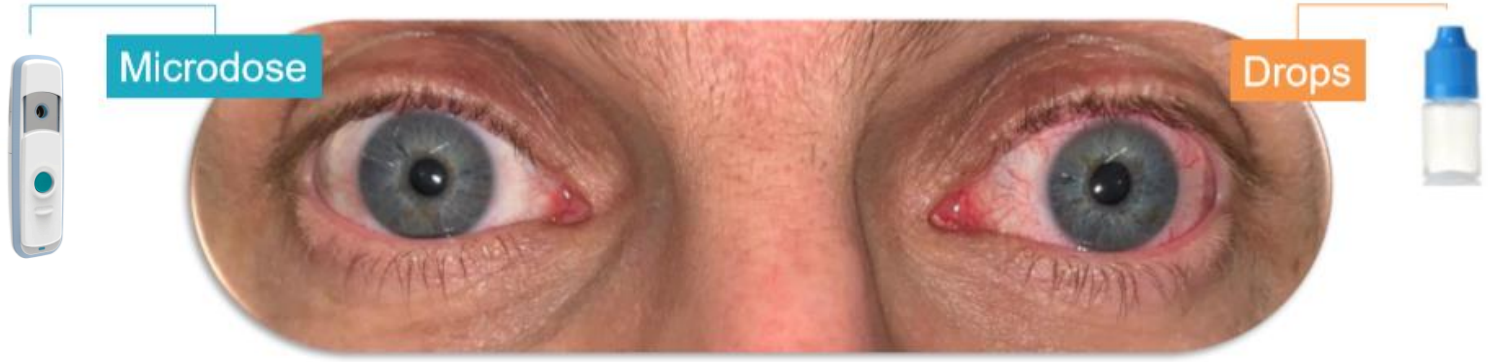
Potential pipeline expansion activities leveraging Optejet® technology are ongoing

** 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*

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 effects[1]



Protruding tip may create cross-contamination risk

- More than 50% of administrations touch ocular surface[2]

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 which we believe reduces exposure to drug and preservative toxicity (based on 8µL dose) by more than 75%. [1] Designed to eliminate drug overflow for a more comfortable patient experience.

Efficacy

Demonstrated statistical and clinical benefit in IOP reduction, pharmacological mydriasis and presbyopia (improvement in near vision)[1,2,5]

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

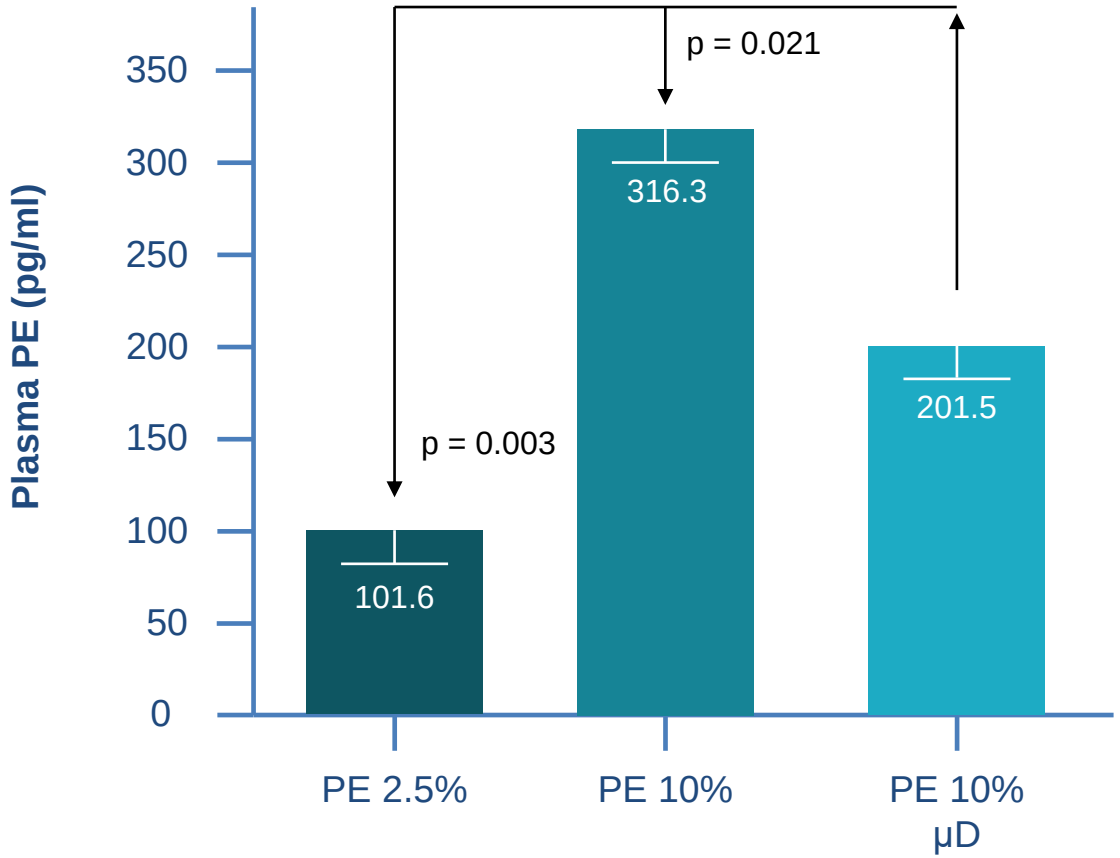
Can be paired with smart devices to enable dosage reminders and tracking.

