

# Prevention of Visual Acuity Loss and Preservation of Photoreceptors by ANX007 in Dry Age-Related Macular Degeneration (AMD)/Geographic Atrophy (GA) in the Phase 2 ARCHER Trial, Including in Patients with Less Advanced Disease

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**Floretina Meeting 2024**

# Targeting C1q-Mediated Neurodegeneration – Preservation of Synapses & Neuronal Function

Dr. Ben Barres discovery of C1q's role in neurodegeneration (2007) ➔

Spawned entire fields and Validated in labs world-wide<sup>1</sup> ➔

Anti-C1q protective in several disease models



**Ben Barres, M.D., Ph.D.**  
Discoverer of C1q Technology  
Chair of Neurobiology at Stanford University  
Scientific Co-Founder, Annexon

## KEY DISCOVERIES:

1. C1q normally functions to eliminate excess synapses in development<sup>1</sup>
2. C1q-mediated synaptic pruning is common pathway of neurodegeneration
3. C1q inhibition protects against synapse loss and neurodegeneration in several disease models<sup>2</sup>



- Alzheimer's disease
- Amyotrophic Lateral Sclerosis
- Frontotemporal dementia
- Geographic Atrophy
- Glaucoma
- Guillain-Barré Syndrome
- Huntington's disease
- Retinal ischemia
- Schizophrenia
- Spinal muscular atrophy
- Traumatic brain injury

<sup>1</sup>Stevens, et al., 2007 DOI 10.1016/j.cell.2007.10.036; Schafer et al., 2012 DOI 10.1016/j.neuron.2012.03.026; Hong, et al., 2016 doi: 10.1126/science.aad8373; Lui et al., 2016 doi.org/10.1016/j.cell.2016.04.001; <sup>2</sup>Yednock, et al, 2022, doi.org/10.1186/s40942-022-00431-y

# ARCHER: Phase 2 Trial of C1q Inhibitor ANX007 in GA Patients

ANX007, non-pegylated IVT-administered Fab

Randomized, double-masked  
Included **foveal and non-foveal** lesions  
**Stratified for lesion location and lesion size**  
12 months (n=270)

