Goldman Sachs Global Healthcare Conference Presentation

June 12, 2024

Jay Duker, M.D.

President and CEO

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EYEPOINT PHARMACEUTICALS

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

Pipeline represents potential multi billion-dollar product opportunities

- **DURAVYU™ (vorolanib intravitreal insert)** – vorolanib - a selective and patented TKI in Durasert E™
  - First pivotal phase 3 trial in **wet AMD** on-track to **initiate** in 2H 2024
  - Positive topline DAVIO 2 Phase 2 data in **wet AMD – statistically non-inferior**
  - Demonstrated biologic effect and continued safety in **NPDR;** 12-month data expected Q3 2024
  - Phase 2 clinical trial in **DME** underway
- **EYP-2301 –** razuprotafib, a patented TIE-2 agonist in Durasert E™ as a potential new MOA for treating serious retinal diseases
- **Durasert® - proven, safe IVT drug delivery technology**
  - Bioerodible Durasert E™ and non-erodible formulations
  - Safely administered to thousands of patient eyes across four FDA approved products with non-erodible formulations
- **Strong Balance Sheet**
  - **$299M** of cash and investments on March 31, 2024
  - Cash runway through Phase 3 wet AMD pivotal trials topline data in 2026

DURAVYU™ has been conditionally accepted by the FDA as the proprietary name for EYP-1901. DURAVYU is an investigational product; it has not been approved by the FDA. FDA approval and the timeline for potential approval is uncertain.
IVT, intravitreal injection

Potential Multi Billion-Dollar Product Opportunities Leveraging Innovative Drug Delivery Technology, Bioerodible Durasert E™

Durasert E™ Programs	Indication	Discovery	Pre-Clin	Phase 1	Phase 2	Phase 3	Next Milestone
DURAVYU (EYP-1901) – vorolanib in Durasert E™ (tyrosine kinase inhibitor)	Wet AMD						First Phase 3 Trial 2H 2024
	NPDR						12-month data Q3 2024
	DME						Topline data in Q1 2025
EYP-2301 – razuprotafib in Durasert E™ (TIE-2 agonist)	serious retinal diseases						Pre-clin tox and PK data
Complement inhibition	GA						Potential product candidate in 2024

non-clinical *trial underway*

wet AMD, wet age-related macular degeneration; EOP2, End of Phase 2; FPI, first patient in; NPDR, non-proliferative diabetic retinopathy; DME, diabetic macular edema; GA, geographic atrophy

Durasert - Intravitreal Sustained-Release Drug Delivery

TECHNOLOGY

Durasert®

Safe, Sustained IVT Drug Delivery

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

Durasert E™: bioerodible

- Drug embedded within a bioerodible matrix
- No polyimide shell
- Designed to deplete drug load before matrix fully erodes
  - DURAVYU™

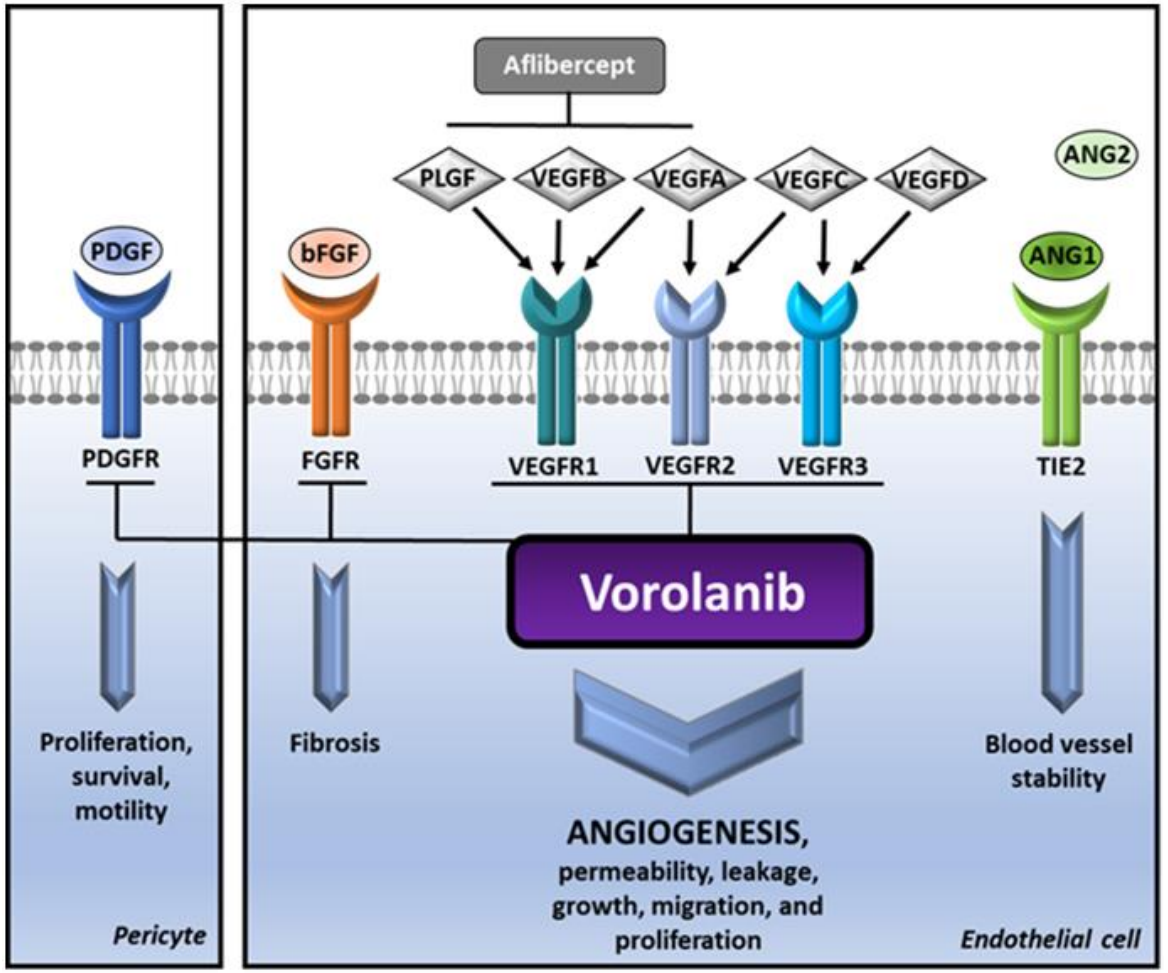
Durasert®: non-erodible

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

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

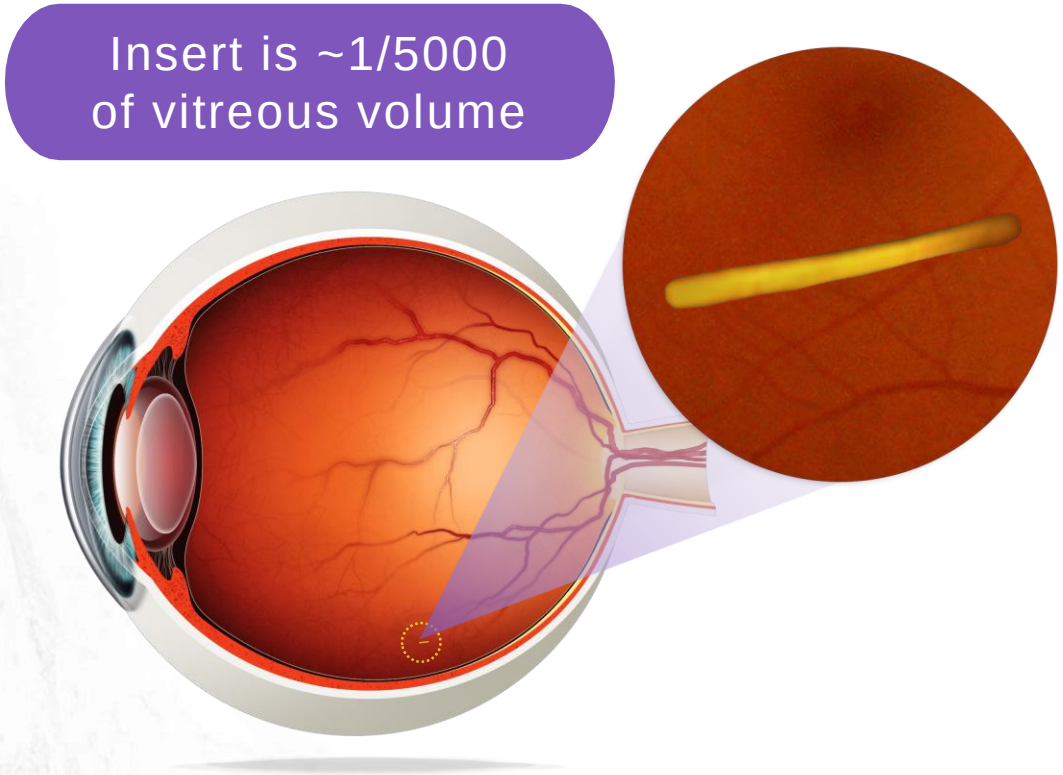
Vorolanib Brings a Potential New MOA to the Treatment of VEGF-Mediated Retinal Diseases by Inhibiting all Isoforms of VEGF and PDGF