[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. [5] Presented at Eyecelerator, July 2021

Optejet® | Significant Clinical Experience and Validation

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

REDUCED SYSTEMIC LEVELS



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]

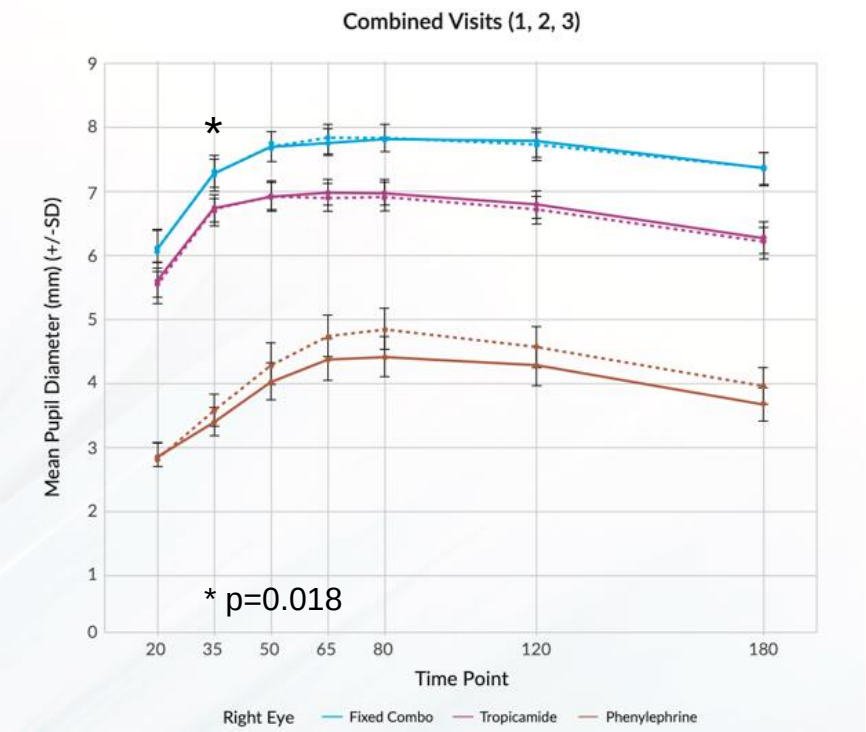
[1] Muller, M., van der Velpe, N., Jaap, W., van der Cammen, T.; Syncope and falls due to timolol eye drops. BMJ, 2006 April; 332:960-961
[2] Ianchulev, I. High-precision piezo-ejection ocular microdosing: Phase II study on local and systemic effects of topical phenylephrine. Ther Deliv, 2018 Jan;9(1):17-27

Optejet® | Demonstrated Benefits in Multiple Phase 3 Studies

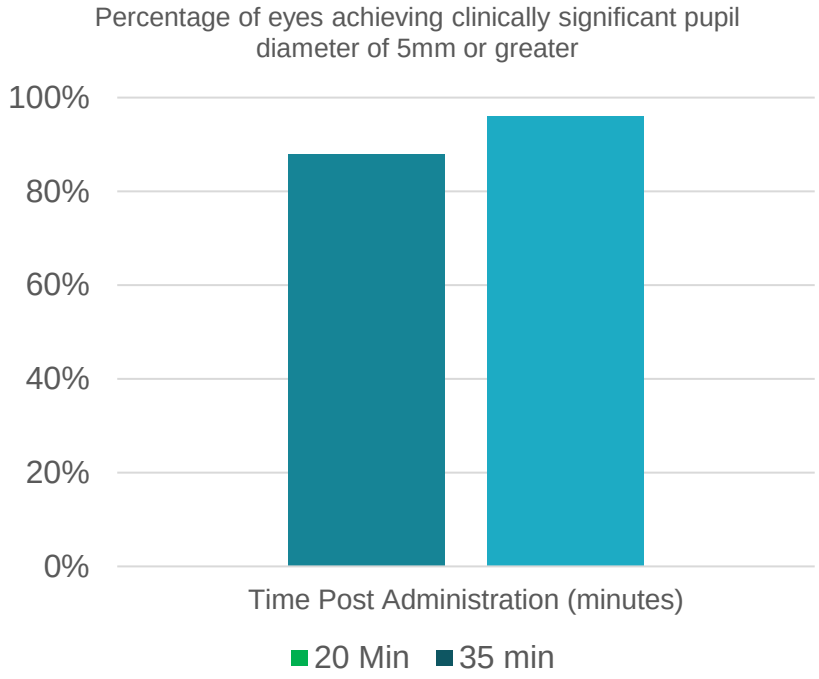
Microdosing a fixed combination of tropicamide-phenylephrine
had a superior mydriatic effect compared to either component formulation[1]

MICRODOSE EFFICACY

MIST-1



Combined MIST Studies[1,2]



