EYP-1901 in wet AMD
DAVIO 2 Phase 2 Clinical Trial
Topline Data

December 4, 2023

EyePoint PHARMACEUTICALS

Forward-Looking Statements

Various statements made in this presentation are forward-looking, within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, and are inherently subject to risks, uncertainties and potentially inaccurate assumptions. All statements that address activities, events or developments that we intend, expect, plan or believe may occur in the future, including but not limited to statements about the sufficiency of our existing cash resources into 2025; our expectations regarding the timing and clinical development of our product candidates, including EYP-1901 and EYP-2301; the potential for EYP-1901 as a novel sustained delivery treatment for serious eye diseases, including wet age-related macular degeneration, non-proliferative diabetic retinopathy and diabetic macular edema; and our longer term financial and business goals and expectations, are forward-looking statements. Some of the factors that could cause actual results to differ materially from the anticipated results or other expectations expressed, anticipated or implied in our forward-looking statements are risks and uncertainties inherent in our business including, without limitation: the effectiveness and timeliness of clinical trials, and the usefulness of the data; the timeliness of regulatory approvals; our ability to access needed capital; termination or breach of current and future license agreements; our dependence on contract research organizations, co-promotion partners, and other outside vendors and service providers; effects of guidelines, recommendations and studies; protection of our intellectual property and avoiding intellectual property infringement; retention of key personnel; product liability; industry consolidation; compliance with environmental laws; manufacturing risks; risks and costs of international business operations; volatility of our stock price; possible dilution; absence of dividends; the impact of instability in general business and economic conditions, including changes in inflation, interest rates and the labor market; and other factors described in our filings with the Securities and Exchange Commission. We cannot guarantee that the results and other expectations expressed, anticipated or implied in any forward-looking statement will be realized. A variety of factors, including these risks, could cause our actual results and other expectations to differ materially from the anticipated results or other expectations expressed, anticipated or implied in our forward-looking statements. Should known or unknown risks materialize, or should underlying assumptions prove inaccurate, actual results could differ materially from past results and those anticipated, estimated or projected in the forward-looking statements. You should bear this in mind as you consider any forward-looking statements. Our forward-looking statements speak only as of the dates on which they are made. We do not undertake any obligation to publicly update or revise our forward-looking statements even if experience or future changes makes it clear that any projected results expressed or implied in such statements will not be realized.

Committed to developing therapeutics to improve the lives of patients with serious retinal diseases

Pipeline represents potentially substantial opportunities using our bioerodible Durasert E™ IVT delivery technology

- **EYP-1901** – vorolanib, a selective and patented TKI
  - Positive topline Phase 2 data in **wet AMD**
  - Phase 3 trials in **wet AMD** planned to initiate in 2H 2024
  - Topline Phase 2 data in **NPDR** anticipated in Q2 2024
  - Phase 2 trial in **DME** planned to commence in Q1 2024
- **EYP-2301 –** *razuprotafib,* a patented TIE-2 agonist for serious retinal diseases

Durasert® - proven, safe IVT drug delivery technology

- Routine in-office IVT injection
- Bioerodible and non-erodible formulations
- Safely administered to thousands of patient eyes across four FDA approved products with non-erodible formulations

Strong Balance Sheet

- $136.0M of cash and investments on September 30, 2023
- Cash runway into 2025

IVT, intravitreal injection

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EYP-1901 (vorolanib in Durasert E) a potential treatment for wet AMD featuring sustained delivery for 6-months or longer

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There is a Significant Need for More Durable Therapies in Wet AMD

1. **Many patients with wet AMD are chronically undertreated**
   - >80% of Retina Specialists say undertreatment is due to patient noncompliance, scheduling limitations or provider preference for less frequent dosing[1]

2. **Current “treat and extend” protocol still places significant burden on physicians and patients**
   - Chronic disease treated with short acting anti-VEGF biologics