- Potent and selective **pan–VEGF** receptor inhibition
- Composition of matter patent into 2037
- Demonstrated **neuroprotection** in a validated retinal detachment animal model
- Inhibits PDGF which may lead to **antifibrotic** benefit
- Reduced off-target binding - does not inhibit TIE-2 at clinically relevant doses[1]



1. Sophie Bakri, M.D., et al. PLOS ONE, *Vorolanib, sunitinib, and axitinib: A comparative study of vascular endothelial growth factor receptor inhibitors and their anti-angiogenic effects*, 2024.
VEGF(R), vascular endothelial growth factor (receptor); PDGF(R), platelet-derived growth factor (receptor); TIE-2, tyrosine-protein kinase receptor

DURAVYU: Vorolanib In Bioerodible Durasert E™



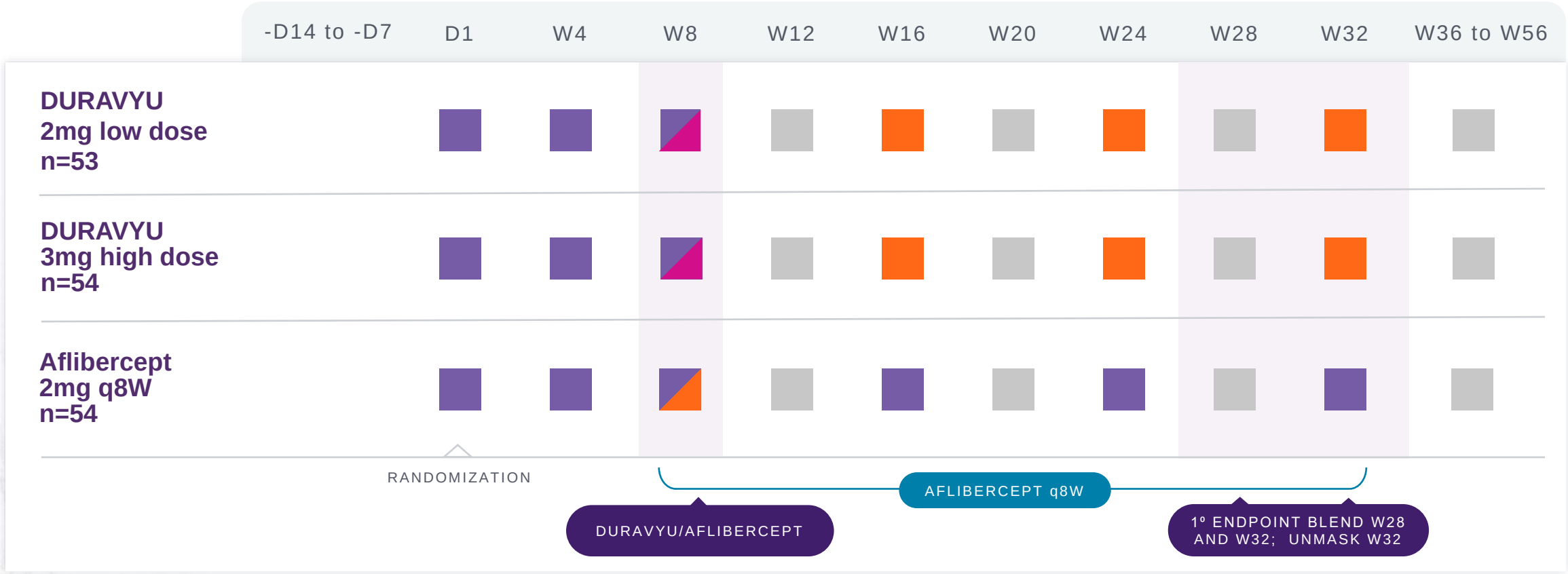
- **Positive efficacy** data in wet AMD from Phase 1 DAVIO and Phase 2 DAVIO 2 clinical trials
- Favorable safety profile **with no ocular or systemic DURAVYU-related SAEs** reported in multiple ongoing Phase 2 clinical trials
- **Immediately bioavailable release** from Durasert E featuring an initial burst of drug followed by zero order kinetics
- Vorolanib fully eluted prior to complete bioerosion of the matrix to **control release** and allow **redosing** regimen
- Delivered in the physician office via **routine intravitreal injection**
- Shipped and stored at **ambient temperature**

Phase 2 DAVIO 2 Clinical Trial in wet AMD -Topline Results

A NON-INFERIORITY TRIAL VERSUS AN AFLIBERCEPT CONTROL

EyePoint Pharmaceuticals

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



REQUIRED AFLIBERCEPT INJECTION VISIT

VISIT SCHEDULED

DURAVYU DOSE

SHAM INJECTION FOR MASKING

*Aflibercept on-label control required by FDA

EyePoint PHARMACEUTICALS

DAVIO 2 Patient Baseline Characteristics Well Balanced Across Arms And Represent a Heavily Pre-Treated Population

	Aflibercept 2mg q8W (n=54)	DURAVYU 2mg (n=50)	DURAVYU 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)	264.5 (192-400)	262.9 (186-345)
Median length of time for wet AMD diagnosis prior to screening, months (range)	15.24 (2.4-242.4)	16.56 (1.2-94.8)	17.2 (2.4-129.6)
Mean # of injections normalized to 12 months prior to screening (range)*	9.3 (2-12)	9.6 (2-13)	9.9 (2-13)

Heavily pre-treated group

PRELIMINARY DATA – PENDING FINAL ANALYSIS

AMD, age-related macular degeneration; BCVA, best-corrected visual acuity; CST, central subfield thickness; ETDRS, Early Treatment Diabetic Retinopathy Study; VEGF, vascular endothelial growth factor.

EyePoint PHARMACEUTICALS

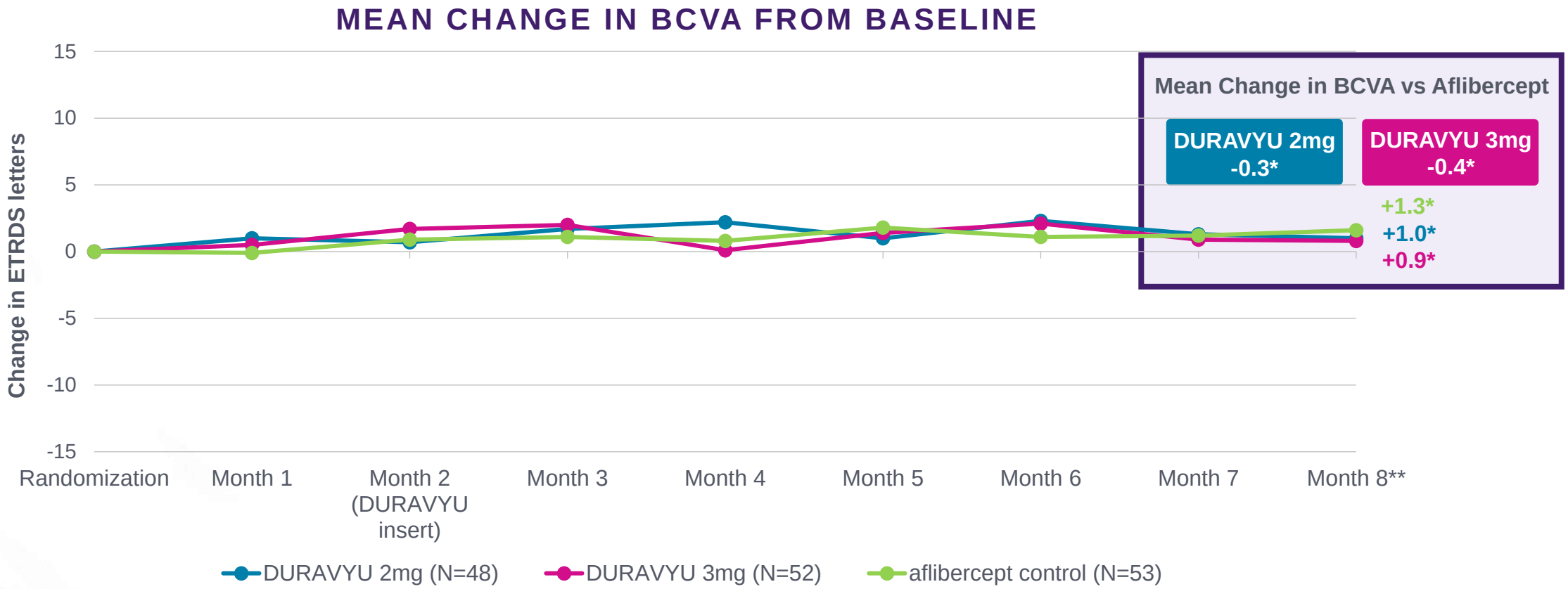
DURAVYU Phase 2 DAVIO 2 Clinical Trial in Wet AMD Met All Primary and Secondary Endpoints

