

# 48-Week End of Study Results from BEHOLD Phase 2 Study of UBX1325 in Patients with DME

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Late Breaking Session

# Financial Disclosures

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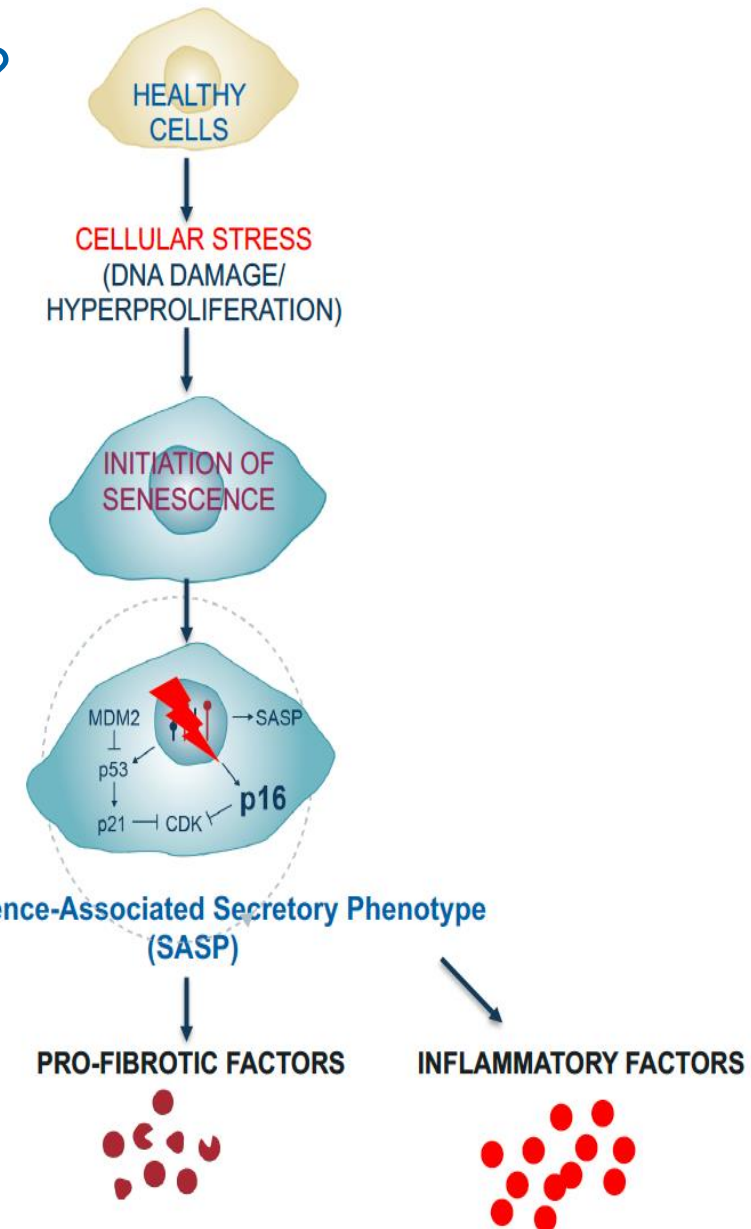
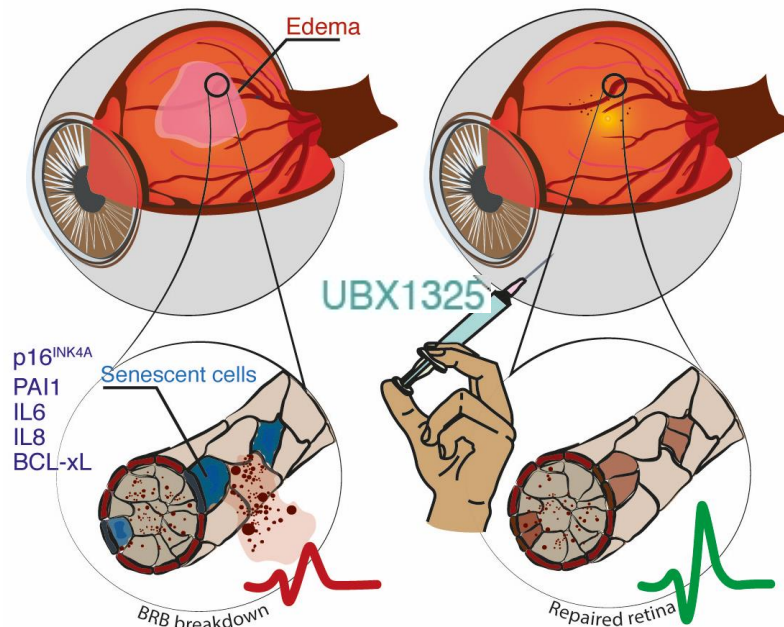
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**Equity:** Aviceda, Oculis, PolyPhotonix, Recens Medical, Retrotope, RevOpsis, Vial

# What is Cellular Senescence and How Can it Lead to Disease?

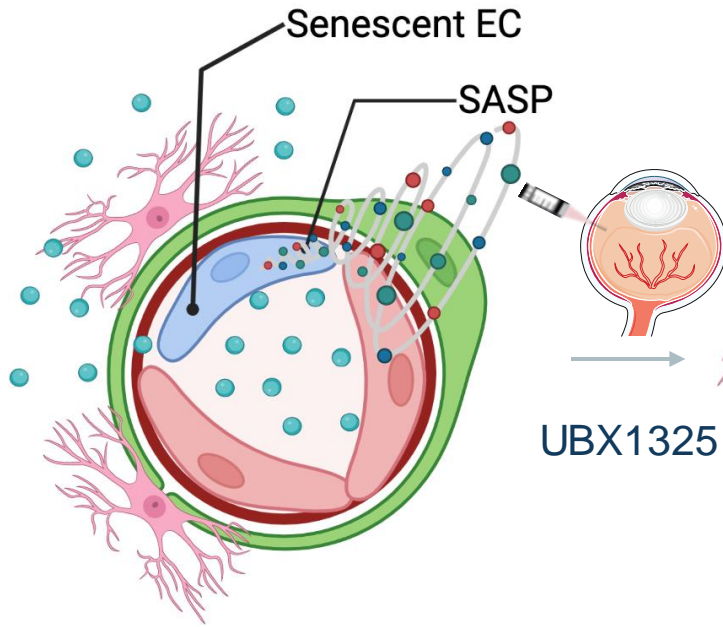
Senescent cells are **STRESSED, NO-LONGER DIVIDING**, metabolically active cells that drive pathology:

- Accumulate in areas of disease activity
- Secrete inflammatory factors
- Do not form tight junctions with their neighboring healthy endothelial cells



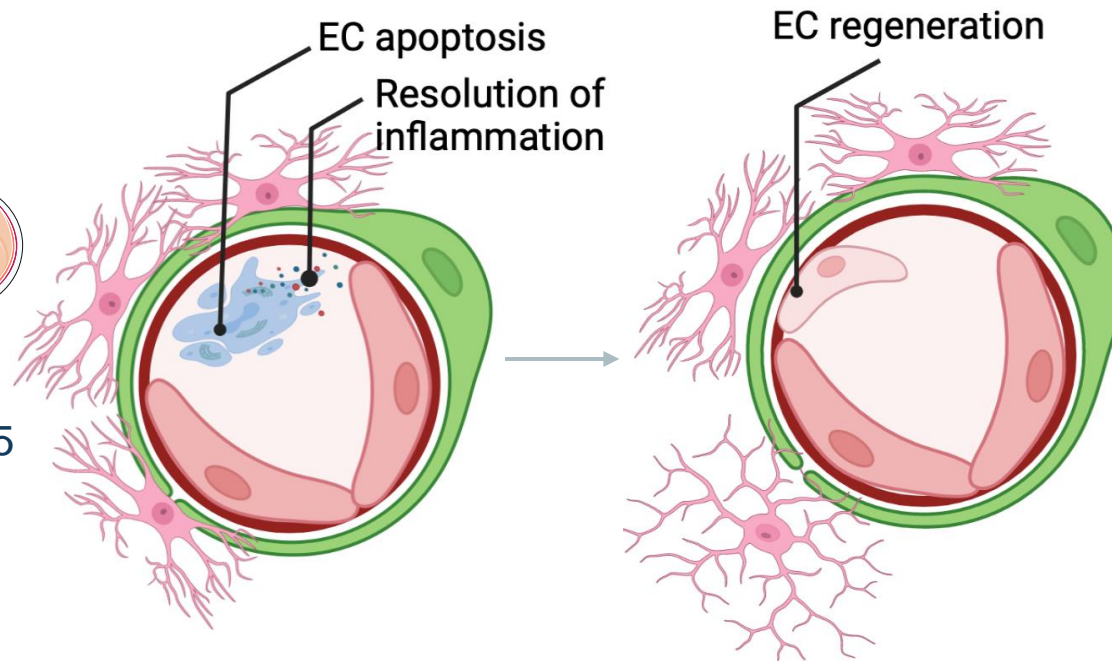
# UBX1325: a Bcl-xL Inhibitor, Selectively Eliminates Senescent Cells