**Sham monthly or every other month**  
(n=89)

**ANX007 5mg monthly (EM)**  
(n=89)

**ANX007 5mg every other month (EOM)**  
(n=92)

## PRIMARY BIOMARKER ENDPOINT

Change in GA lesion area as assessed by fundus autofluorescence at Month 12

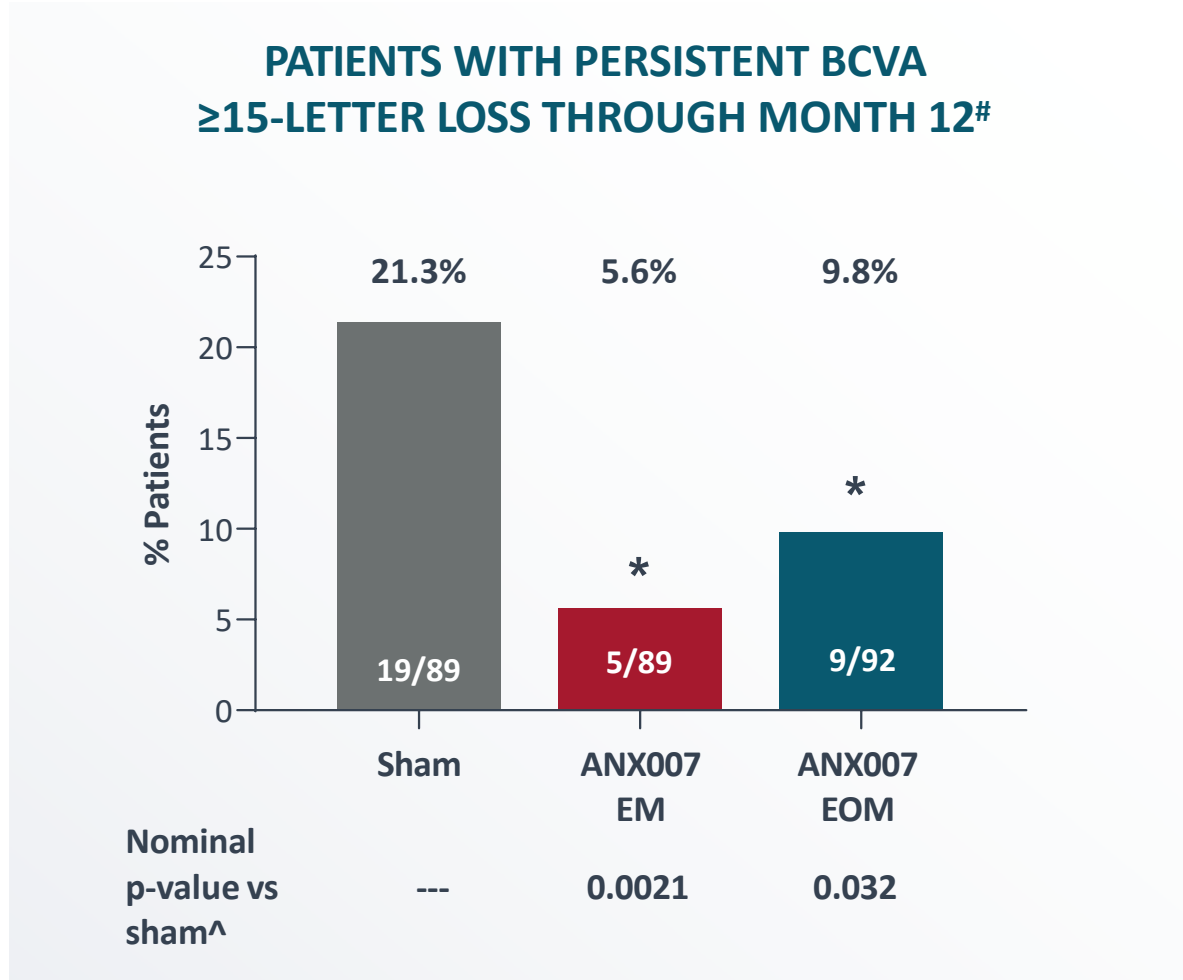
## PRESPECIFIED SECONDARY FUNCTIONAL ENDPOINTS

Best Corrected Visual Acuity (BCVA)  
Low Luminance Visual Acuity (LLVA) & Deficit (LLVD)

Off-treatment  
(6 months)