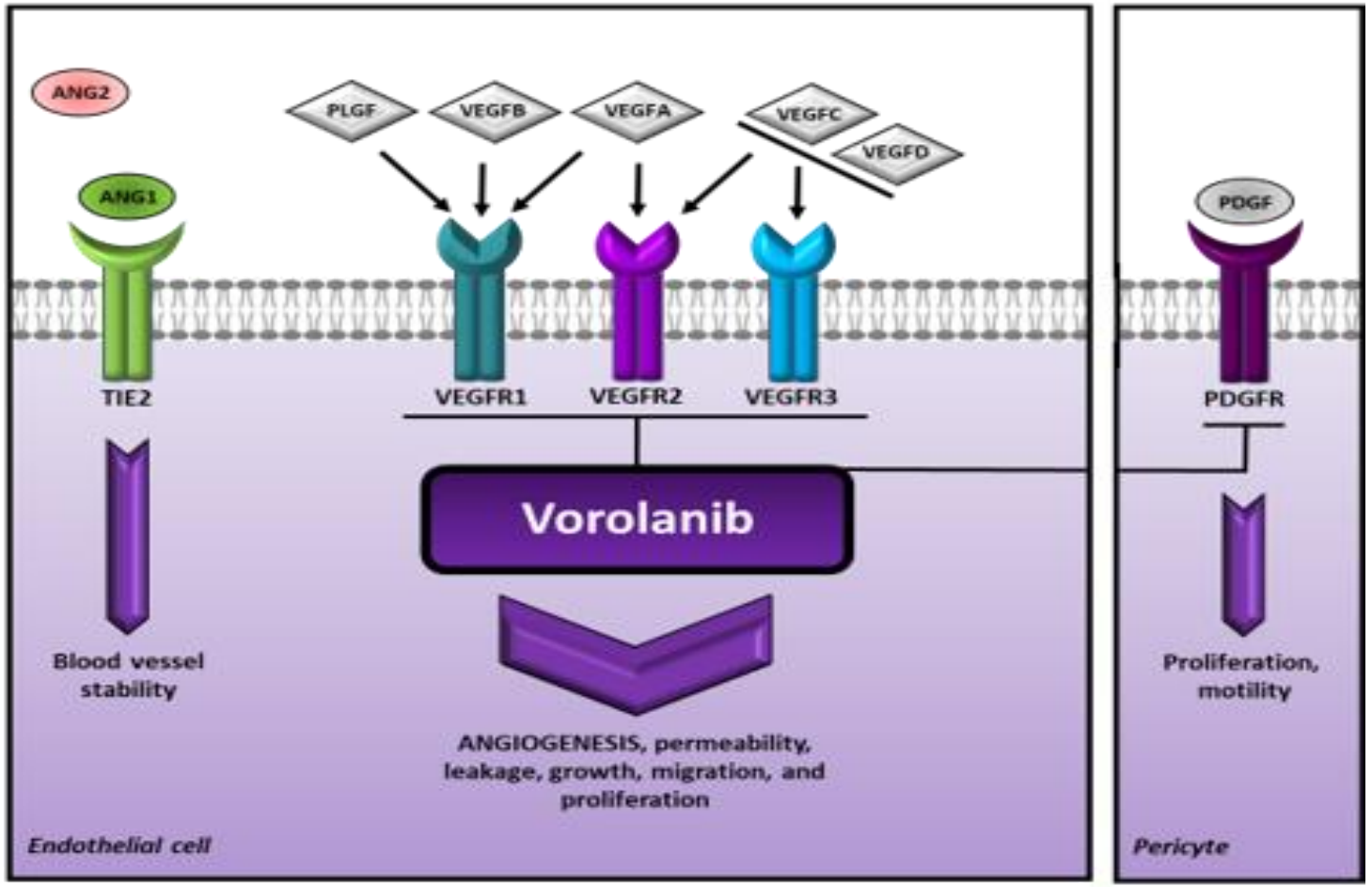
3. **A delay in care/missed visit can result in vision loss**
   - A delay in treatment of only 5.34 weeks resulted in vision loss[2]

4. **An aging population means significantly more injections in a patient’s lifetime**
   - Current anti-VEGF treatments are dosed on average every two months in the United States[3]

1. 2022 PAT Survey; 2. American Academy of Ophthalmology, *The Effect of Delay in Care Among Patients Requiring Intravitreal Injections,* Welin Song, BS et al; 3. NIH *Current and Upcoming Anti-VEGF Therapies and Dosing Strategies for the treatment of neovascular AMD: a comparative review,* Saira Khanna et al, Dec. 2019