Diabetic blood vessel

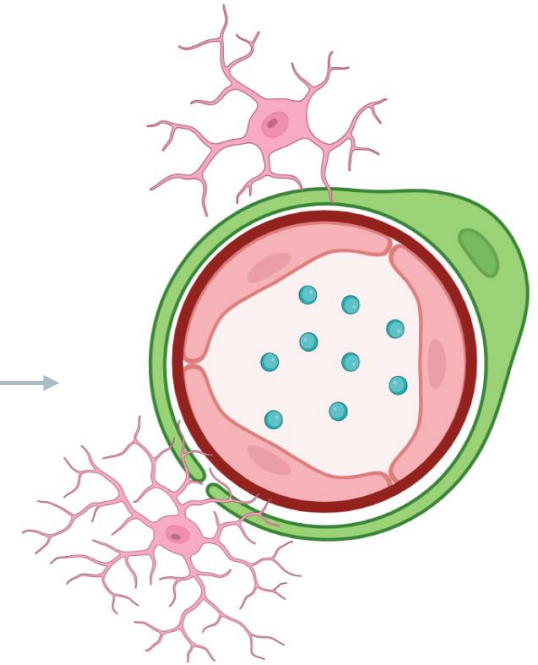


UBX1325

Vessel remodeling



Repaired blood vessel

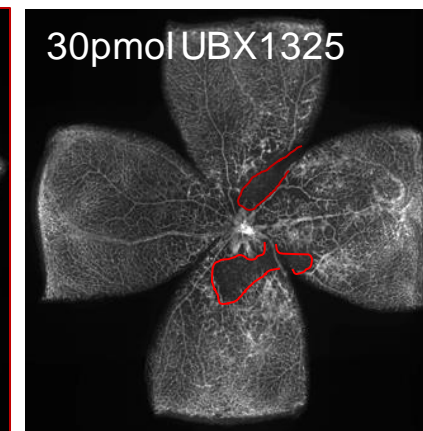
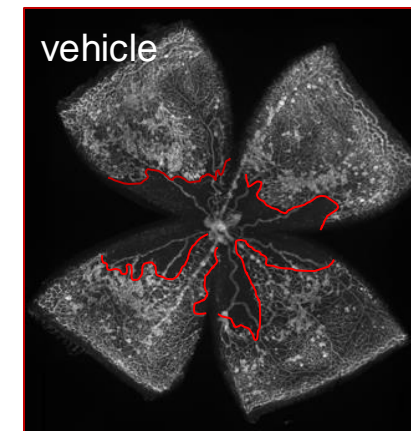
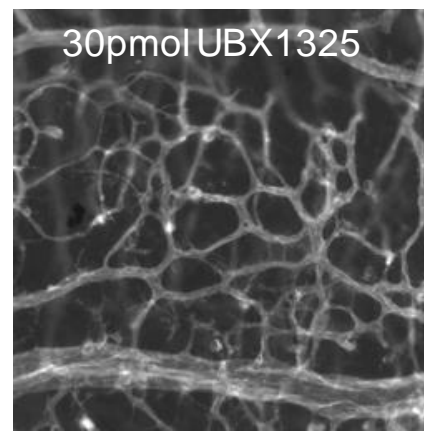
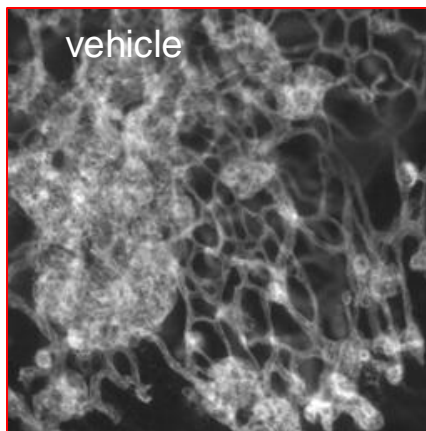
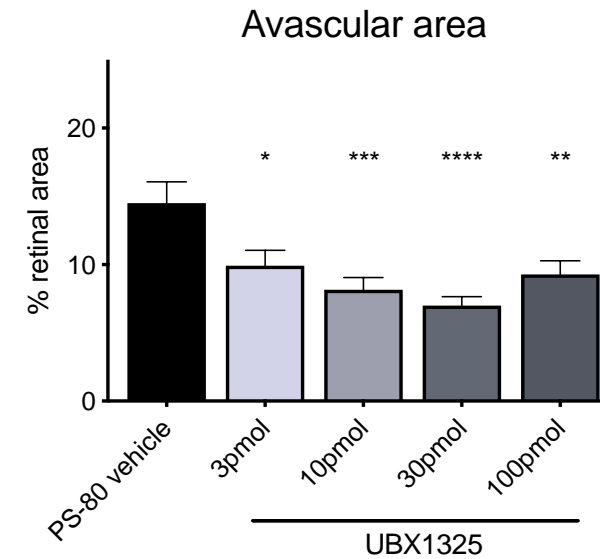
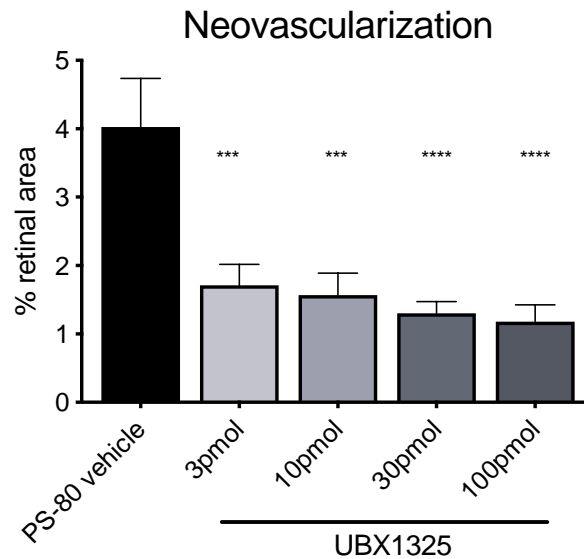


Senescent (Sn) ECs accumulate in diabetic retinas in areas of disease activity

- UBX1325 selectively triggers cell death of Sn ECs
- UBX1325 reduces retinal inflammation and vascular leakage

Preclinical data predicts progressive disease modification through vascular remodeling

# UBX1325 Improves Retinal Vasculature in Mouse OIR Model



IVT UBX1325 decreases both neovascular and avascular areas in mouse OIR

# UBX1325 Ph2 BEHOLD Study 48-Week Data in Patients with DME

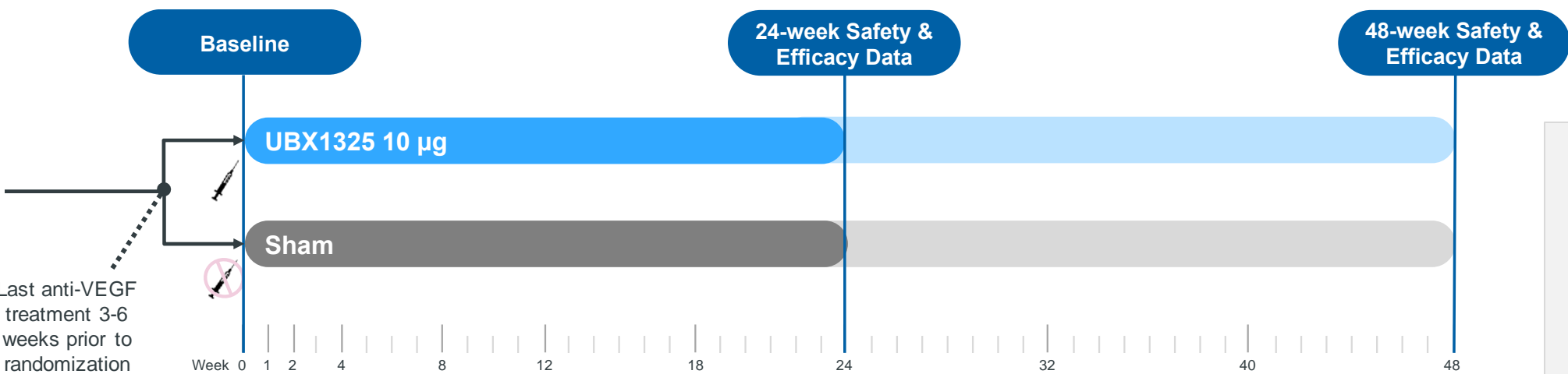


# BEHOLD Study Design, Patient Population, and Endpoints

## Patient Population

Individuals with **Diabetic Macular Edema**

- **Repeated anti-VEGF** treatments ( $\geq 2$  injections/6 months) – Actual: 4.1 injections in prior 6 months
- **Residual retinal fluid** ( $\geq 300 \mu\text{m}$ ) – Actual: 439.6  $\mu\text{m}$
- **Visual acuity deficit** (73 ETDRS letters or worse) – Actual: 61.4 ETDRS letters



	Sham	UBX	Total
Full Analysis Set	33	32	65
Completed to 24 Weeks only	4	5	9
Lost to follow-up	1	3	4
Site Closure	1	0	1
Patient withdrawal	1	0	1
Available through 48 Weeks	26	24	50

## Endpoints

- Safety and tolerability
- BCVA change from baseline
- Durability of response
- Sub- and intra-retinal fluid, CST changes
- Proportion of UBX1325 patients requiring 2 or more rescue treatments