Endpoint	Endpoint Achieved	2mg Arm	3mg Arm
Primary: Non-inferior change in BCVA vs. aflibercept	✓	- 0.3 letters	- 0.4 letters
Secondary: Favorable safety profile[1]	✓	No DURAVYU-related SAEs	
Secondary: Reduction in treatment burden vs. 6 mos prior	✓	89%	85%
Secondary: Reduction in treatment burden vs. aflibercept	✓	83%	79%
Secondary: Supplement-free up to 6 months	✓	65% 88% of eyes had 0 or only 1 supplemental injections	64% 83% of eyes had 0 or only 1 supplemental injections
Secondary: Anatomical control vs. aflibercept	✓	+9.7um	+5.2um

1. As of November 7, 2023 data cut
PRELIMINARY DATA – PENDING FINAL ANALYSIS

EYEPOINT PHARMACEUTICALS

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



In the Pulsar trial, HD Eylea (16-week 8mg arm) change in BCVA vs. 2mg Eylea was -1.4 letters[1]

*Blended week 28 and week 32 change vs. baseline
**Month 8 represents 6 months after DURAVYU injection
CI, Confidence Interval
PRELIMINARY DATA – PENDING FINAL ANALYSIS

1 – AAO 2022 presentation, Paolo Lanzetta, on behalf of the PULSAR study investigators

EyePoint PHARMACEUTICALS

DURAVYU Demonstrated a Favorable Safety Profile in the Phase 2 DAVIO 2 Clinical Trial[1]

- No reported DURAVYU-related ocular or systemic SAEs
  - Four ocular SAEs reported in a study eye – none deemed DURAVYU related[2]
- >97% of AEs reported were mild (Grade 1 or 2) and generally expected with IVT
- No insert migration into the anterior chamber
- No retinal occlusive vasculitis
- No cases of IOI associated with DURAVYU
- Low patient discontinuation rate of 4% up to week 32
  - No discontinuations were related to DURAVYU treatment

SAE, serious adverse event; AE, adverse event; IVT, intravitreal injection; IOI, intraocular inflammation
PRELIMINARY DATA CUT– PENDING FINAL ANALYSIS

1- As of November 7, 2023 data cut
2- as deemed by the investigator

EyePoint PHARMACEUTICALS

DURAVYU Continues to Show a Favorable Safety Profile Across Multiple Clinical Trials and Indications

Clinical Trial	Number of Patients Treated
DAVIO (Phase 1)	17
DAVIO 2 (Phase 2)[1]	102
PAVIA (Phase 2)[1]	51
Total	**170**

170 patients treated with DURAVYU with no DURAVYU-related ocular or systemic SAE's post DURAVYU injection

Data as of June 10, 2024
1. Data are preliminary pending study completion and final report.
SAE, serious adverse event

EyePoint PHARMACEUTICALS

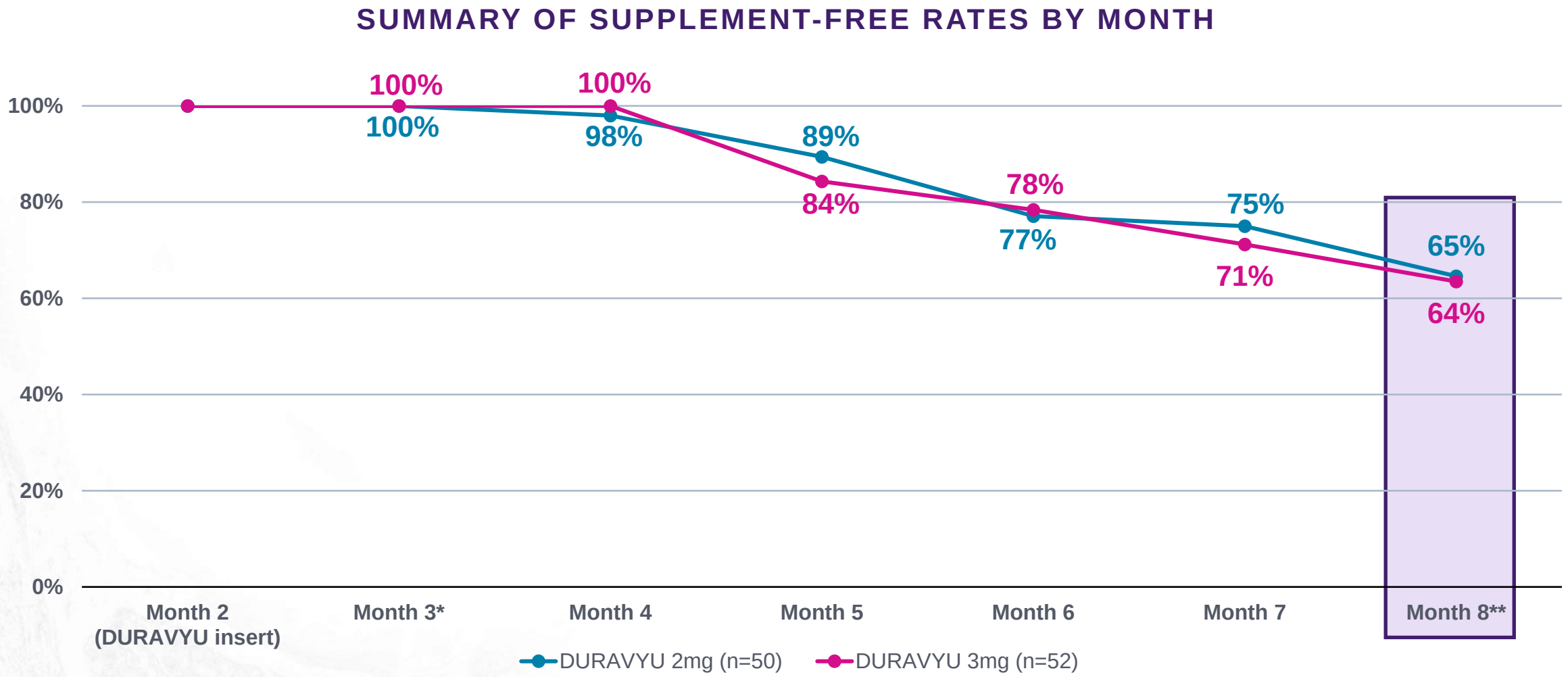
DURAVYU Demonstrated a Meaningful Reduction in Treatment Burden vs. the Aflibercept Control Arm

	DURAVYU 2mg	DURAVYU 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**

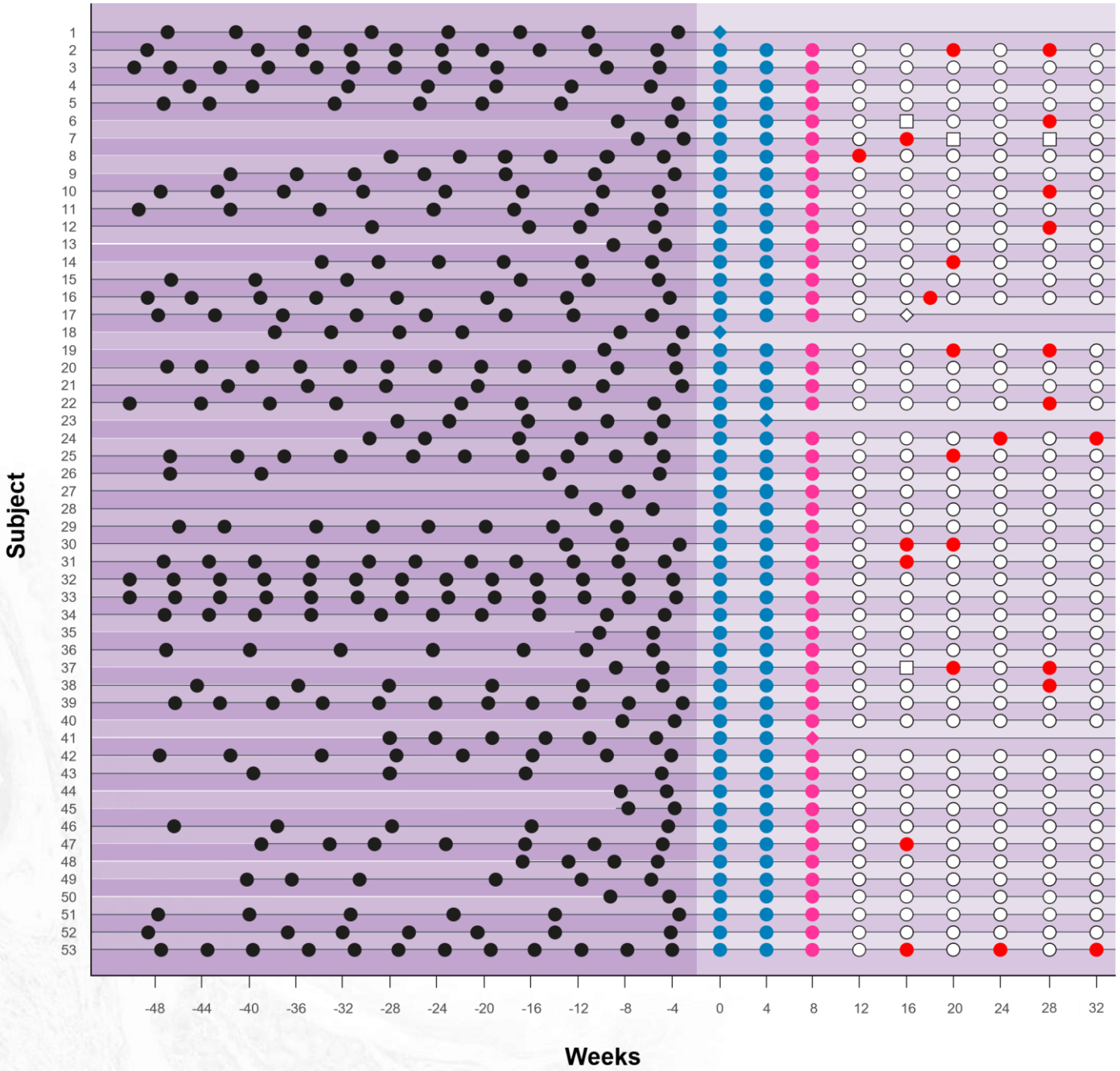
PRELIMINARY DATA – PENDING FINAL ANALYSIS.