Vorolanib Brings a Potential New MOA to the Treatment of VEGF-Mediated Retinal Diseases by Blocking all Isoforms of VEFG and PDGF

- Potent and selective pan–VEGF receptor inhibition
- Composition of matter patent into 2037
- Demonstrated neuroprotection in a validated retinal detachment animal model
- Blocks PDGF which may lead to antifibrotic benefit
- Reduced off-target binding and does not inhibit TIE-2 at clinically relevant doses



SoC, standard of care; ANG, angiopoietin; PDGF(R), platelet-derived growth factor (receptor); PLGF, placental growth factor; TIE-2, tyrosine-protein kinase receptor TIE-2; VEGF(R), vascular endothelial growth factor (receptor).

TECHNOLOGY

DURASERT®

Safe Sustained IVT Drug Delivery

- Delivered by a single in-office IVT injection
- Continuous, stable release of drug
- Zero-order kinetics

Durasert E™: bioerodible

- Insert consists of drug embedded within a bioerodible matrix
- Designed to deplete drug load before matrix fully erodes

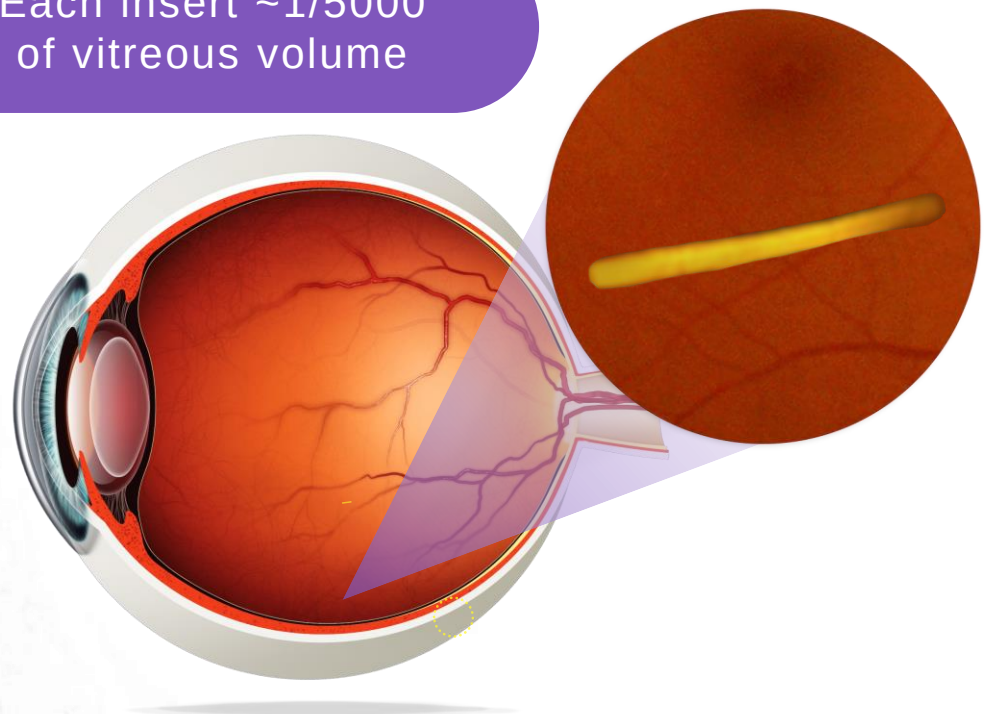
Durasert®: non-erodible

- Drug embedded within a bioerodible matrix coated with non-erodible polyimide shell:
  - YUTIQ®[1]
  - ILUVIEN®[1]
  - RETISERT®[2]
  - VITRASERT®[2]

1- licensed to Alimera; 2 – licensed to Bausch and Lomb

EYP-1901: Receptor Binding Vorolanib In Bioerodible Durasert E™

Each insert ~1/5000 of vitreous volume



- Delivered in the physician office via standard intravitreal injection technique
- Immediately bioavailable featuring an initial burst of drug followed by zero order kinetics release for ~9 months
- Positive safety and efficacy data in wet AMD from Phase 1 DAVIO clinical trial
- Continued positive safety data in ongoing Phase 2 clinical trials with all patients at least six months post injection
- Shipped and stored at ambient temperature