**END OF STUDY**  
Month 18

# ANX007 Demonstrated Statistically Significant Protection From Vision Loss as Measured by BCVA $\geq 15$ -Letter Loss

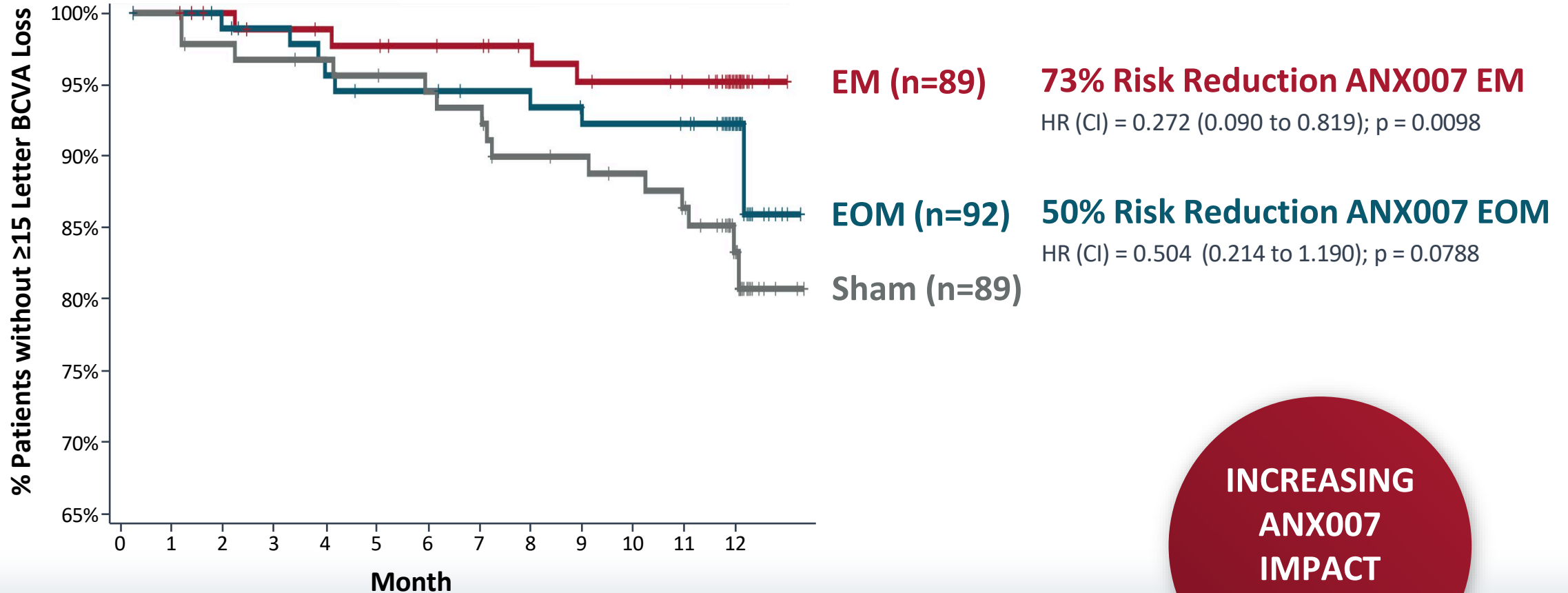


- First known significant preservation of vision in GA
- Dose-dependent response
- BCVA  $\geq 15$ -letter loss universally deemed clinically meaningful
- Persistent loss defined as two consecutive visits or last visit

#Persistent for two consecutive visits through month 12 or at last study visit  
^Nominal p-value from a Chi-square test in ITT population: \* Nominal  $p < 0.05$   
Final data

# Significant, Time-Dependent Protection From BCVA $\geq 15$ -Letter Vision Loss with ANX007 Monthly Treatment

BCVA  $\geq 15$ -LETTER LOSS AT 2 CONSECUTIVE VISITS THROUGH MONTH 12<sup>#</sup>

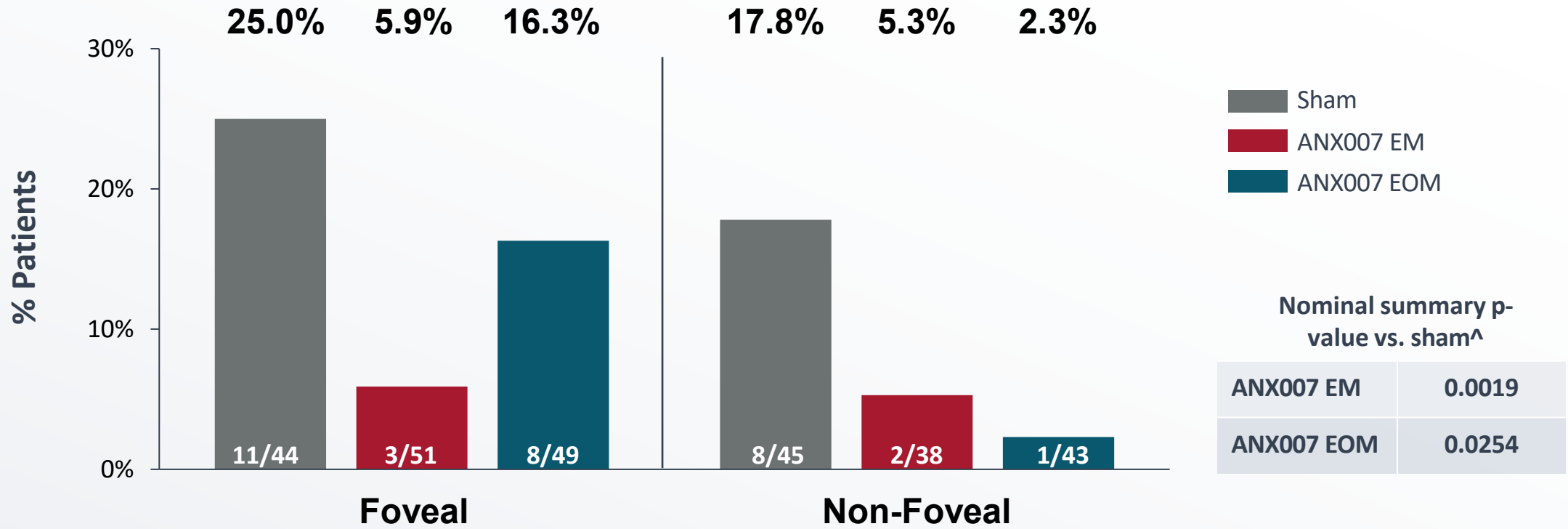


**INCREASING  
ANX007  
IMPACT  
OVER TIME**

HR, hazard ratio; Nominal log-rank test (versus sham) p-values are presented;  
<sup>#</sup>Persistent BCVA 15-LL at two consecutive visits including month 12 supported by ensuing (off-treatment) visit  
Final data