EyePoint PHARMACEUTICALS

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



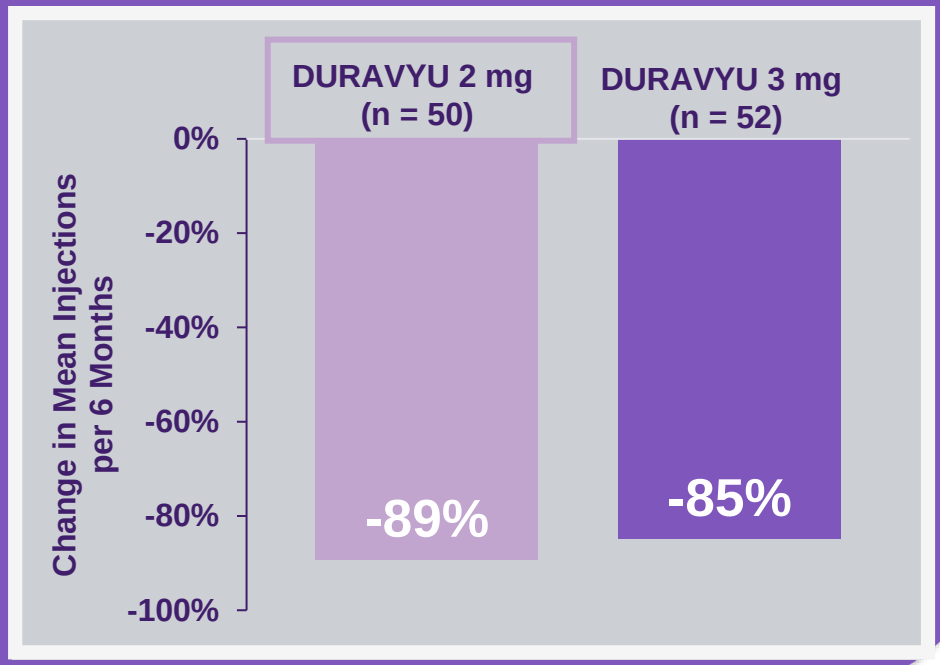
*First visit patients are eligible to be rescued
**Month 8 represents 6 months post DURAVYU injection
PRELIMINARY DATA – PENDING FINAL ANALYSIS



DURAVYU 2mg Dose Reduced Treatment Burden by 89% Compared to Prior 6 Months

Injections in year prior and during the DAVIO 2 trial

- Anti-VEGF injection
- Aflibercept loading dose
- Aflibercept + DURAVYU
- No injection
- Missed Visit
- Supplemental injection