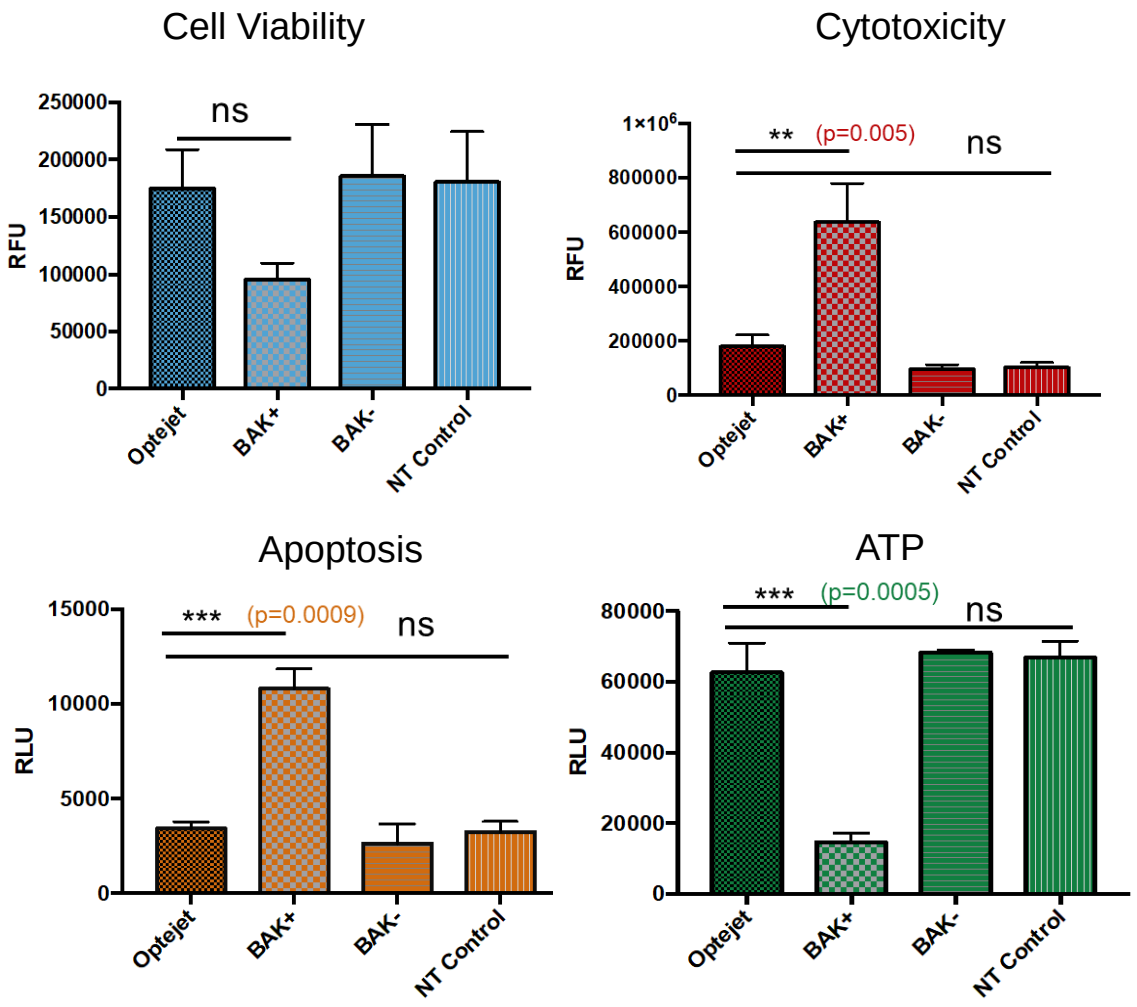
1. Wirta DL, Walters TR, Flynn WJ, Rathi S, Ianchulev T. Mydriasis with micro-array print touch-free tropicamide+phylephrine fixed combination MIST: pooled randomized phase III trials. Ther Deliv; 2021
2. Data on File, Eyenovia 2021

Optejet® | Minimal Conjunctival Tissue Impact

Delivering preserved medication without the associated harm to ocular tissues

Results of a human conjunctival cell line assay study with Tufts Medical Center indicate that the impact of preserved medications delivered with the Optejet is similar to non-preserved eye drops

Cell viability, cytotoxicity, apoptosis (cell membrane integrity and ATP (measure of metabolic activity) were all similar to the non-preserved drop and significantly better than the preserved eye drop[1]