# ANX007 BCVA Subgroup Analysis: Protection from Vision Loss Observed in Both Foveal and Non-Foveal Lesions

**PATIENTS WITH PERSISTENT BCVA  $\geq$ 15-LETTER LOSS THROUGH MONTH 12<sup>#</sup>**



<sup>#</sup>Persistent for two consecutive visits at any time through month 12 or at last study visit

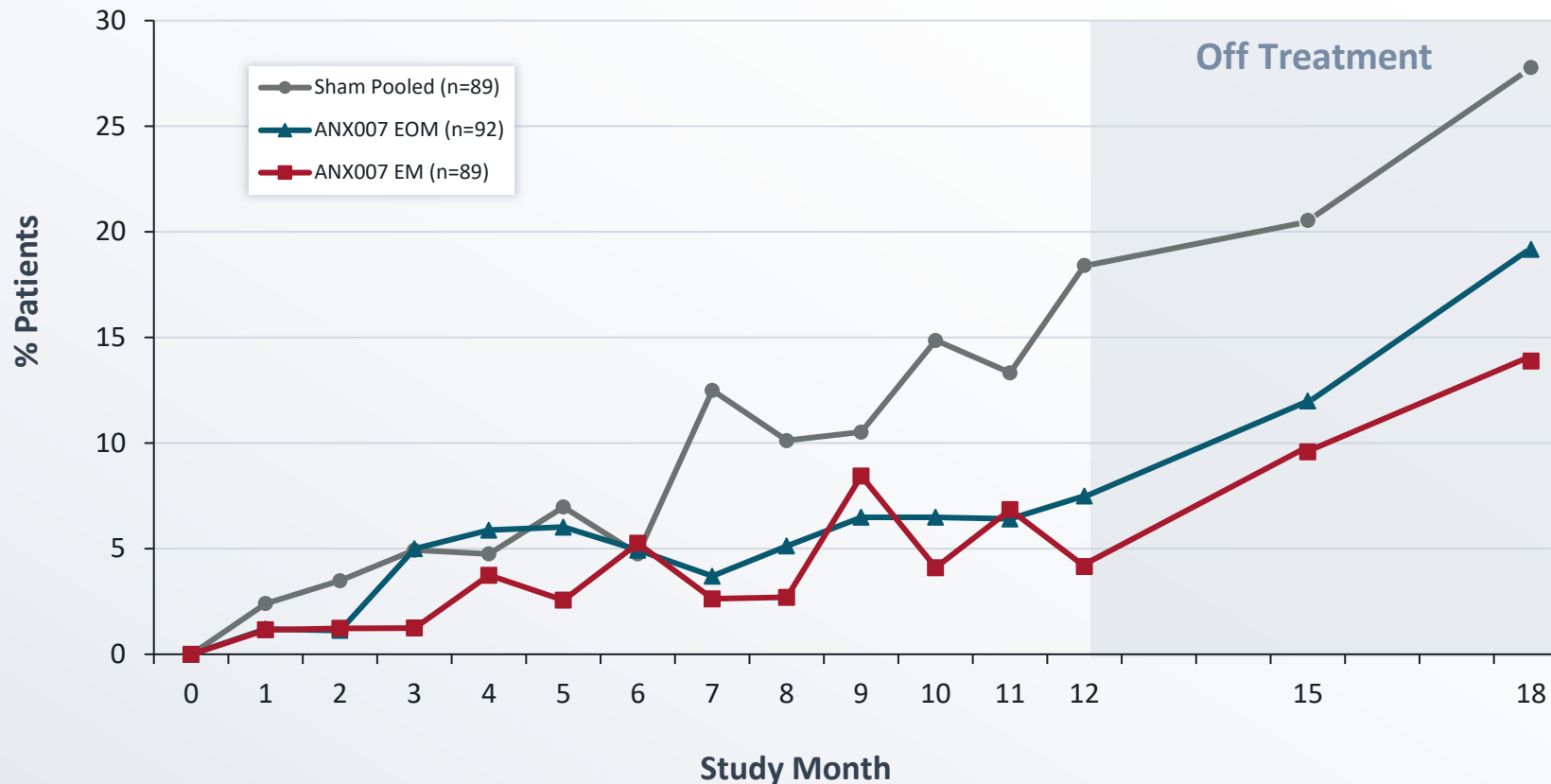
<sup>^</sup>Nominal p-value from a Cochran Mantel-Haenszel test (General Association) in ITT population