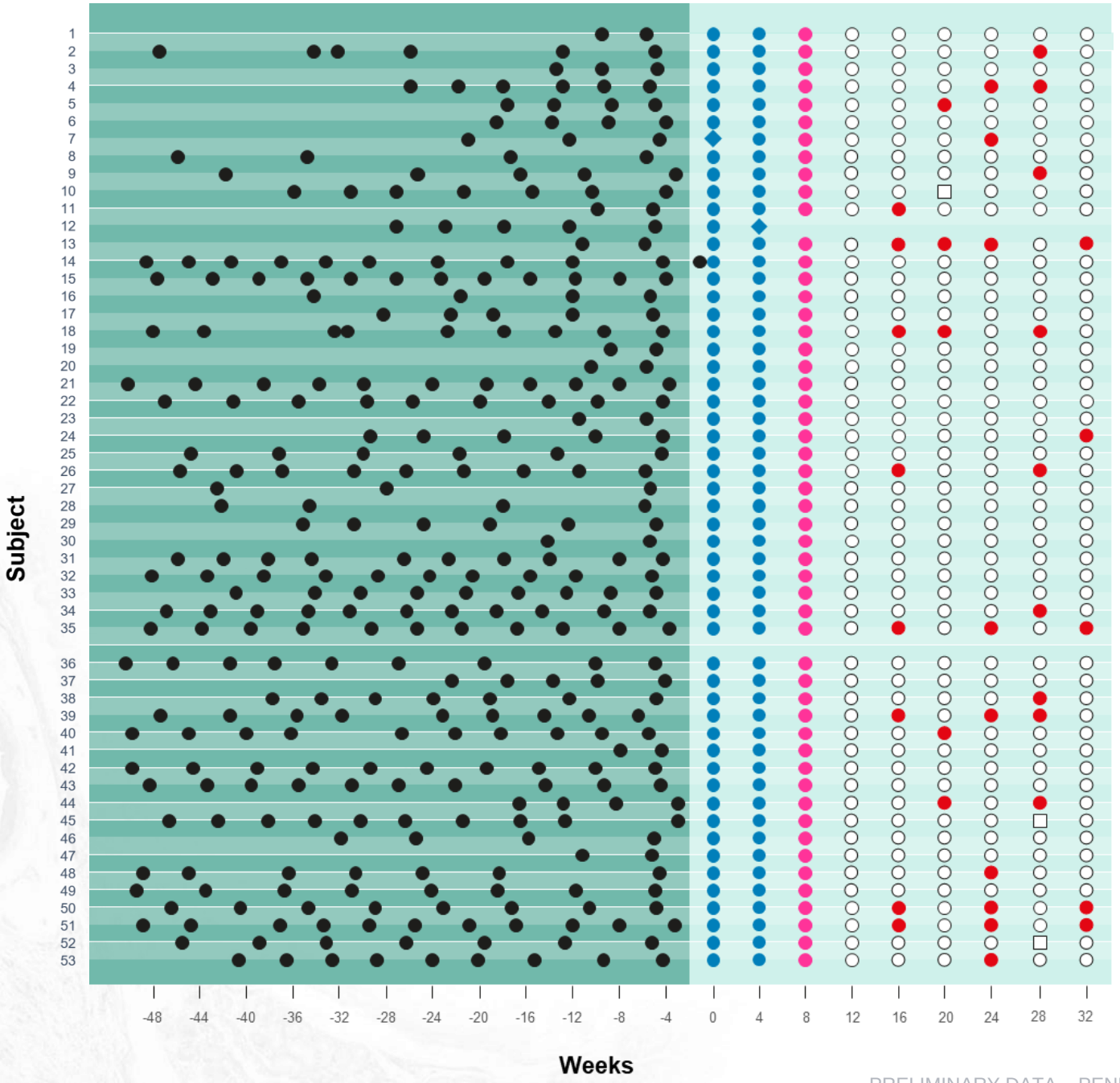


PRELIMINARY DATA – PENDING FINAL ANALYSIS

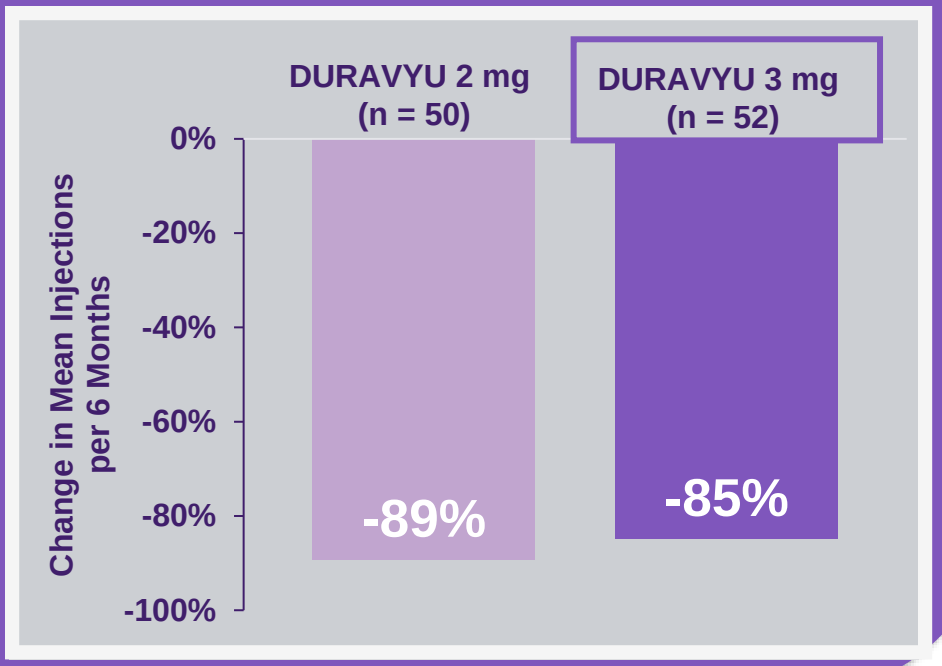
EYEPOINT PHARMACEUTICALS

DURAVYU 3mg Dose Reduced Treatment Burden by 85% Compared to Prior 6 Months

Injections in year prior and during DAVIO 2 trial



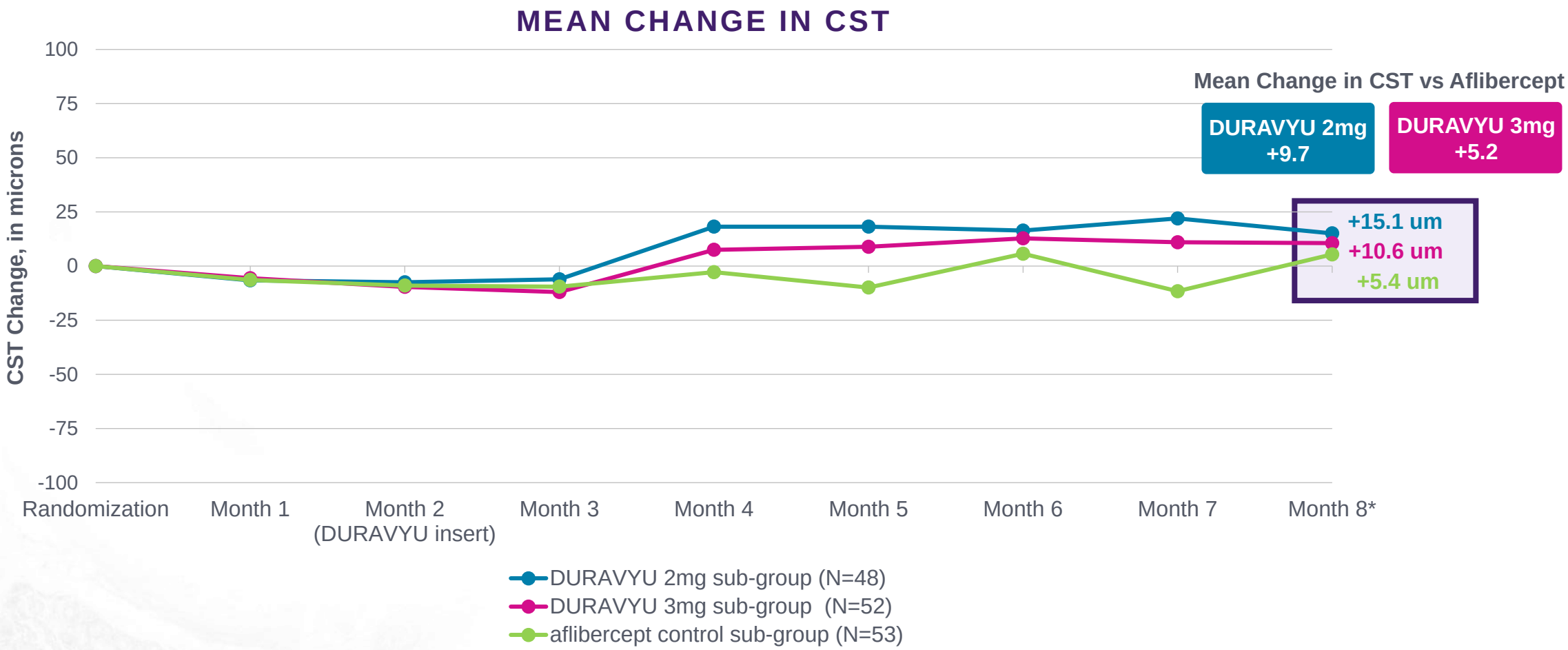
- Anti-VEGF injection
- Aflibercept loading dose
- Aflibercept + DURAVYU
- No injection
- Missed Visit
- Supplemental injection



PRELIMINARY DATA – PENDING FINAL ANALYSIS

EYEPOINT PHARMACEUTICALS

Data from DAVIO 2 Suggests Strong Anatomic Control with OCT Change Below 10 microns at 6-Months Compared to the Aflibercept Control



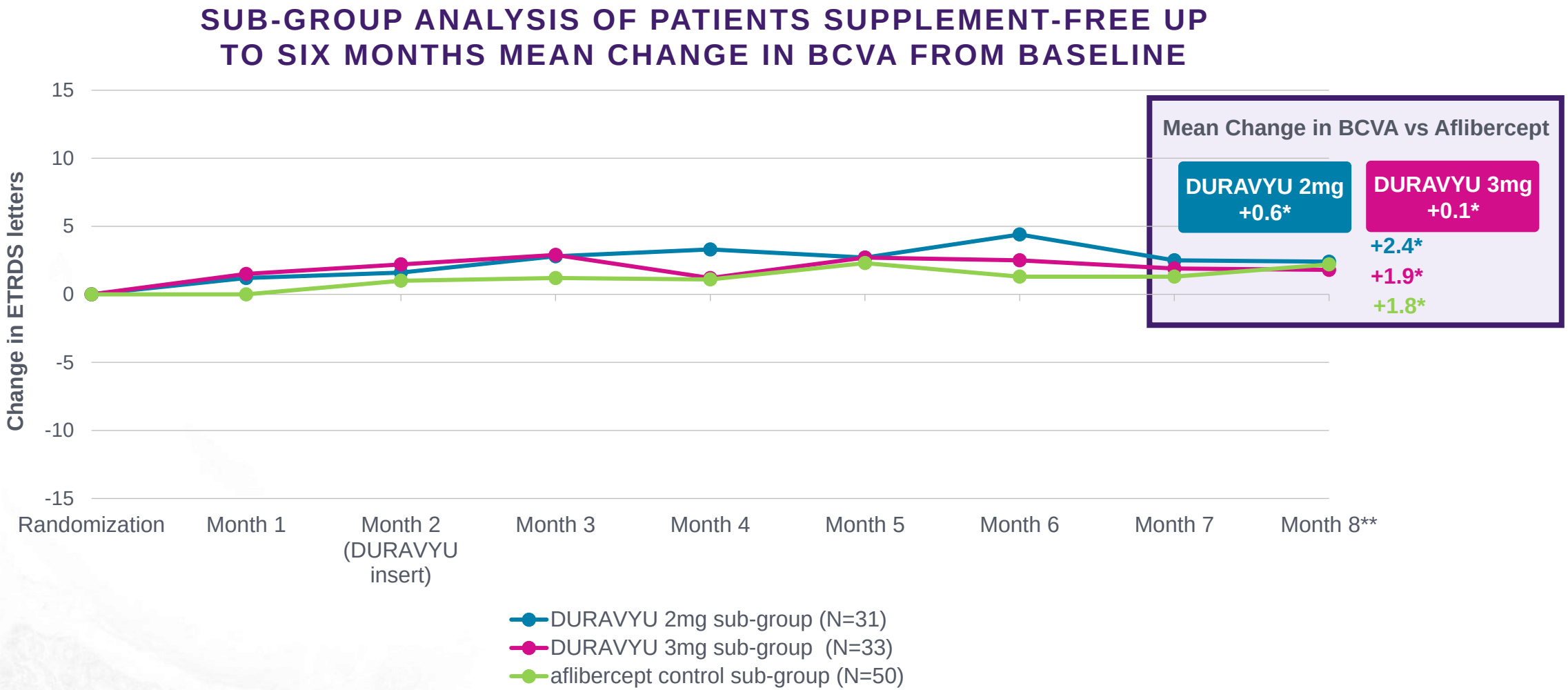
*Month 8 represents 6 months after first DURAVYU injection
PRELIMINARY DATA – PENDING FINAL ANALYSIS