IVEGF – vascular endothelial growth factor: AMD – age related macular degeneration;

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The DAVIO 2 Clinical Trial – Background

A non-inferiority trial evaluating two doses of EYP-1901 against an aflibercept control in wet AMD

The DAVIO 2 clinical trial was designed to evaluate EYP-1901 in wet AMD and support Phase 3 clinical trials based on a Type C meeting with FDA

Design: Multi-center, randomized, double-masked trial in patients with previously treated wet AMD

Anti-VEGF supplement criteria:

- 5 letter loss with 75 microns of new fluid
- Other criteria
  - 10 letter loss due to wet AMD
  - 100 microns new fluid x 2 visits
  - New retinal hemorrhage from wet AMD
  - Investigator discretion

Primary outcome: difference in mean change in BCVA from Day 1 to Week 28 and 32 (blended)

Key secondary endpoints: safety, reduction in treatment burden, percent of eyes supplement-free up to six months and anatomical results

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DAVIO 2 Clinical Trial is Randomized, Double-Masked, Aflibercept Controlled* with a Single EYP-1901 Treatment at Two Doses

REQUIRED AFLIBERCEPT INJECTION VISIT

VISIT SCHEDULED

EYP-1901 DOSE

SHAM INJECTION FOR MASKING

*Aflibercept on-label control required by FDA

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DAVIO 2 Baseline Characteristics Well Balanced Across Arms

	Aflibercept 2mg q8W (n=54)	EYP-1901 2mg (n=50)	EYP-1901 3mg (n=52)
Mean age, years (range)	75.9 (52-93)	76.4 (61-93)	75.4 (56-89)
Female, %	53.7%	64.0%	67.3%
Mean BCVA, ETDRS letters (range)	73.4 (41-85)	73.9 (52-84)	74.9 (46-85)
Mean CST, µm (range)	265.7 (178-348)	267.0 (192-400)	262.9 (186-345)
Median length of time for wet AMD diagnosis prior to screening, months (range)	28.1 (2.4-273.6)	24.2 (2.4-168.0)	28.1 (2.4-145.2)
Mean # of injections normalized to 12 months prior to screening (range)	9.5 (1.0-12.0)	10.1 (2.0-13.0)	10.0 (2.0-13.3)

* PRELIMINARY DATA – PENDING FINAL ANALYSIS

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Phase 2 DAVIO 2 Clinical Trial Topline Results

A NON-INFERIORITY TRIAL VERSUS AN AFLIBERCEPT CONTROL

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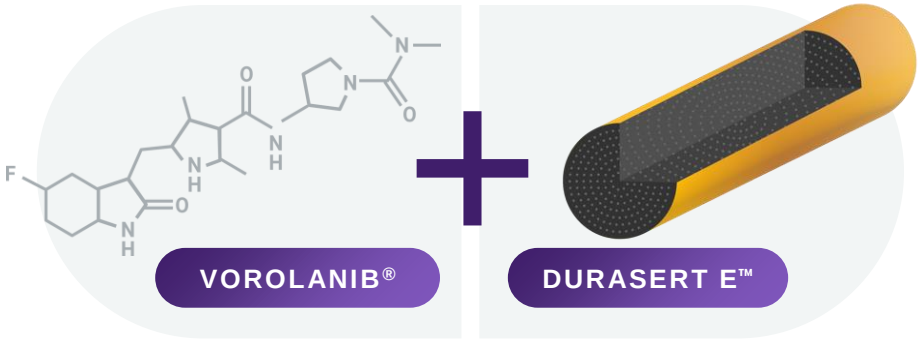
EYP-1901 Phase 2 DAVIO 2 Clinical Trial Met All Objectives

MET PRIMARY ENDPOINT

- ✓ **Statistically non-inferior** change in BCVA versus aflibercept control with a numerical difference of only -0.3 and -0.4 letters, respectively for the 2 mg and 3 mg dose

- ✓ **Continued favorable safety profile:**
  - No EYP-1901-related SAEs reported
  - Ocular AEs – majority are mild in severity and expected with mode of administration