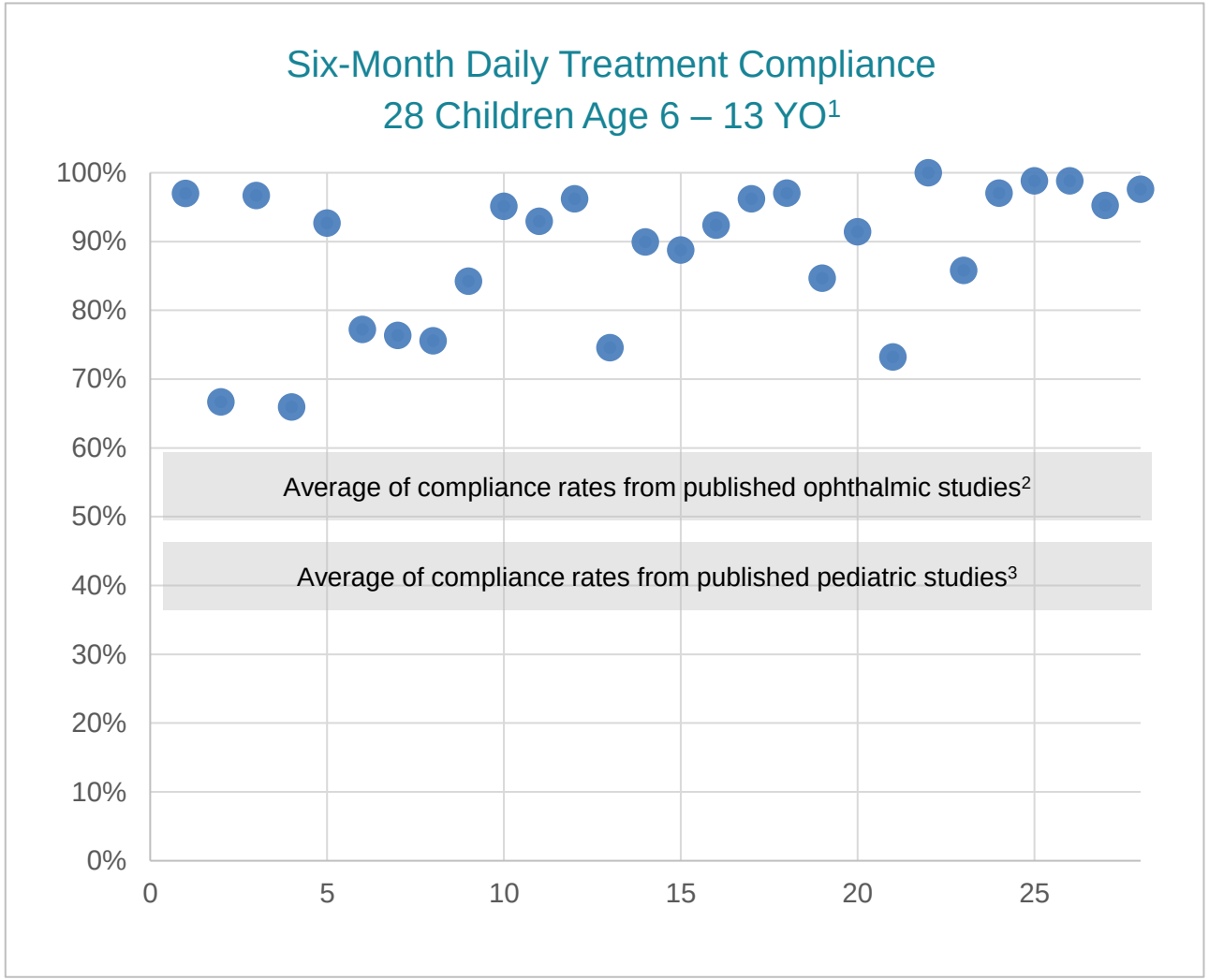
1. Data on file

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[2,3]



[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 Price[1]

82% - 94%

Next-Generation Ophthalmic Therapeutics

- Eyenovia's microdose therapeutics are regulated as drug-device combination products, with primary mode of action being the drug. Primary oversight is by CDER, with additional input from FDA device reviewers

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

[1] Estimates for "at scale" (250,000 annual units minimum)

Presbyopia | There Exists a Significant Unmet Need

- Presbyopia is the age-related loss of near vision that occurs as the lens becomes inelastic
- Majority of people aged 40 – 55 have never needed glasses prior to having difficulty with near vision
- Having to wear glasses can be an inconvenience and an unwanted outward signal of aging
- An alternative which is less obvious and more convenient is seen as valuable
- Eyenovia's **MicroLine** is intended to be that inconspicuous, convenient alternative
- **MicroLine** provides near vision without the appearance and inconvenience of reading glasses
  - Sight. Unseen.

18 million people 40-55 years of age who never previously needed glasses suffer from presbyopia in the US alone

A 7.7 **billion dollar**[1] addressable market

[1] Estimate from DelveInsight Presbyopia report; December 2020

Why Pilocarpine?

- A well-known and established drug
- **Pilocarpine has been demonstrated to constrict the pupil of the eye and create a "pinhole" effect that increases the depth of field**.
- Onset 10-30 minutes, with duration of action 4-8 hours
  - *The most frequently reported adverse reactions occurring in ≥ 5 % of patients in the pilocarpine 2% populations were:* ***headache/brow ache****, accommodative change, blurred vision, eye irritation, visual impairment (dim, dark, or "jumping" vision), and eye pain.*

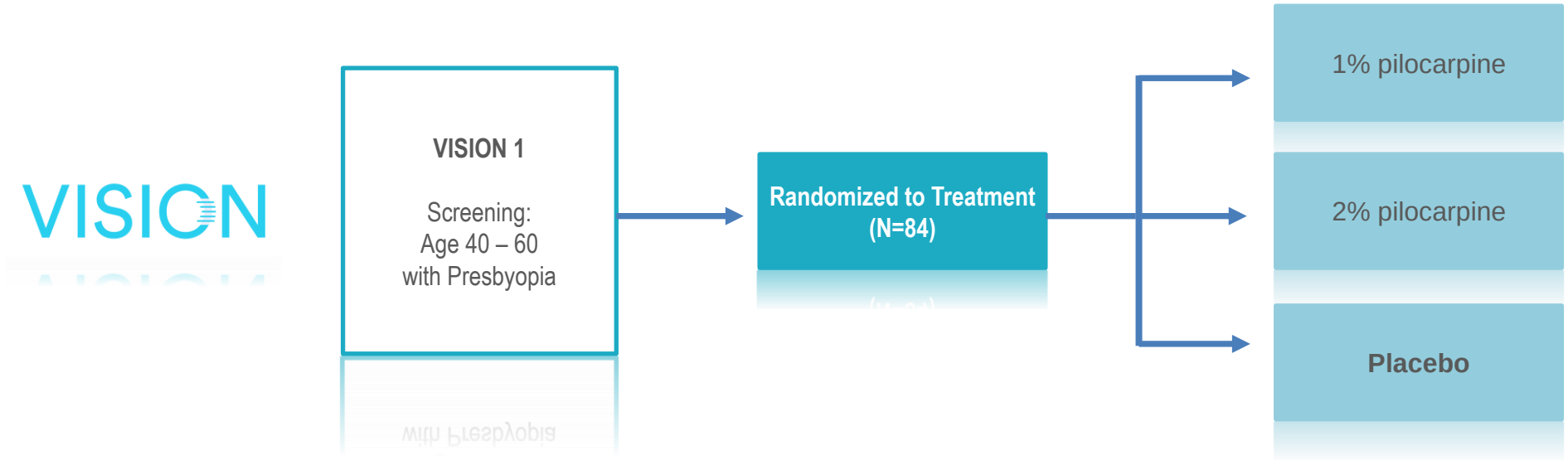
*__Microdosing__ is hypothesized to reduce/eliminate headache

Pilocarpine estimates based on presentations at 2021 ASCRS

- Effective at restoring functional vision, such as the ability to read a menu or cell phone
- Ability to use “as needed” without chronic dosing
- Rapid onset of action
- Easy to administer
- Comfortable instillation with low incidence of brow or headache to drive patient satisfaction and re-use