Phase 2 DAVIO 2 Trial in Wet AMD

Sub-Group Analysis of Patients Anti-VEGF Supplement-Free Up to 6 Months

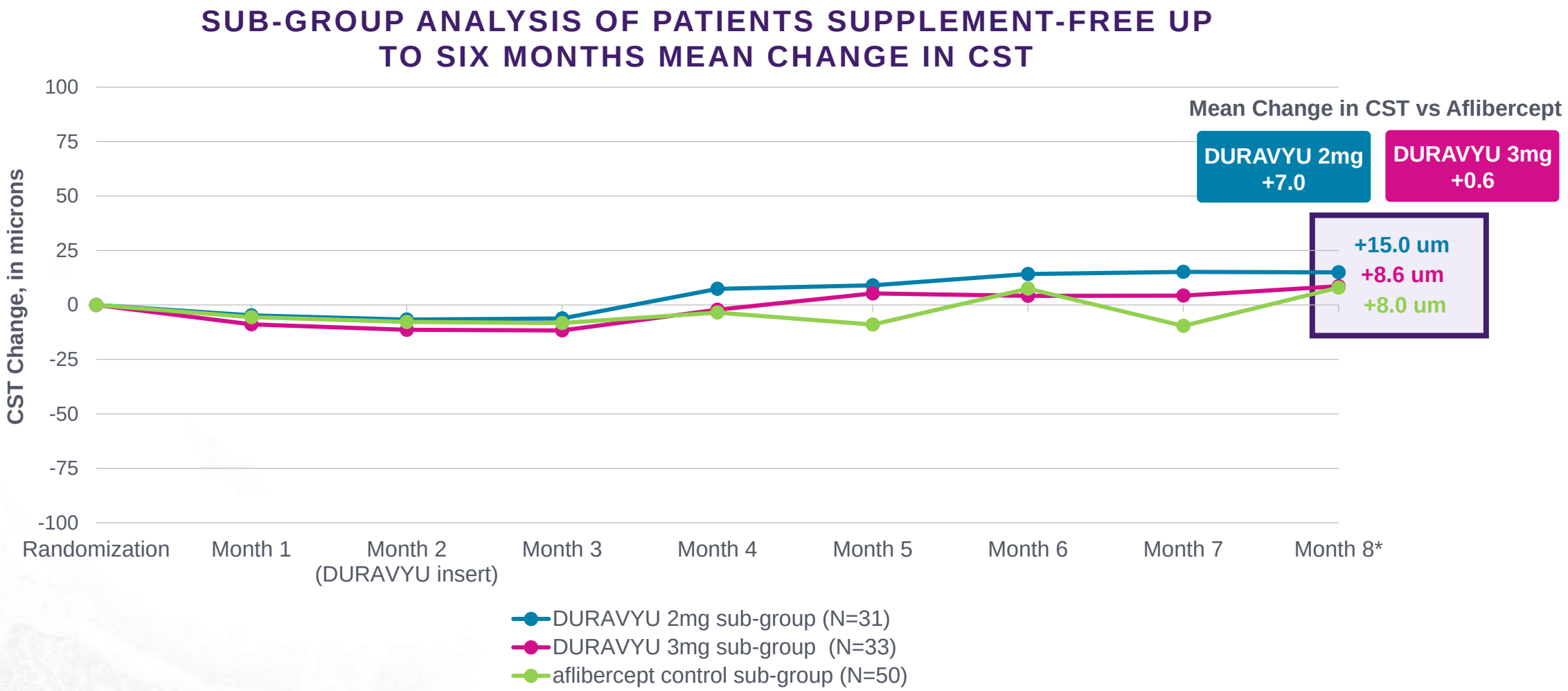
EyePoint Pharmaceuticals

DURAVYU Demonstrated Numerical Superiority in Change in BCVA in Sub-Group Analysis of Patients Supplement-Free Up to 6-Months



*Blended week 28 and week 32 change vs. baseline
**Month 8 represents 6 months after DURAVYU injection
PRELIMINARY DATA – PENDING FINAL ANALYSIS

Strong Anatomic Control in Patients Supplement Free Up to 6-Months with OCT Change Below 10 microns Compared to the Aflibercept Control



*Month 8 represents 6 months after first DURAVYU injection
PRELIMINARY DATA – PENDING FINAL ANALYSIS

Phase 3 Pivotal Trials Design*

NON-INFERIORITY VERSUS AN AFLIBERCEPT CONTROL

EyePoint Pharmaceuticals

*Pending final FDA review.

DURAVYU Non-Inferiority Phase 3 Clinical Trials Design in Wet AMD

- Design of the Phase 3 trials were informed by previous **Type C meeting with FDA** and **positive DAVIO 2 data** with additional considerations for potential FDA approval and product label.
- **Positive EOP2** meeting with FDA **completed in April 2024**; waiting for final FDA review*
- Key trial design elements agreed upon with FDA:
  - Two pivotal, **non-inferiority trials** vs. aflibercept control
  - **12-month** primary efficacy endpoint (blended) – basis of NDA submission
  - DURAVYU **re-dosing** at six-month intervals – 4 total doses
  - Sham injection for masking

We remain on-track to initiate the LUGANO trial (US) in 2H 2024
with LUCIA trial (US/OUS) to follow.

*Timing TBD based on extenuating circumstances with the interim FDA Division of Ophthalmology leadership required for sign-off.

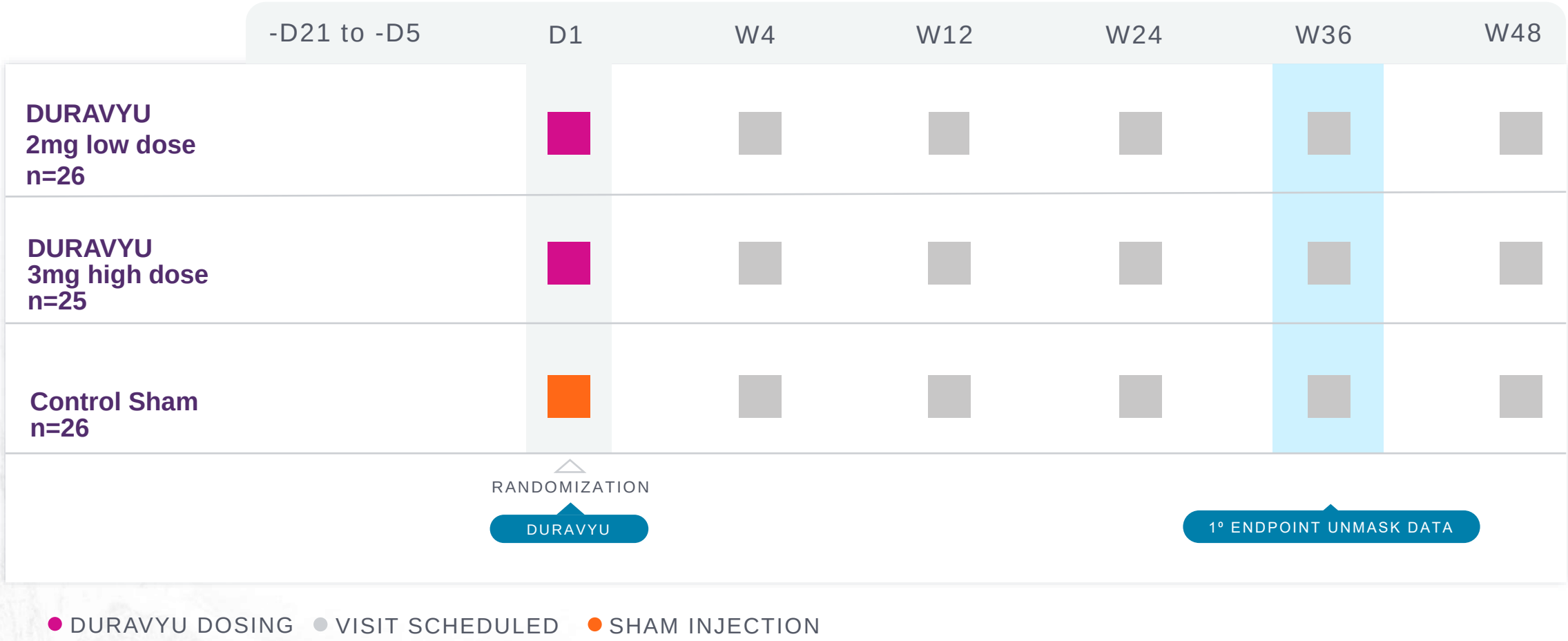
FDA, Food and Drug Administration; NDA, New Drug Application; OUS, outside the United States; EOP2, end of Phase 2