MET ALL SECONDARY ENDPOINTS

- ✓ **~80% reduction** in treatment burden at 6-months
- ✓ Nearly **two-thirds of eyes supplement-free** up to six-months
- ✓ **Strong anatomical control** in both EYP-1901 arms

PRELIMINARY DATA – PENDING FINAL ANALYSIS

DAVIO 2 Achieved Primary Endpoint of Non-Inferiority Change in Visual Acuity in Both EYP-1901 Arms; Statistically and Numerically Non-Inferior to Control (95% CI)

	EYP-1901 2mg	EYP-1901 3mg	Aflibercept 2mg q8W
Change in BCVA* vs. Baseline	+ 1.0 letters	+ 0.9 letters	+ 1.3 letters
Difference vs. Aflibercept Control	**- 0.3 letters**	**- 0.4 letters**	NA
Statistics	NI (95% CI)	NI (95% CI)	NA

Non-inferiority Margin = - 4.5 letters per FDA guidance

*Blended week 28 and week 32
NI, Non-inferior; CI, Confidence Interval
PRELIMINARY DATA – PENDING FINAL ANALYSIS

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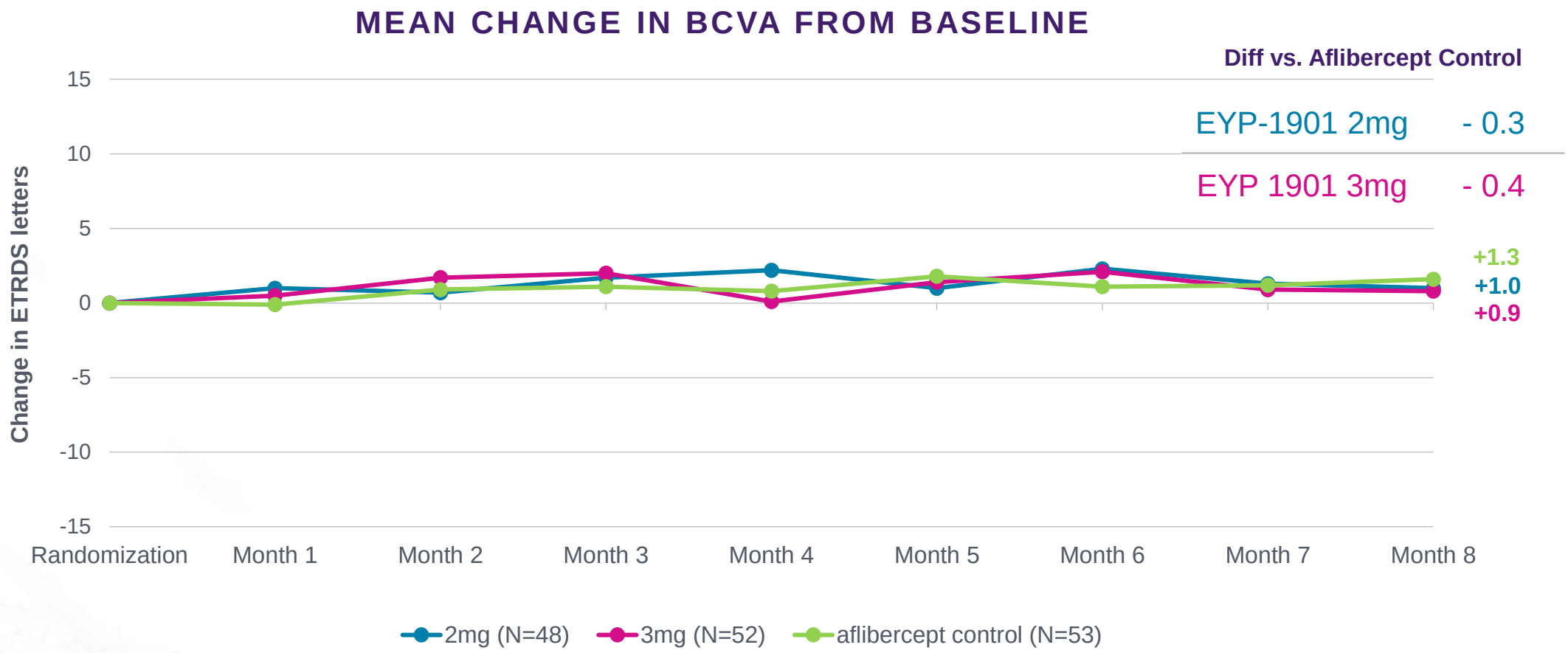
EYP-1901 was Statistically Non-Inferior in Change in BCVA Compared to the Aflibercept Control (95% CI)