## Patient Characteristics at Baseline Were Well Balanced Between Groups

Parameter, Units (SD)	Sham	UBX1325
Age, Years	61.4 (9.09)	63.6 (9.33)
HBA1c, %	7.4 (1.36)	8.0 (1.68)
Diabetes Dx, Years	17.5 (10.53)	17.2 (11.41)
DME Dx, Years	3.0 (2.32)	3.5 (3.60)
BCVA, ETDRS letters	61.8 (9.61)	60.9 (9.97)
CST, $\mu$ m	456.2 (98.07)	422.5 (84.16)
# anti-VEGF injections prior 190 days	4.1 (1.09)	4.1 (1.26)
Anti VEGF agent over prior 190 days (# of patients)		
Afilbercept	13	13
Aflibercept, bevacizumab	4	1
Bevacizumab	15	16
Ranibizumab	1	2

*Balanced on other parameters at baseline: ethnicity & race, BMI, DRSS score*

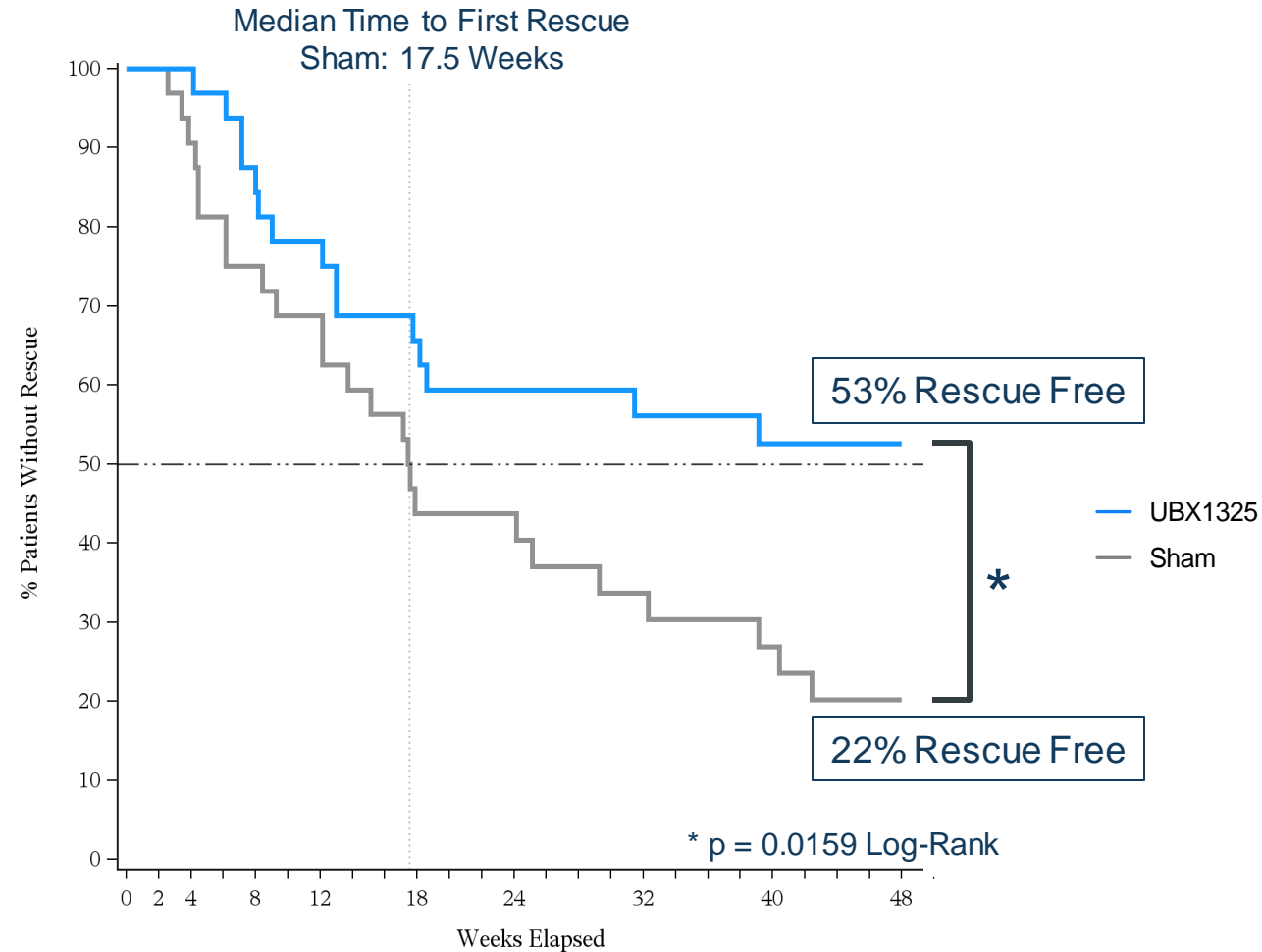


# UBX1325-Treated Patients Had Marked Drop In Need For Anti-VEGF Rescue Beyond Week 18 Compared to Sham-Treated Patients Through 48 Weeks

- Median Time-To-First-Rescue in UBX arm was >48 weeks (at least 30 weeks greater than Sham arm)
- ~50% of UBX-treated patients went without rescue through 48 weeks
- ~80% of sham-treated patients required rescue before 48 weeks