Final data

# BCVA $\geq 15$ -Letter Loss Accelerated After Cessation of Treatment

Consistent with true on-treatment drug effect and disease-modifying mechanism of action

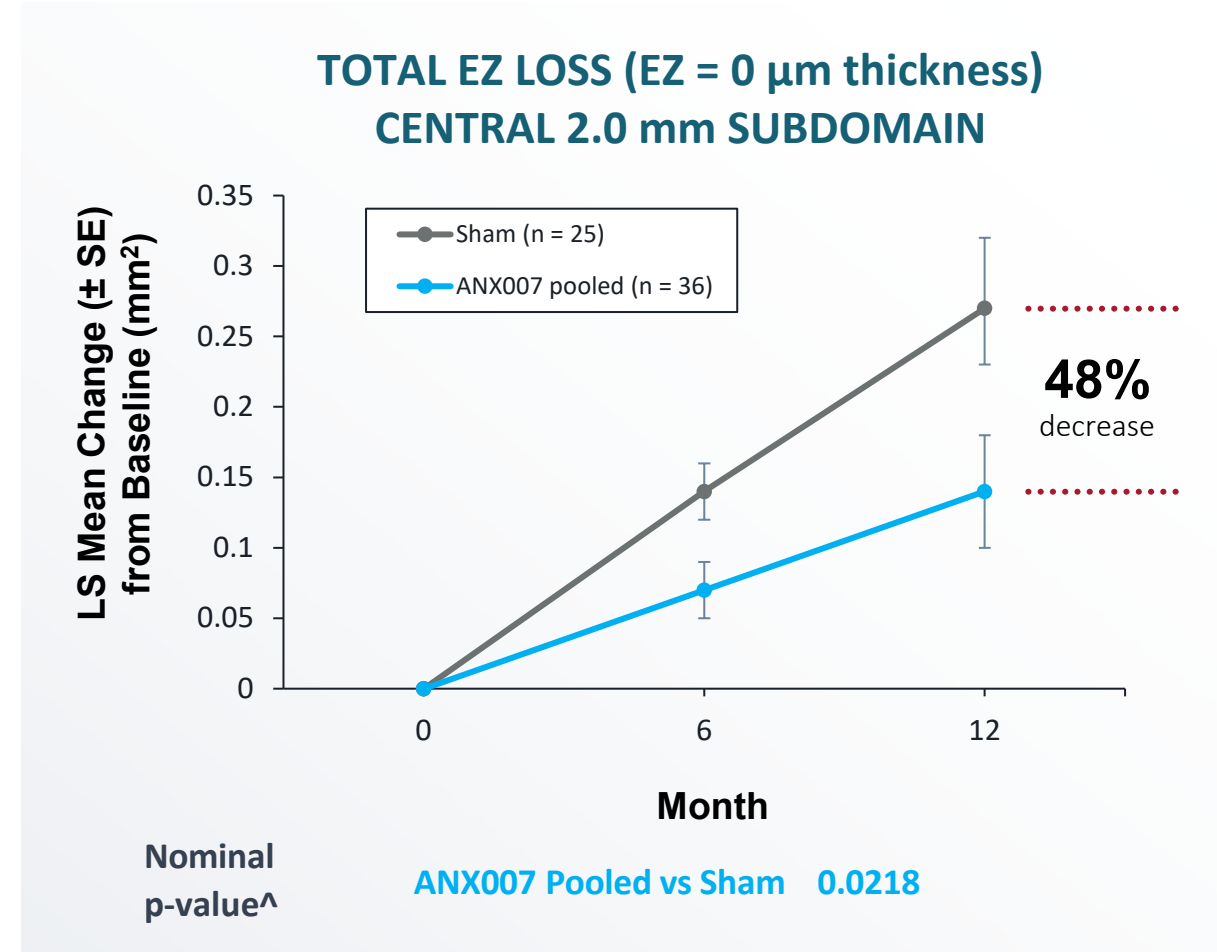
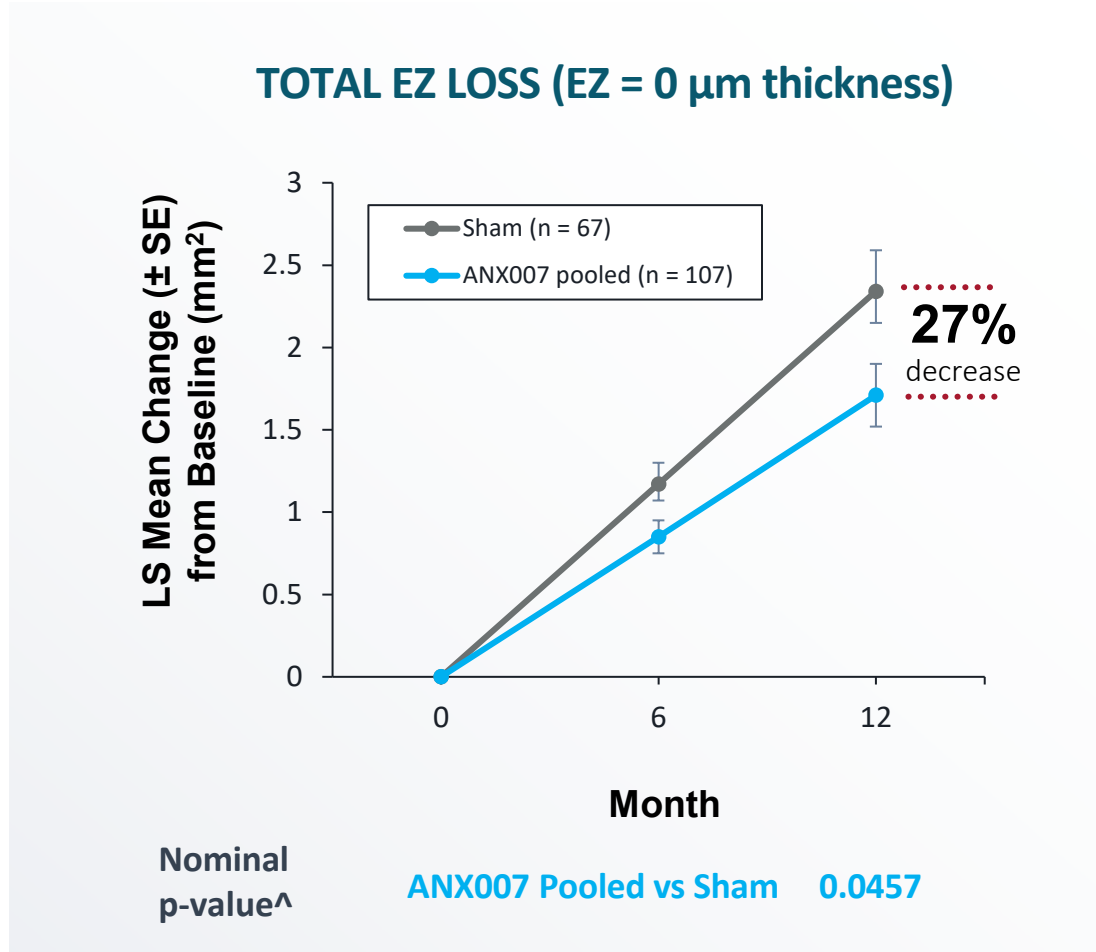
PATIENTS WITH ANY BCVA  $\geq 15$ -LETTER LOSS FROM BASELINE