*Blended week 28 and week 32 change vs. baseline
CI, Confidence Interval
PRELIMINARY DATA – PENDING FINAL ANALYSIS

EYP-1901 Demonstrated a Favorable Safety Profile in the Phase 2 DAVIO 2 Trial (Data Cut as of November 7, 2023)

- No reported EYP-1901-related ocular SAEs
  - Four ocular SAEs reported in a study eye – none deemed related to EYP-1901[1]
- No reported EYP-1901-related systemic SAEs
- AEs reported were generally mild and expected with IVT[2]
- No cases of:
  - Insert migration into the anterior chamber
  - Retinal occlusive vasculitis
- Low patient discontinuation rate of 4% up to week 32
  - No discontinuations were related to AEs or EYP-1901 treatment

1- As determined by investigator
2- Further details to be provided following completion of internal review
SAE, serious adverse event; AE, adverse event; IVT, intravitreal injection
PRELIMINARY DATA – PENDING FINAL ANALYSIS

Clinically Meaningful Reduction in Treatment Burden Supports EYP-1901 as a Maintenance Treatment For Wet AMD

	EYP-1901 2mg	EYP-1901 3mg
Mean number of injections week 8 through week 32	0.55	0.71
Mean number of injections 6 months prior to screening*	5.07	4.98
Reduction in treatment burden vs. 6 months prior (%)	**89%**	**85%**

*Normalized
PRELIMINARY DATA – PENDING FINAL ANALYSIS

EYP-1901 Demonstrated a Significant Reduction in Treatment Burden vs. the Aflibercept Control Arm

	EYP-1901 2mg	EYP-1901 3mg	Aflibercept 2mg q8W
Mean number of injections week 8 through week 32	0.55	0.71	3.32
Reduction in treatment burden vs. aflibercept control (%)	**83%**	**79%**	**NA**

PRELIMINARY DATA – PENDING FINAL ANALYSIS.

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EYP-1901 Demonstrated Clinically Meaningful Supplement-Free Rates