VISION-1 Study Design

- Phase 3, double-masked, placebo-controlled, cross-over superiority trial
  - Microdosed pilocarpine 1%, 2% and placebo ophthalmic sprays
- Primary endpoint: mesopic high-contrast binocular DCNVA gain at 120 minutes post-treatment
  - Analyzed separately for 2 cohorts: baseline DCNVA < 0.6 logMAR and ≥ 0.6 logMAR
- Study time period: December 2020 – March 2021



VISION-1 Met Primary Endpoint
Formulation is Well-Tolerated and Comfortable

1° Outcome
≥3-line gain

OR 7.7[2]

p-value<0.05

Patients Report
seeing improvement

71%

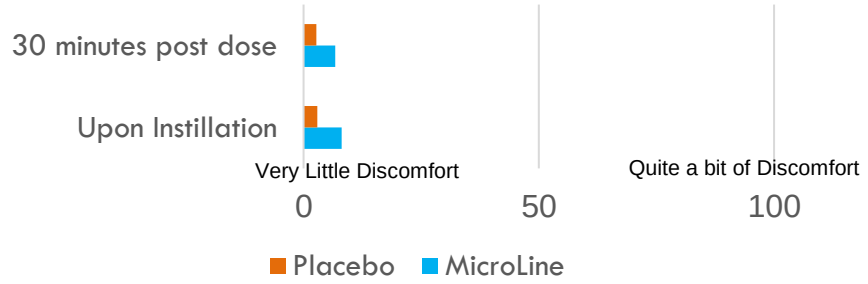
Exit survey: Percent reporting significant improvement in near vision

Key Safety Outcomes

All AEs were Transient in Nature

	MicroLine	Placebo
Moderate Hyperemia[1]	2%	0%
Instillation Discomfort	2%	0%
Brow ache	2%	0%

Patient Comfort Assessment



1 Resolved by 3 hours post-dose
2 Cohort of subjects with baseline DCNVA < 0.6 logMAR

Post-Study Survey Indicates Strong Preference for MicroLine

PRESBYOPIA FOCUS GROUPS DESCRIBE A BETTER OPTION

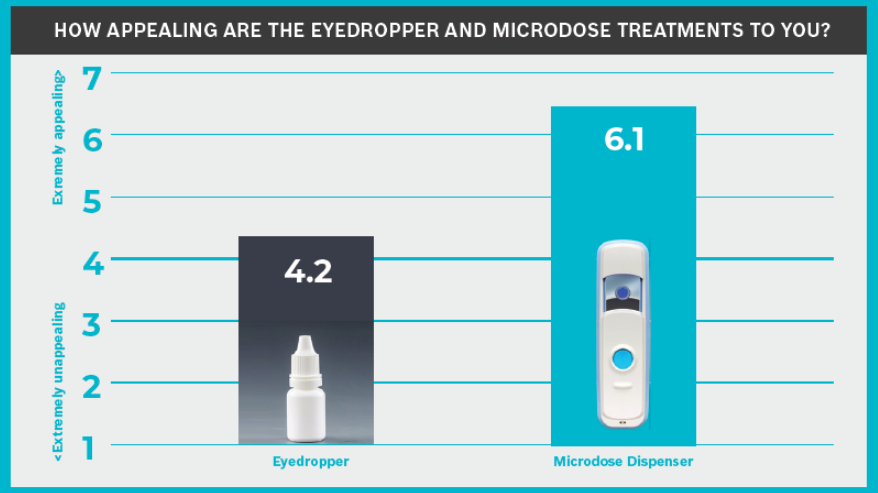
The ideal product profile would include:

No risk of headaches
"I'm much more willing to try [microdosing] because of my fear of headaches"

Lower risk of red eye/other side effects
"None of those side effects, that's huge"

It's futuristic and "cool"
"That spray is neat, I'd have no problem using that in front of coworkers"

Convenience (ability to administer without head tilt/needing a mirror
"I prefer the mist, don't have to use the dropper"

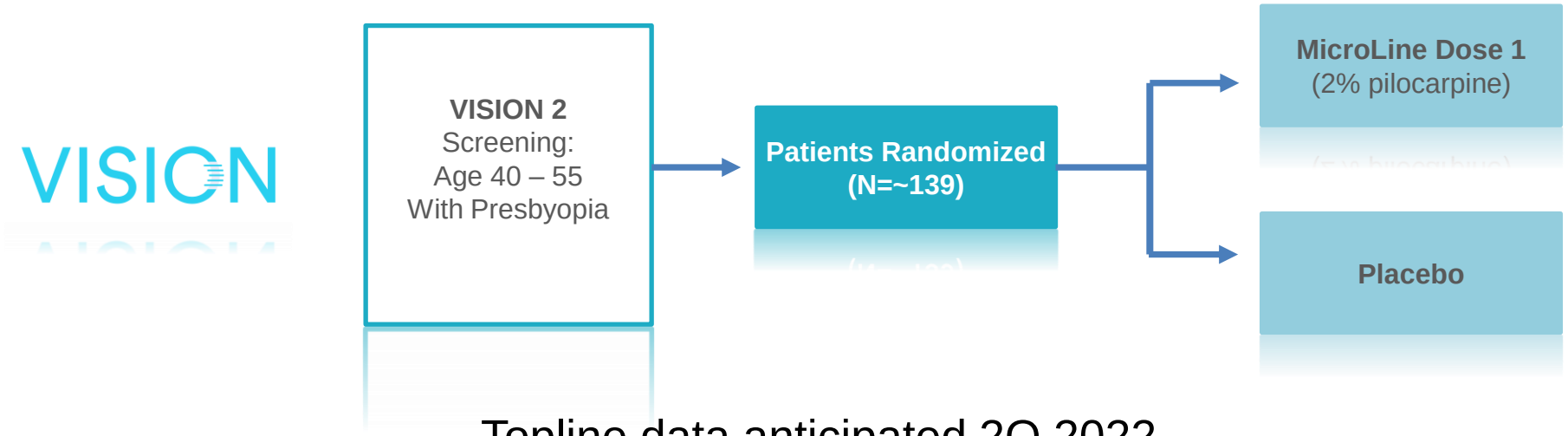


In a separate study among 100 presbyopic patients and 100 optometrists . . .