- Low frequency (<0.6% per month) of single BCVA  $\geq 15$ -letter losses in EM- and EOM-treated groups during 12-month treatment period
- While benefit was maintained after treatment cessation the rate of BCVA  $\geq 15$  LL increased to parallel that of sham (>1.6% per month)



# ANX007 Significantly Protected Photoreceptors Across Retina and in Central Subdomain Region Through 12 Months



<sup>^</sup>Nominal p-values from a linear mixed model for repeated measures model (slope) analysis; Heidelberg Spectralis OCT population with baseline OCT data, excludes patients with >98% atrophy at baseline

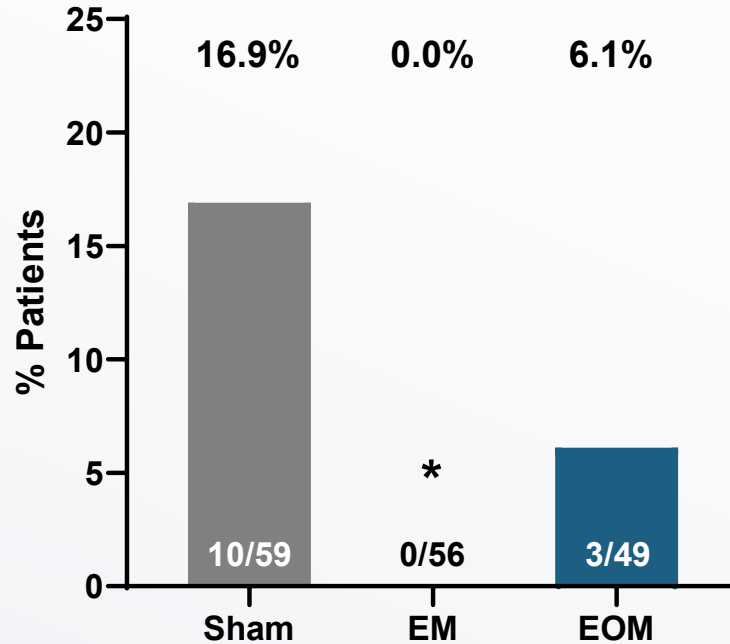


# ANX007 Functional and Structural Benefits Greatest in Eyes with Less Advanced Dry AMD / GA

Lower low luminance visual deficit = more robust ANX007 response

## PERSISTENT BCVA 15-LETTER THROUGH MONTH 12<sup>#</sup>

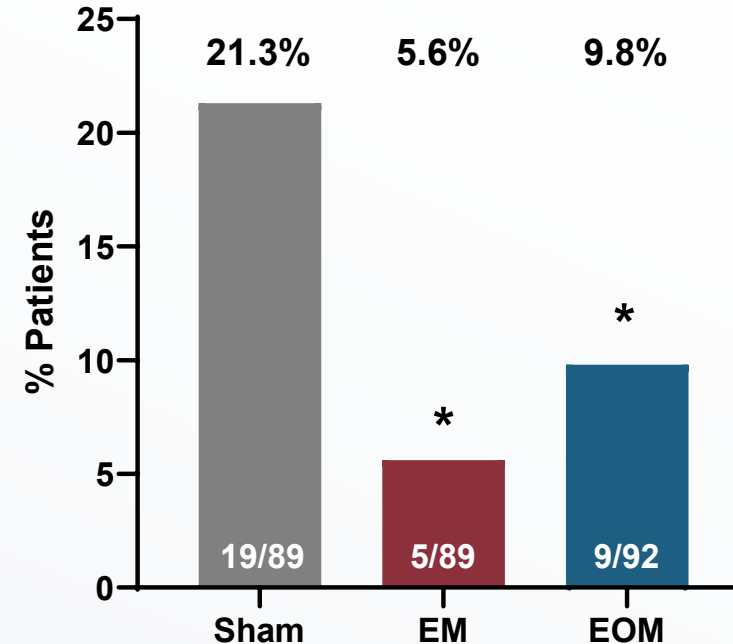
### BASELINE LLVD < 30



Nominal p-value vs. sham<sup>^</sup>

--- 0.0013 0.0852

### OVERALL POPULATION



--- 0.0021 0.032

<sup>#</sup>Persistent BCVA 15-letter loss for two consecutive visits through month 12 or at last study visit

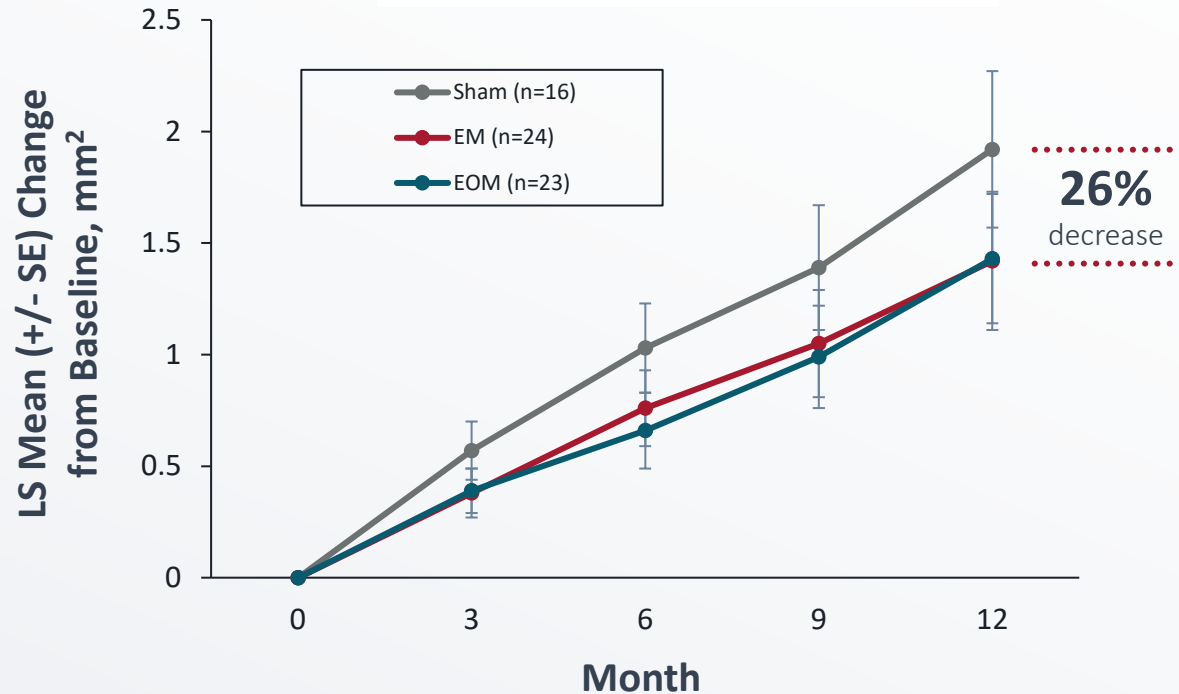
<sup>^</sup>Nominal p-value from a Chi-square test in LLVD<30 at baseline and ITT populations ; Final data