Phase 2 PAVIA Clinical Trial Topline Results

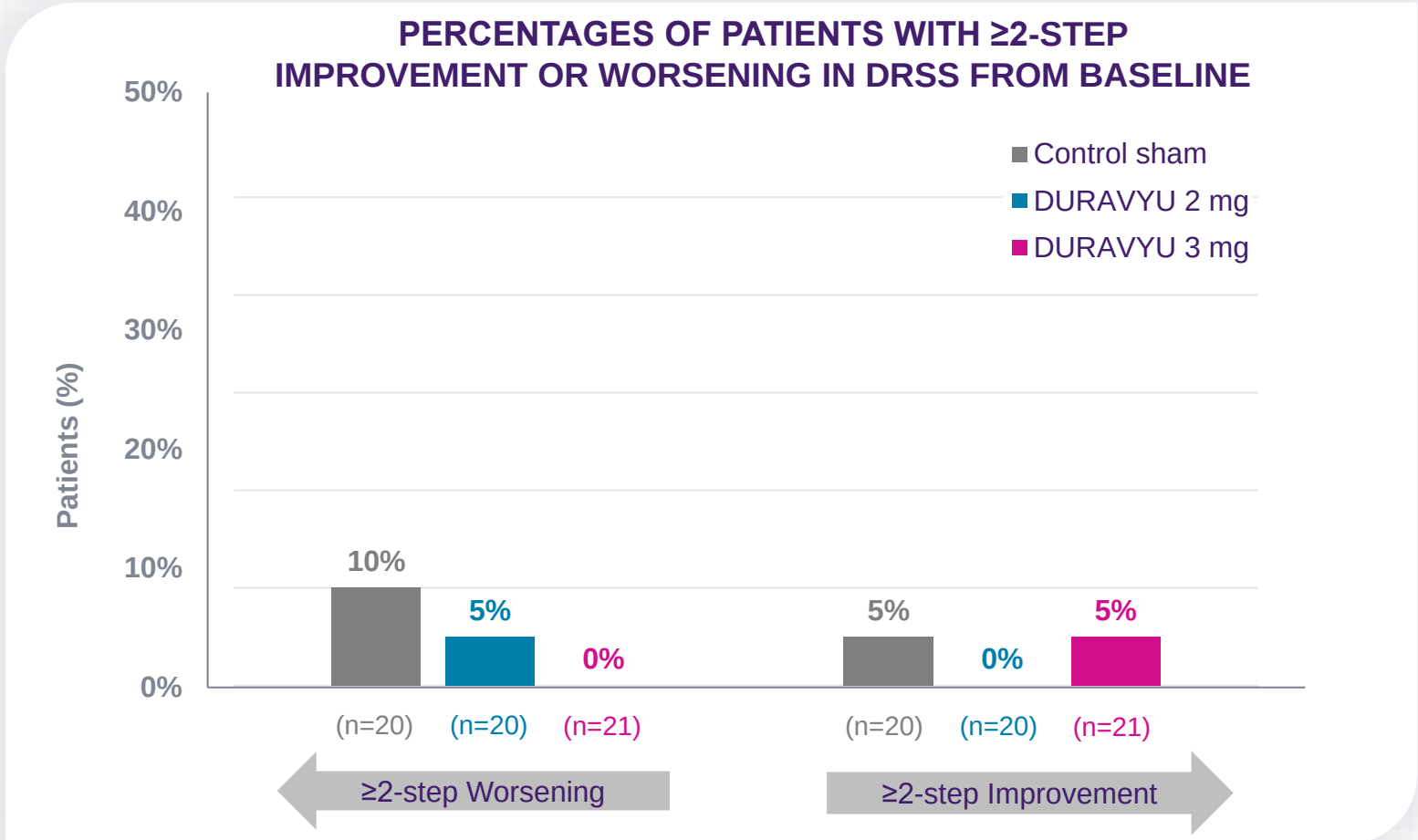
A RANDOMIZED, MULTICENTER TRIAL VERSUS SHAM CONTROL

EyePoint Pharmaceuticals

Phase 2 PAVIA is a Randomized, Double-Masked, Single Injection of DURAVYU Compared to Sham Control in NPDR Patients



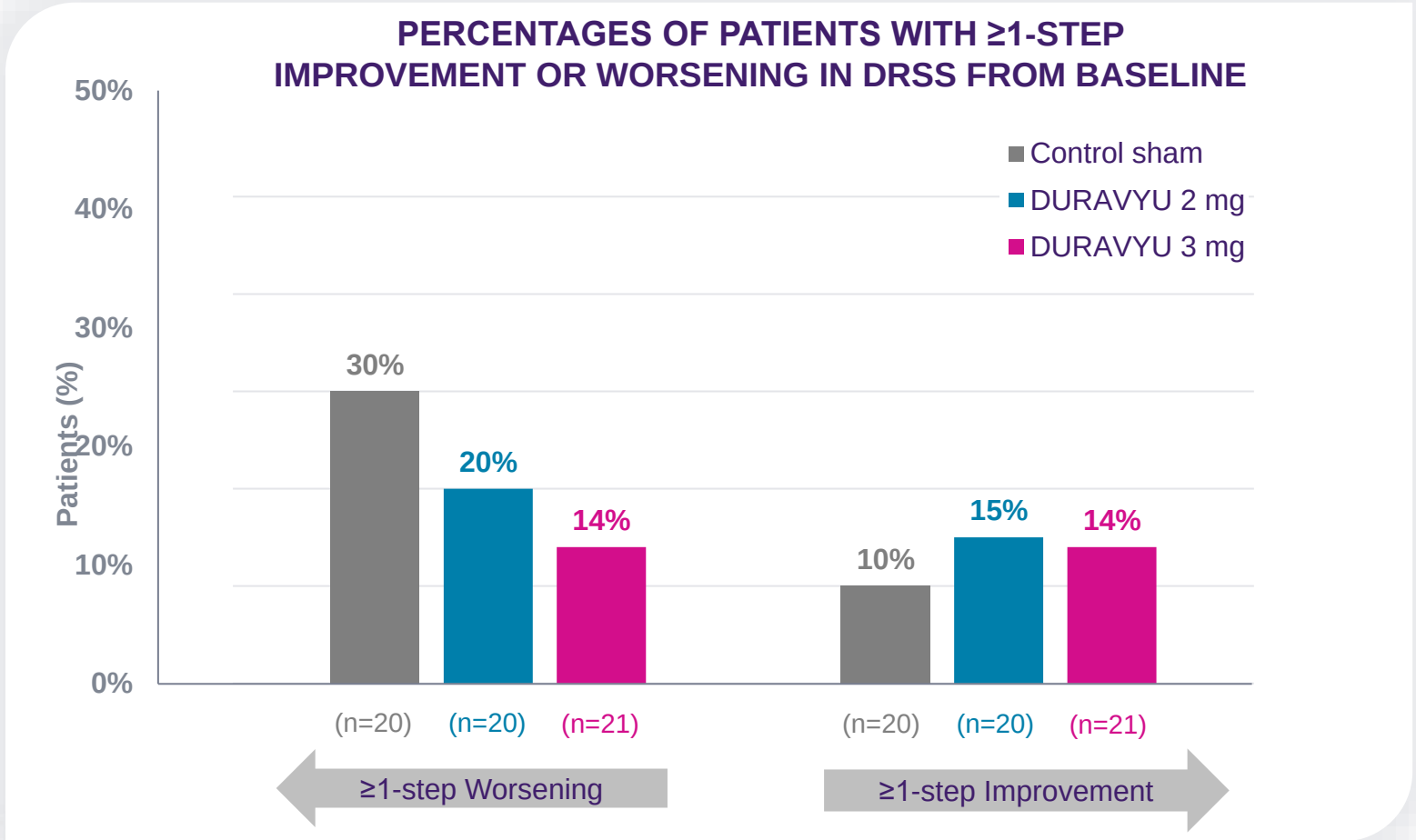
NPDR Eyes Treated with DURAVYU had Reduced Rates of Disease Progression at Nine Months; No Patients in the 3mg Arm Experienced ≥2-Step Worsening



PRELIMINARY DATA – PENDING FINAL ANALYSIS
DRSS, diabetic retinopathy severity scale

EyePoint PHARMACEUTICALS

The PAVIA Clinical Trial Demonstrated that Eyes Treated with DURAVYU were Maintained with Stable or Improved Retinopathy



PRELIMINARY DATA – PENDING FINAL ANALYSIS
DRSS, diabetic retinopathy severity scale

PAVIA Clinical Trial Take Home Messages

- Biologic activity for DURAVYU trends toward reduction in worsening NPDR
- 12-month data should add additional color on this trend

- NPDR results appear to be disease-specific for TKI programs with two companies' independent clinical trials in NPDR showing modest results

- TKIs have been proven in wet AMD across multiple clinical trials
- DAVIO 2 wet AMD results stands alone and supports Phase 3 initiation for DURAVYU

- DURAVYU has the most robust dataset across TKI programs with very favorable safety profile