PERCENT OF PATIENTS SUPPLEMENT-FREE UP TO SIX MONTHS AFTER ADMINISTRATION OF EYP-1901

	EYP-1901 2MG	EYP-1901 3mg
Supplement-Free Rates	**65%**	**64%**

PRELIMINARY DATA – PENDING FINAL ANALYSIS

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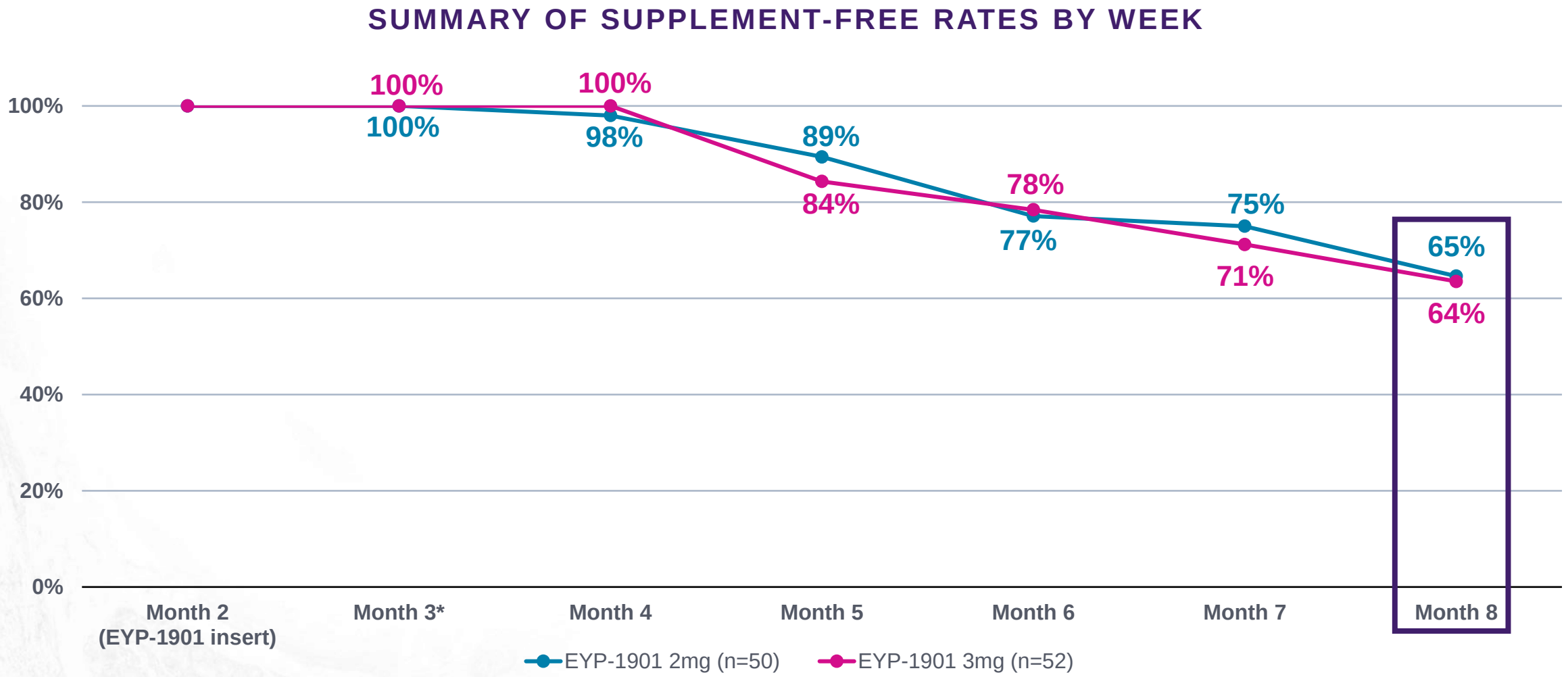
Nearly Two-Thirds of Eyes Treated with EYP-1901 were Supplement-Free up to Six Months After a Single Injection