- ✓ **Most likely users were between 40 and 55 years old in the top half of household incomes**
- ✓ **A price of approximately $30 - $35 a month is not expected to be an issue for the vast majority of potential users**
- ✓ **Four hour duration of action is appropriate**
- ✓ **Lack of side effects, especially headache, was deemed "very important"**

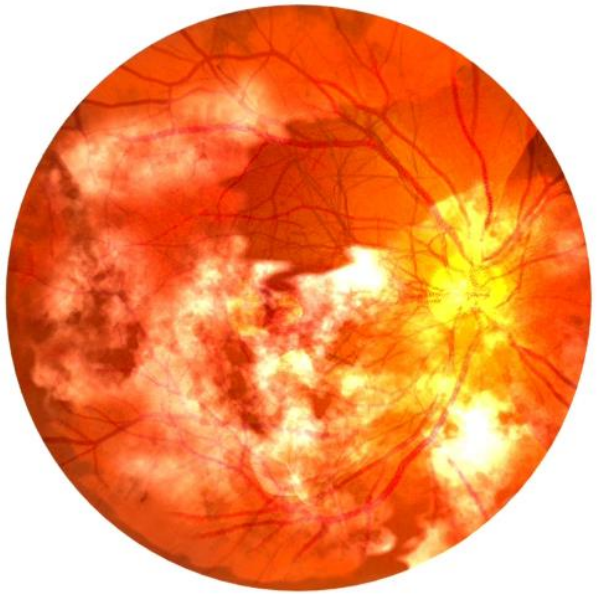
VISION-2 Study Design

- Phase 3 double-masked, placebo-controlled, cross-over superiority trial
  - microdosed pilocarpine 2% and placebo ophthalmic sprays
- Primary endpoint: improvement in mesopic distance corrected near visual acuity 2 hours post-treatment
- First patient enrolled November 4, 2021



Topline data anticipated 2Q 2022

Progressive Myopia



Progressive of Myopic Maculopathy

Affects ~25M children in the US alone, with ~5M considered to be at high risk[4]

- Back-of-the-eye disease
- Mostly begins in early childhood, with a genetic link to myopic parents[1]
- Pathologic elongation of sclera/retina which can lead to significant morbidity and visual sequelae[2]
  - 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 more[3]

[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.

Current treatment options for myopia include:

- Eyeglasses
- Contact Lenses
- Orthokeratology
- Atropine

  Atropine 0.01% must be compounded by a specialty pharmacy and is not approved by the FDA for myopia control. It is not covered by insurance and can cost $100 per bottle for a 3-month supply.

  Significant variability in the efficacy and side effect profile of the same concentration of atropine across different studies.

MicroPine Product Profile

- Clinically meaningful and significant effectiveness at preventing myopia progression versus placebo
- Ability for children to reliably use, once daily per eye
- Comfortable to instill, minimal impact on the ocular surface
- Minimal local side effects and systemic absorption
- Potential for tracking adherence and providing dosing reminders for purpose of improving treatment success

Chaperone Study Design

36mo

Chaperone Study - Single Phase III Trial initiated in June 2019.

Primary Endpoint: Proportion of subjects with <0.5 diopter change in refractive error (myopia progression) from baseline through 36 months.

12mo

Patients are then re-randomized to the same or an alternative treatment arm and followed for an additional 12 months.

Enrollment completion expected Q4 2022*

CHAPERONE

CHAPERONE
Screening:
Age 3-12
With Pediatric
Myopia

Patients Randomized (N=~420)

MicroPine Dose 1
(0.01% atropine)

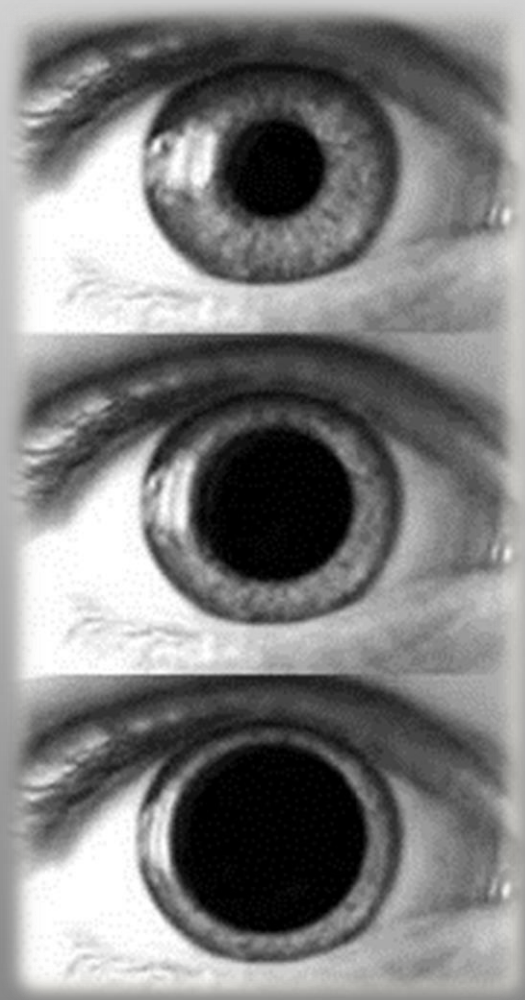
MicroPine Dose 1
(0.1% atropine)

Placebo

*Strategic partnership with Bausch Health for the development and commercialization of MicroPine