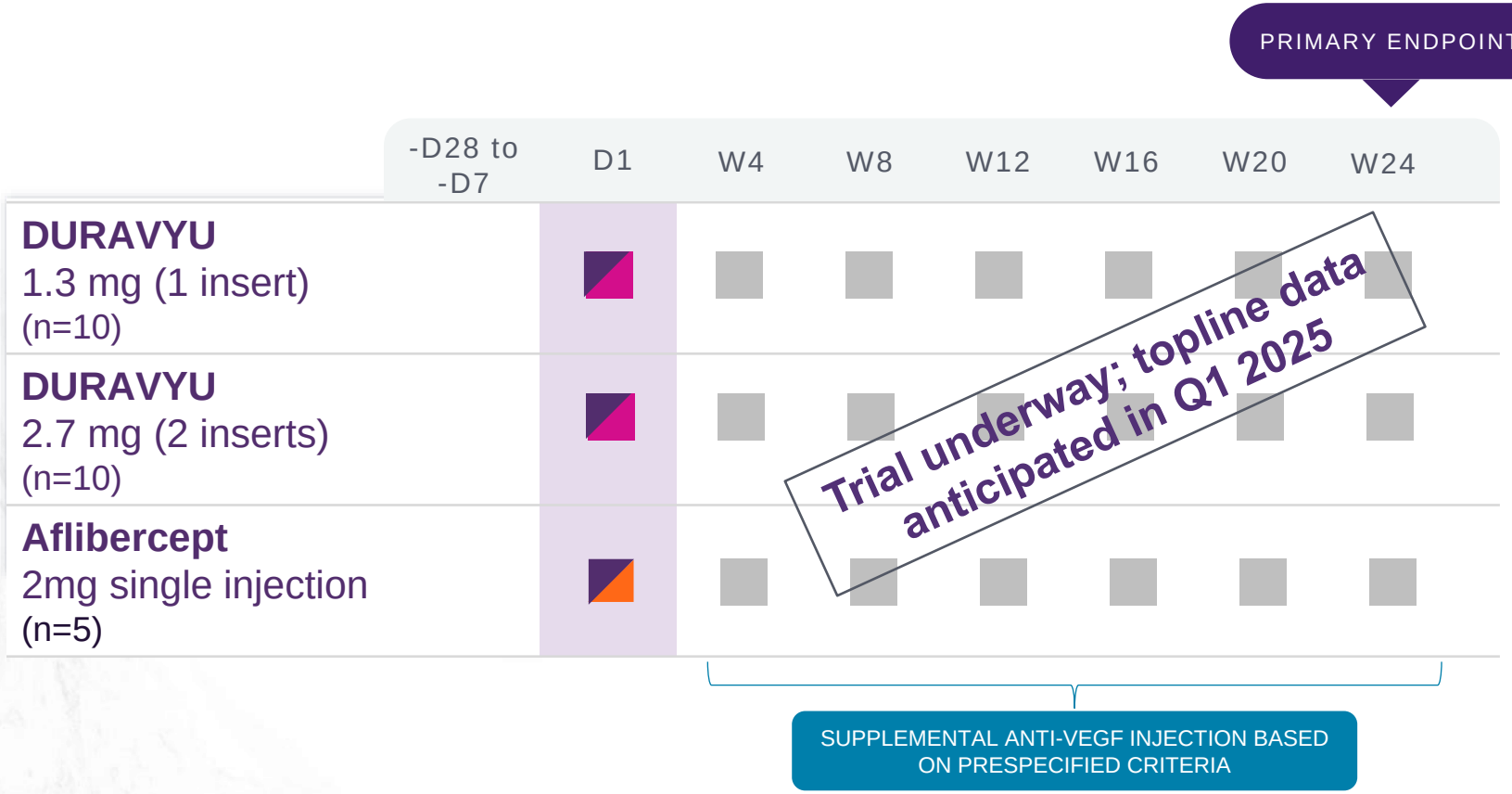
EyePoint PHARMACEUTICALS

DURAVYU: vorolanib in Durasert E™

PHASE 2 VERONA CLINICAL TRIAL IN DIABETIC MACULAR EDEMA (DME)

EyePoint Pharmaceuticals

Phase 2 VERONA Clinical Trial is a Randomized, Open-Label, Aflibercept Controlled Trial with a Single DURAVYU Injection



- Potential 6-month treatment in previously treated DME patients
- Objectives:
  - Evaluate the safety and efficacy of two doses of DURAVYU in the DME patient population
  - Collect dose-ranging data to inform future clinical trials
- Primary endpoint: time to supplemental anti-VEGF injection up to week 24
- Secondary endpoints: Change in BCVA vs. aflibercept control, stable anatomical outcome as measured by OCT, DRSS over time

VERONA Primary Endpoint: Time to Supplemental Injection up to Week 24 – Supplement Criteria

Starting at Week 4:

- Reduction in BCVA ≥10 letters due to DME[1]
- Reduction in BCVA of 5-9 letters **and** >75 microns of new fluid at two consecutive visits[1]
- Increase of ≥100 microns of new fluid vs. Baseline (Day 1)[2]
- Investigator discretion

Starting at Week 12:

- Lack of 10% reduction in CST compared to Baseline (Day 1)

1. vs. best on study measurement; 2. as measured by Spectral domain OCT (SD-OCT)
BCVA, best corrected visual acuity; CST, central subfield thickness

EyePoint PHARMACEUTICALS

EYP-2301: razuprotafib in Durasert E™

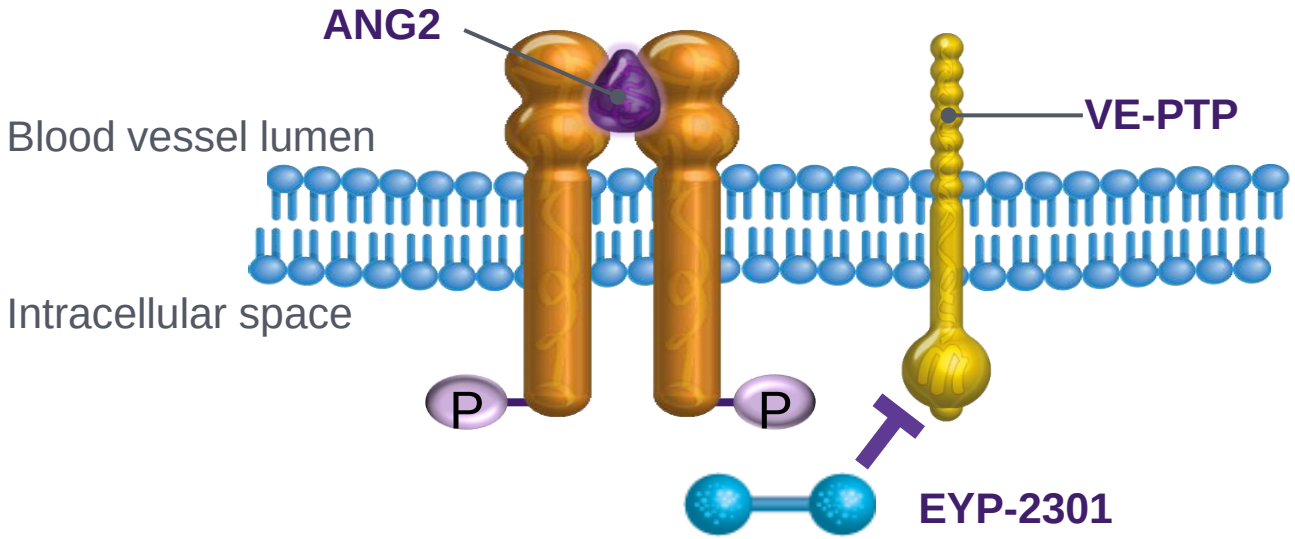
A SUSTAINED DELIVERY TIE-2 AGONIST FOR SEVERE RETINAL DISEASES

EyePoint Pharmaceuticals

EYP-2301: Razuprotafib in Durasert E™ is Being Developed as a Sustained Delivery Treatment for Serious Retinal Diseases

EYP-2301 targets vascular endothelial protein tyrosine phosphatase (VE-PTP) to promote TIE-2 activation and maintain vascular stability in the retina

- Tie-2 activation combined with VEGF inhibition has the potential to **enhance efficacy and extend durability**[1] of treatment
- In the retina, activated TIE-2 controls endothelial cell proliferation, barrier function and intercellular contacts, **stabilizing vessels and the blood-retinal barrier**[2]
- Razuprotafib (f/k/a AKB-9778) delivered subcutaneously was previously studied demonstrating preclinical and **clinical proof of concept** in posterior segment disease [3,4]



1. Heier et al. Retina, 2021;41:1-19. and Joussen et al. Eye 2021; 35:1305-1316.; 2. Hammes, et. Al – Diabetes.2011 Jan 1; 3. Shen et al. JCI, 2014; 124:4564; 4. Campochiaro et al. Ophthalmology, 2016; 123:1722-1730

Cash runway through topline data in 2026 of pivotal Phase 3 clinical trials for DURAVYU in wet AMD

Strong Balance Sheet

- **$299M** of cash and investments on March 31, 2024
- No debt

Continued Execution And Well-Funded Through Key DURAVYU Milestones

DURAVYU™

✓	VERONA - DME Phase 2 Trial initiation	Q1 2024
✓	FDA conditional approval of DURAVYU proprietary name	March 2024
✓	EOP2 meeting with FDA for wet AMD	Q2 2024
✓	PAVIA topline data	Q2 2024
☐	**DAVIO 2 12-month data**	**Q2 2024**
☐	**PAVIA 12-month data**	**Q3 2024**
☐	**First wet AMD Phase 3 trial (LUGANO) initiation**	**2H 2024**
☐	**VERONA topline data**	**Q1 2025**

Corporate

✓	Appointed new Chief Medical Officer	March 2024
✓	Expanded SAB with world-renowned retina specialists	April 2024
☐	R&D Day	June 2024

EOP2, End of Phase 2; wet AMD, wet age-related macular degeneration; SAB, Scientific Advisory Board

EyePoint PHARMACEUTICALS

Goldman Sachs Global Healthcare Conference Presentation

June 12, 2024

Jay Duker, M.D.

President and CEO