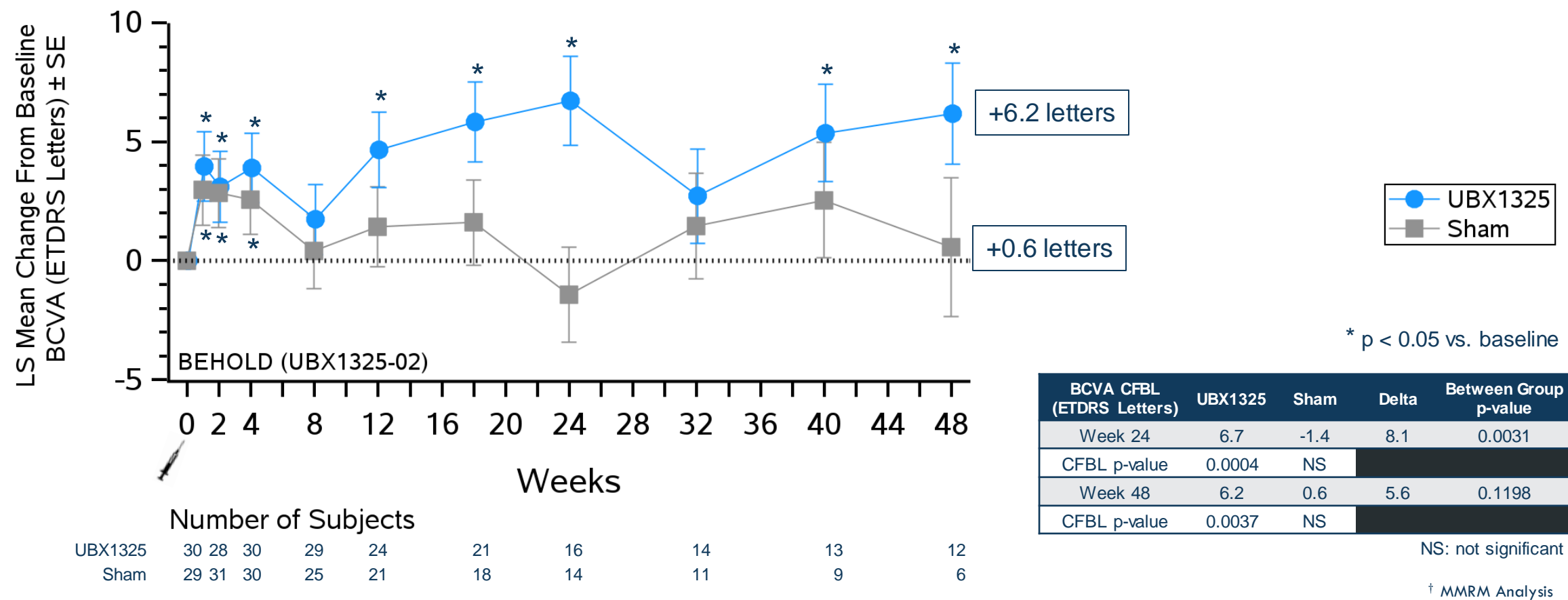
## Rescue Criteria (Either)

- Decrease of 10 ETDRS or more letters from any peak value
- Increase in CST of 75  $\mu\text{m}$  or more from baseline

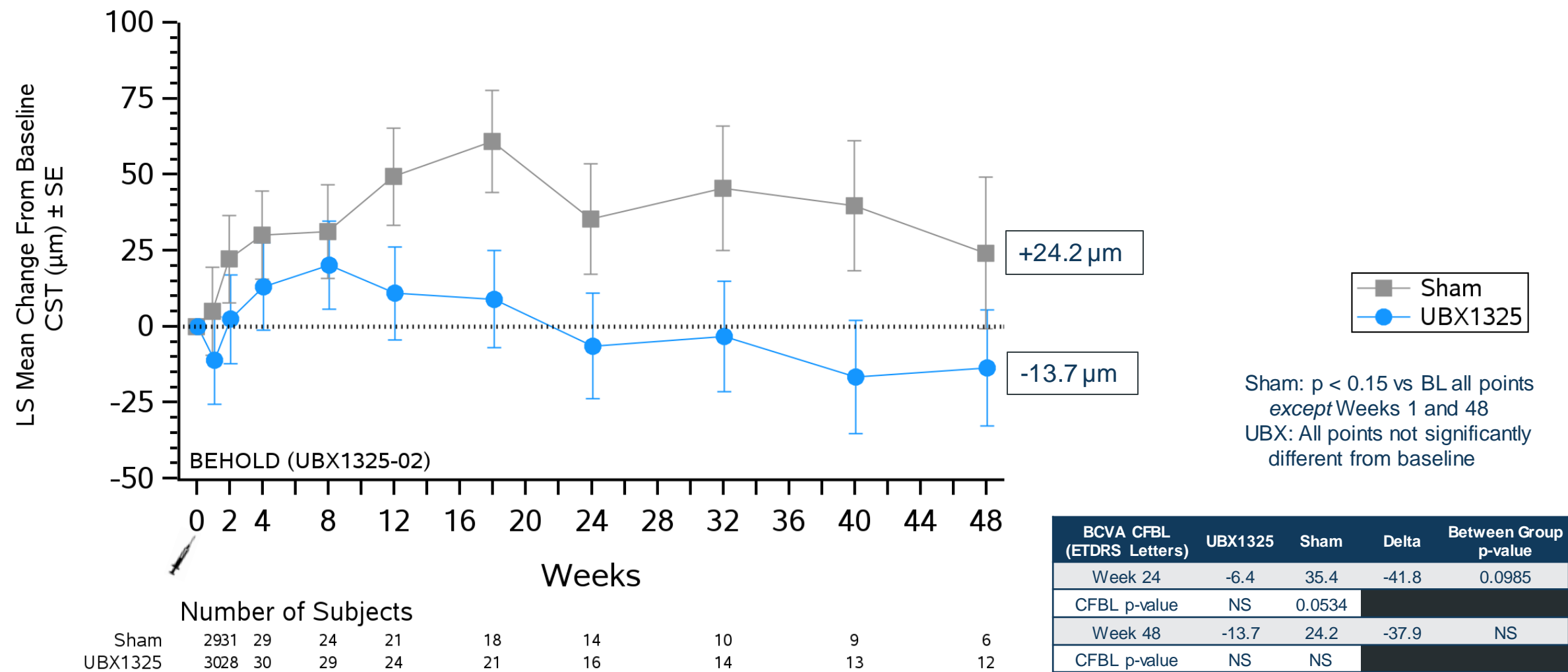


Efficacy analyses *excluding* and *including* data post anti-VEGF rescue show a treatment benefit of UBX1325