MydCombi for Mydriasis

- Pharmacologic mydriasis (pupil dilation) is part of the comprehensive eye exam
  - Estimated 100 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 opportunity[1]
- 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
- Able to commercialize efficiently with a small, targeted sales force
- **Now being reviewed as as drug-device combination product**



[1] $200M annual sales of pharmaceutical mydriatic products used during 100M office-based exams ($2 * 100M) + $50M of single bottle mydriatic agents used cataract replacement surgery ($12.5 x 4M)

MydCombi™ among the first drug-device combination products for pupil dilation

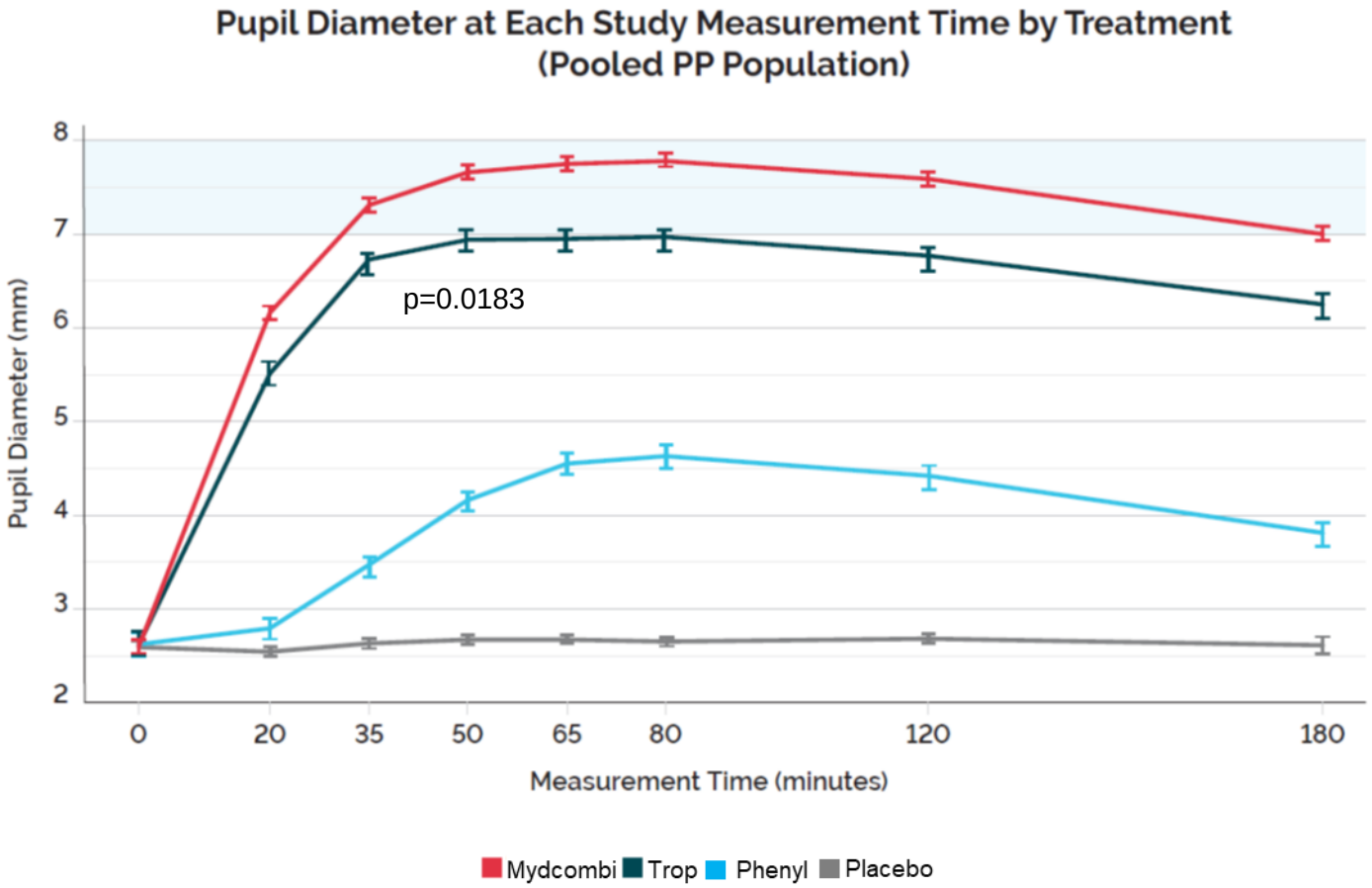
MydCombi™

(tropicamide and phenylephrine HCl ophthalmic spray) 1%/2.5%

- 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 time[1]
- Touch-free, comfortable application with fewer than 1% of patients experiencing stinging discomfort[2]
- 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-dosage[2]

[1] Denion E. et al, A 5-Minute Interval between Two Dilating Eye Drops Increases Their Effect. Optom Vis Sci. 2017 Aug
[2] Wirta, D. Presented at ASCRS Annual Meeting, 2019, San Diego CA
[3] Abelson, M., 2020. The Hows And Whys Of Pharmacokinetics. ReviewofOphthalmology.com; accessed 11/3/20

MydCombi has a Superior Mydriatic Effect vs. Single Agents



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

In the MIST-1 and MIST-2 studies, adverse events were infrequent and generally mild with none over 5% in incidence.

Presented by S. Rathi et al, American Academy of Optometry Annual Meeting, 2020

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

eyenovia		Big Eye Pharma
11 FTE for $2.2 million Calling on large group practices in largest population centers for 50% reach at launch	Sales Team 	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**

Note: All figures above are estimates

Strategic Partnerships to Potentially Extend Commercial Reach

arctic VISION

Validating partnership for the development and commercialization of **MydCombi™, 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 US[1]

[1]Min Chen, 2018
[2] Theophanous C. Myopia Prevalence and Risk Factors in Children. Clinical Ophthalmology. December 2018.
[3] U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2019.