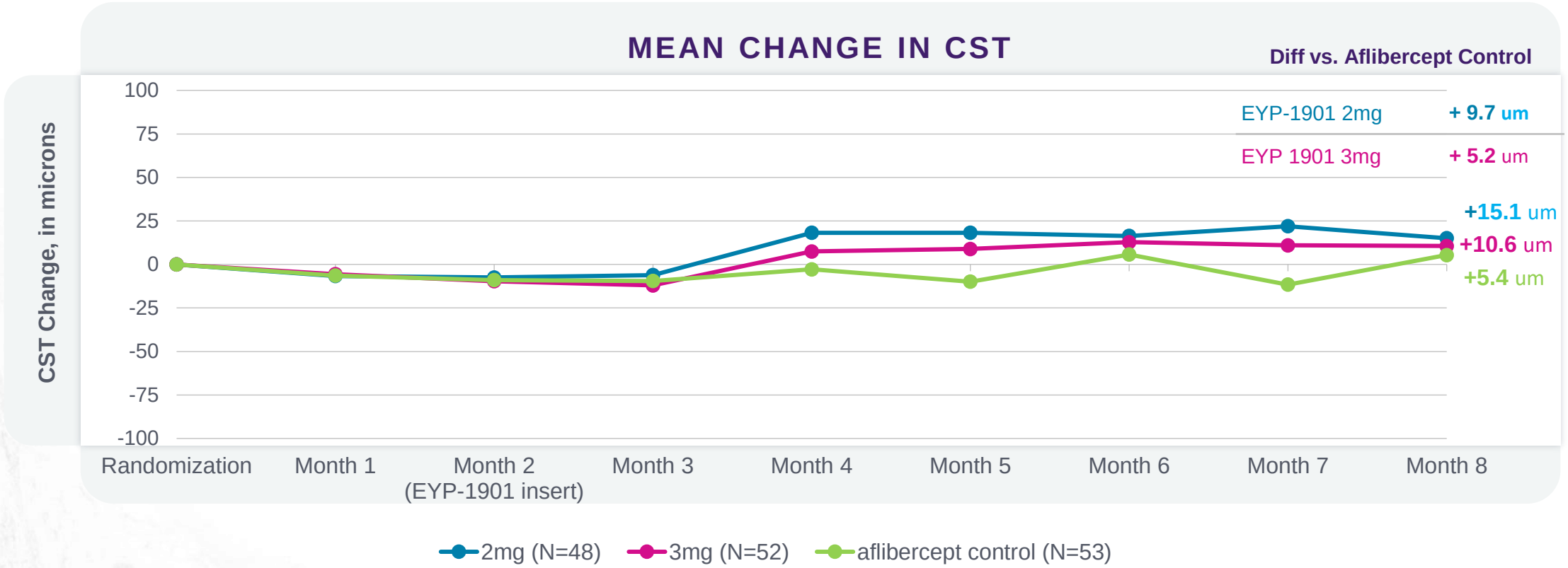


*First visit patients are eligible to be rescued
PRELIMINARY DATA – PENDING FINAL ANALYSIS

Stable Anatomy via OCT in EYP-1901 Arms

	EYP-1901 2mg	EYP-1901 3mg	Aflibercept 2mg q8W
Baseline CST (mean)	262.9	267.0	265.7
Change in OCT at Week 32 vs. Baseline	+ 15.1 microns	+ 10.6 microns	+ 5.4 microns
Difference vs. Aflibercept Control	**+ 9.7 microns**	**+ 5.2 microns**	**NA**

Data from DAVIO 2 Suggests Strong Anatomic Control with OCT Change Below 10 microns at Week 32 Compared to the Aflibercept Control



PRELIMINARY DATA – PENDING FINAL ANALYSIS

EYP-1901 Phase 2 DAVIO 2 Clinical Trial Met All Objectives

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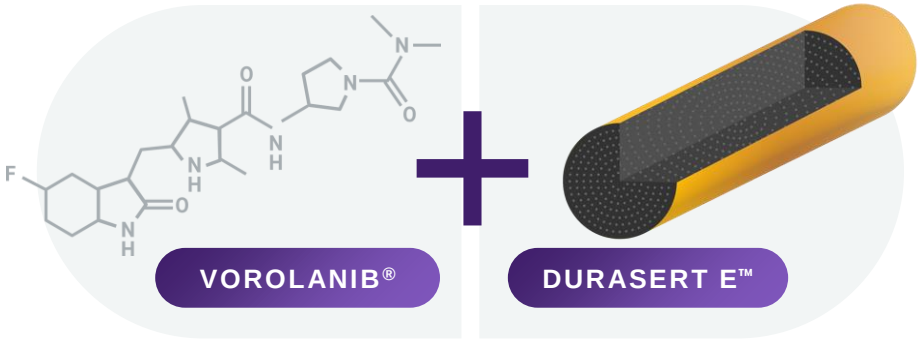

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PRELIMINARY DATA – PENDING FINAL ANALYSIS

EYP-1901 Phase 2 DAVIO 2 Clinical Trial Met All Primary and Secondary Endpoints

Endpoint	DAVIO 2 Topline	DAVIO 2 Lower Limit (as included in November deck)
Mean change in BCVA vs. aflibercept control	• - 0.3 letters (EYP-1901 2mg) • - 0.4 letters (EYP-1901 3mg) • Statistically non-inferior (CI 95%)	• < - 3.0 letters • Potentially underpowered
Safety	• No reported EYP-1901-related ocular SAEs • No reported EYP-1901- related systemic SAEs	Favorable safety profile
Reduction in treatment burden	• 89% (EYP-1901 2mg)* • 85% (EYP-1901 3mg)*	50% or better
Supplement-free rate	• 65% (EYP-1901 2mg) • 64% (EYP-1901 3mg)	50% or better
Mean change in CST on OCT	• + 15.1 microns (EYP-1901 2mg) • + 10.6 microns (EYP-1901 3mg)	Within ~30 microns

*vs. mean number of injections normalized 6 months prior to screening
PRELIMINARY DATA – PENDING FINAL ANALYSIS

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