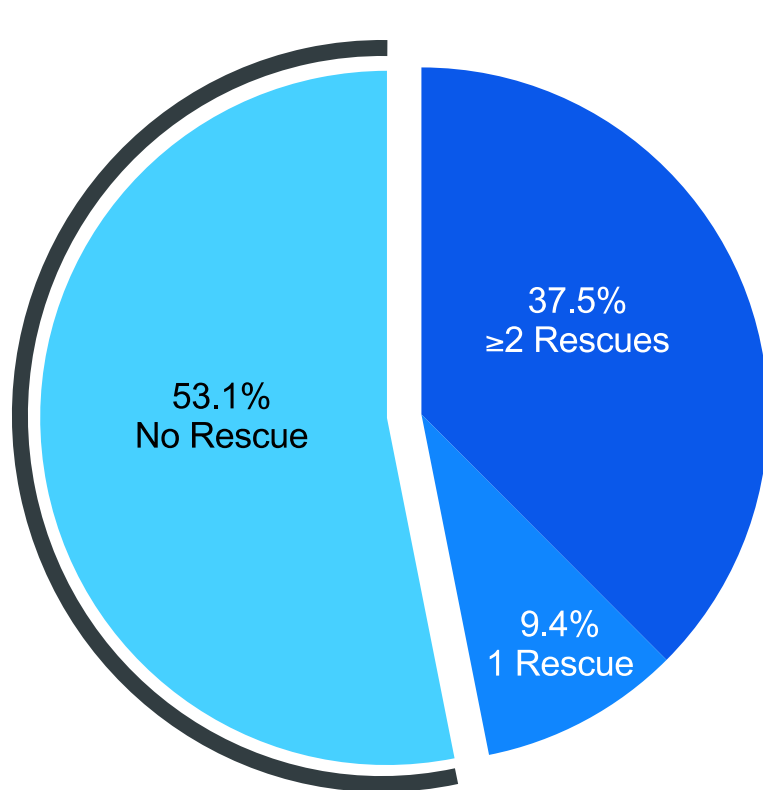
# UBX1325-treated Patients Had a Significant Improvement in BCVA from Baseline† of 6.2 letters at 48 weeks (excluding data post-rescue)



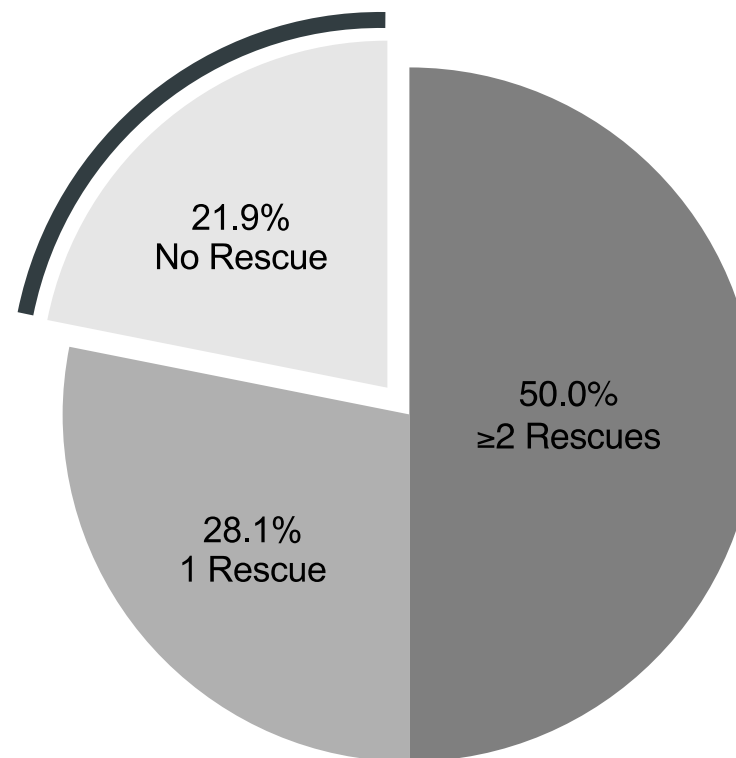
# CST Remained Stable In UBX1325-Treated Patients Compared to Worsening In Sham Patients (Excluding Post-Rescue Data)



# 53.1% of UBX1325-Treated Patients In the Study Did Not Require Anti-VEGF Rescue Compared to 21.9% of Sham Patients at 48 Weeks



n = 32  
**UBX1325**



n = 32  
**Sham**

UBX vs. Sham  
**p = 0.0096**

## Rescue Criteria (Either)

- Decrease of 10 ETDRS or more letters from any peak value
- Increase in CST of 75  $\mu$ m or more from baseline

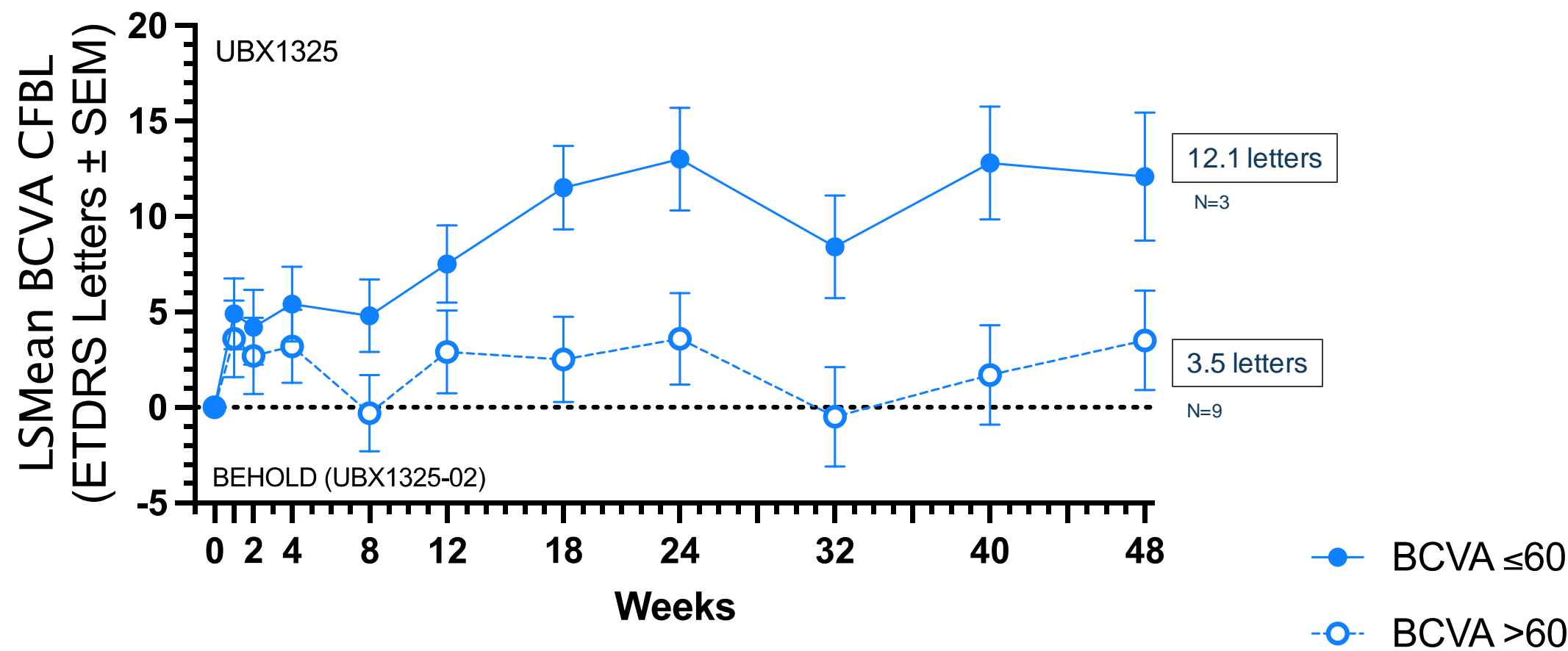
# UBX1325 Demonstrated a Favorable Overall Safety and Tolerability Profile With **No Instances of Intraocular Inflammation, Endophthalmitis, Retinal Artery Occlusion or Vasculitis**