Strategic Partnerships to Potentially Extend Commercial Reach

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

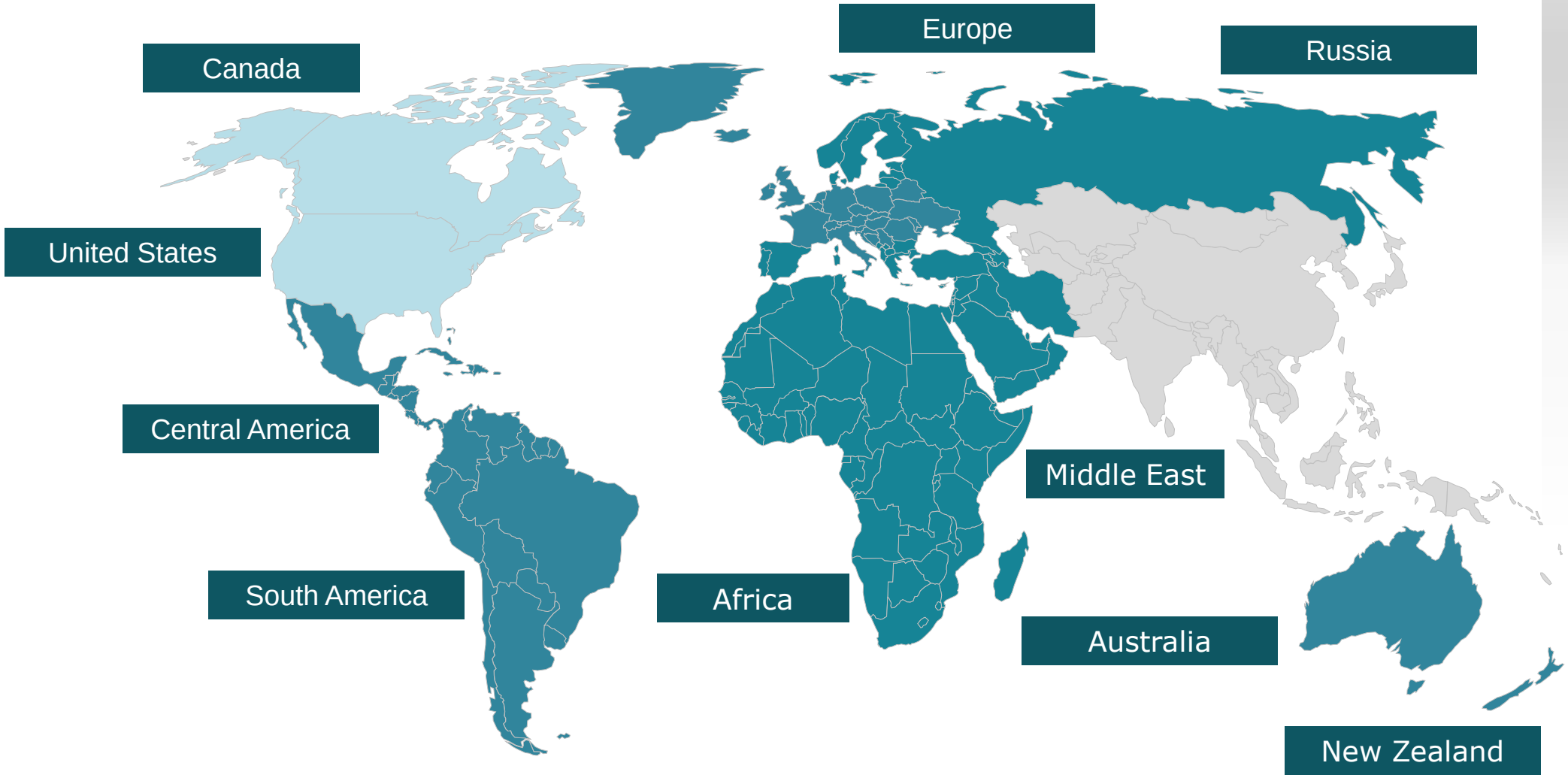
US impacted population with high myopia estimated at approx. 3M[2,3]

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

Territory: **US and Canada**

[1]Min Chen, 2018
[2] Theophanous C. Myopia Prevalence and Risk Factors in Children. Clinical Ophthalmology. December 2018.
[3] U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2019.

Available Licensing Opportunities



TERRITORY AVAILABILITY

MydCombi
MicroLine
MicroPine

MydCombi
MicroLine

Currently under license for all products

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

13 U.S. Patents Issued

84. O.U.S. Patents Issued

Volume delivered, method of delivery, speed of delivery, data capture

Various patents in effect until late 2031

Provisional patents filed to bring protection through 2040

Nasdaq: EYEN	
Common Shares Outstanding	31.7M
Equity Grants Outstanding Under Stock Plans	4.3M
Warrants	7.9M
Fully Diluted Shares	43.9M
Cash	$27.3M
Debt	$7.3M

All figures as of December 21, 2021

Board of Directors

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

Kenneth Lee Jr.
Lead Director
General partner of Hatteras
Venture Partners

Dr. Julia Haller
Board Member
Ophthalmologist-in-Chief
Wills Eye Hospital

Stephen Benjamin
Board Member
Former President, The US
Conference of Mayors

Charles Mather IV
Board Member
Managing Director, Equity Capital
Markets at Suntrust Robinson Humphrey

Rachel Jacobson
Board Member
President of The Drone
Racing League

Dr. Curt LaBelle
Board Member
Managing Director of GHIF
venture fund and Co-Founder
of Eyenovia

Dr. Anthony Sun
Board Member
CEO, Zentalis
Pharmaceuticals, Inc.