Parameter, No. of Patients	Sham (N = 33)	UBX1325 10 µg (N = 32)
Subjects with at least one TEAE	31 (93.9)	26 (81.3)
Related TEAE	3 (9.1)	6 (18.8)
Grade ≥3 TEAE	4 (12.1)	5 (15.6)
Serious TEAE	3 (9.1)	5 (15.6)
Ocular TEAE for Study Eye	28 (84.8)	23 (71.9)
Treatment-related Ocular TEAE for Study Eye	3 (9.1)*	6 (18.8)*
TEAE leading to death	0	0
<b>Intraocular inflammation, endophthalmitis, retinal artery occlusion, or vasculitis</b>	<b>0</b>	<b>0</b>

\* Most are likely procedural related, all were mild-mod, and self-limited:  
Sham: 1 conj. hemorrhage, 1 conj. hyperemia, 1 diabetic macular edema  
UBX: 5 conj. hemorrhage, 1 ant. chamber pigmentation, 1 eye irritation

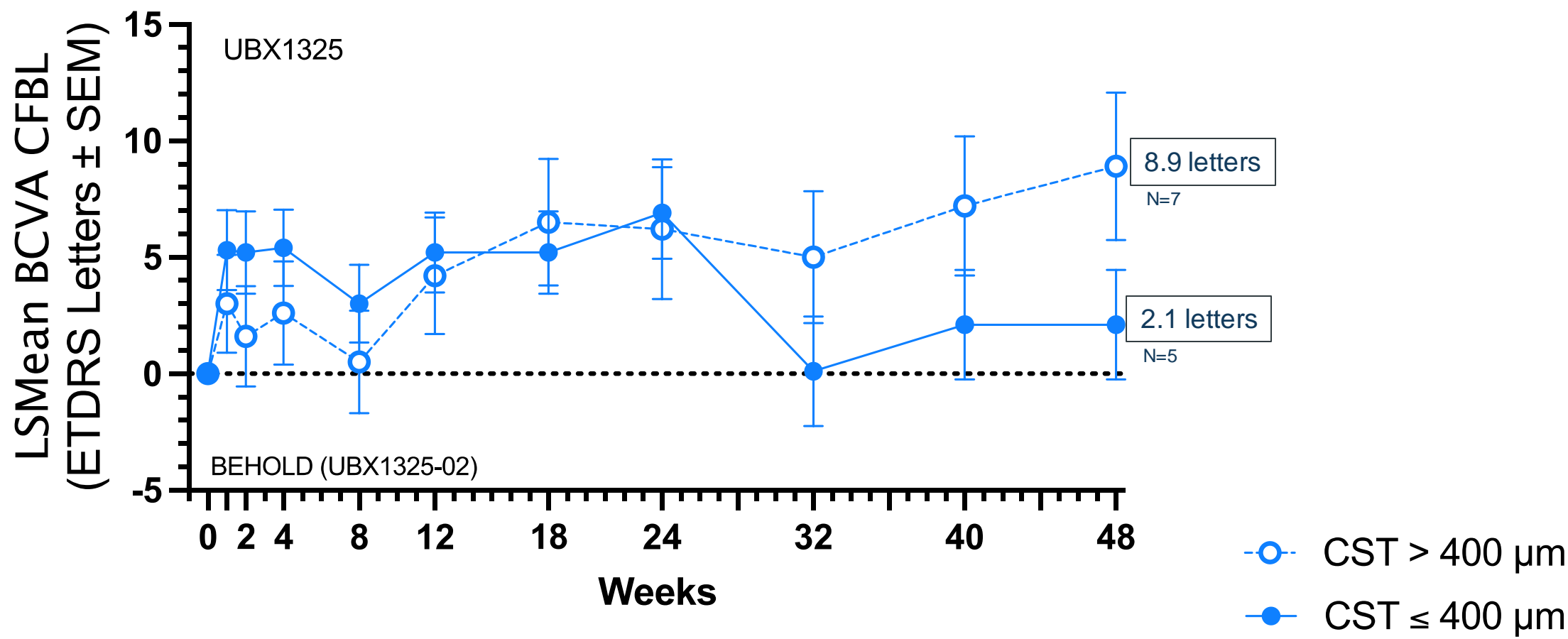
# Pre-specified Subgroup Analyses

# Higher BCVA Gain in UBX1325-Treated Patients With Baseline BCVA ≤60 Letters at 48 Weeks

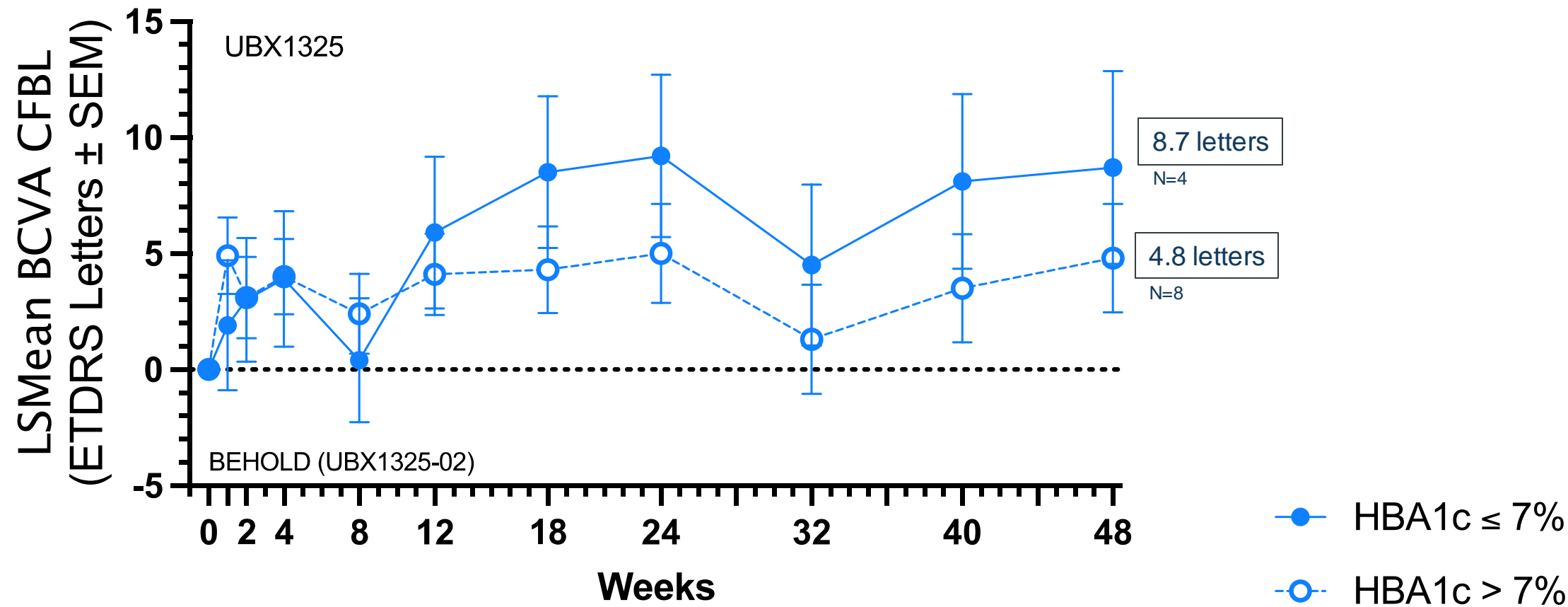




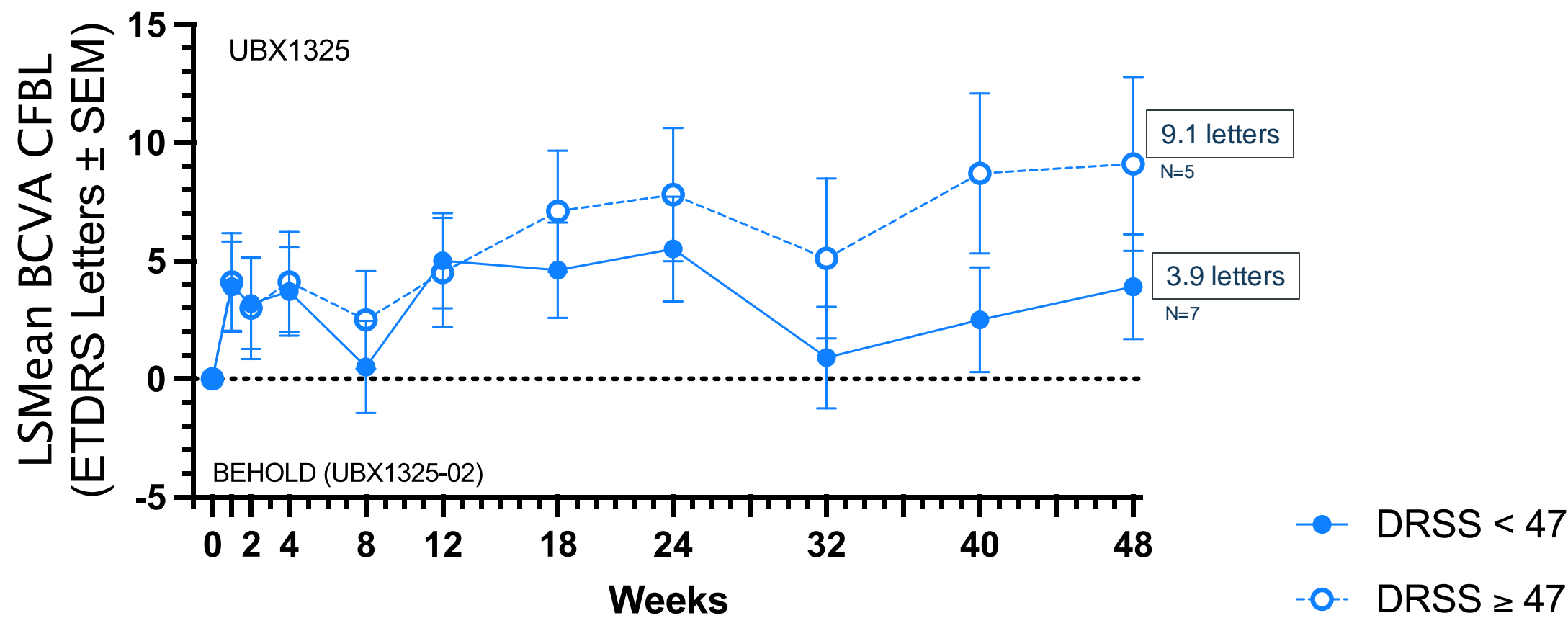
# Higher BCVA Gain in UBX1325-Treated Patients With Baseline CST > 400 at 48 Weeks



# Trend Towards Higher BCVA Gain in UBX1325-Treated Patients With Baseline HBA1c ≤ 7% at 48 Weeks



# Trend Towards Higher BCVA Gain in UBX1325-Treated Patients With Baseline DRSS $\geq 47$ at 48 Weeks



# Conclusions

## In the BEHOLD Phase Study, UBX1325:

- ✓ Improved visual acuity at 48 weeks by **6.2 letters from baseline after a single injection**
- ✓ Led to ~50% of patients achieving a **rescue-free interval of at least 48 weeks** and may represent the **potential for disease modification**
- ✓ **Maintained retinal structure** throughout the duration of the study without the need for anti-VEGF rescue
- ✓ Had a **generally favorable safety and tolerability profile** with no intraocular inflammation