# ANX007 Functional and Structural Benefits Greatest in Eyes with Less Advanced Dry AMD / GA

Smaller lesions = more robust ANX007 response

## GA LESION GROWTH / RPE LOSS

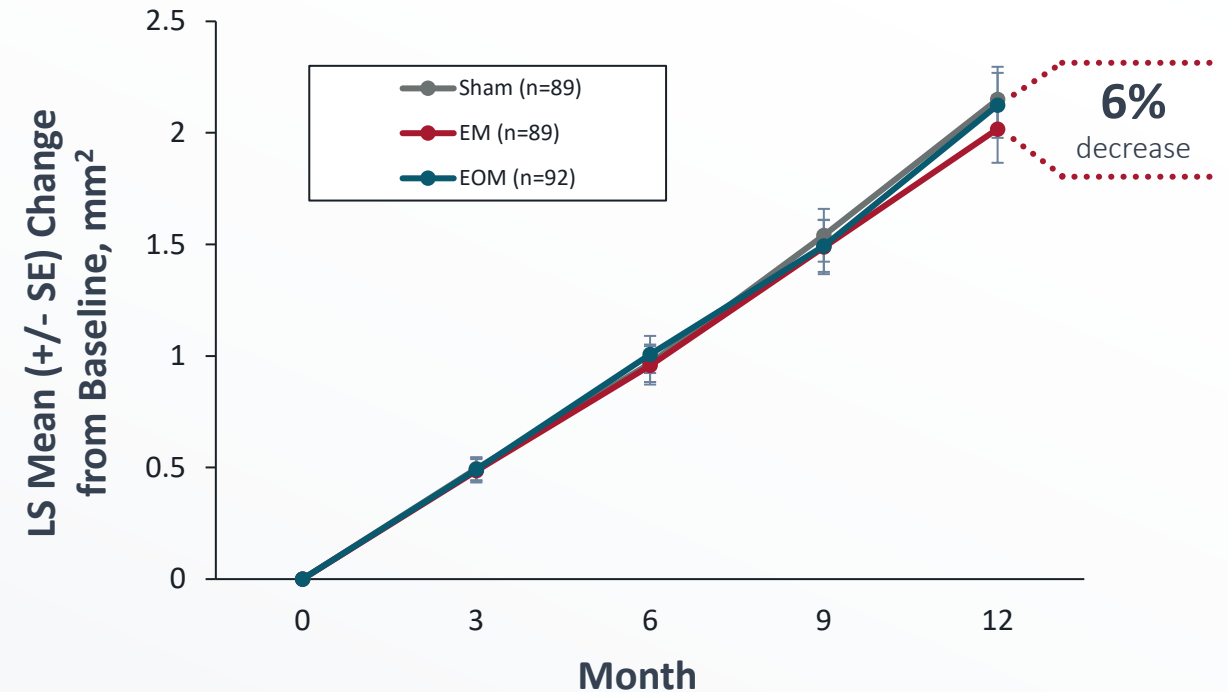
### GA LESIONS < 4.0 mm<sup>2</sup>



Nominal p-value vs. sham<sup>^</sup>

EM  
0.46

### ALL GA LESIONS



Nominal p-value vs. sham<sup>^</sup>

EM  
0.53

From mixed model for repeated measures;

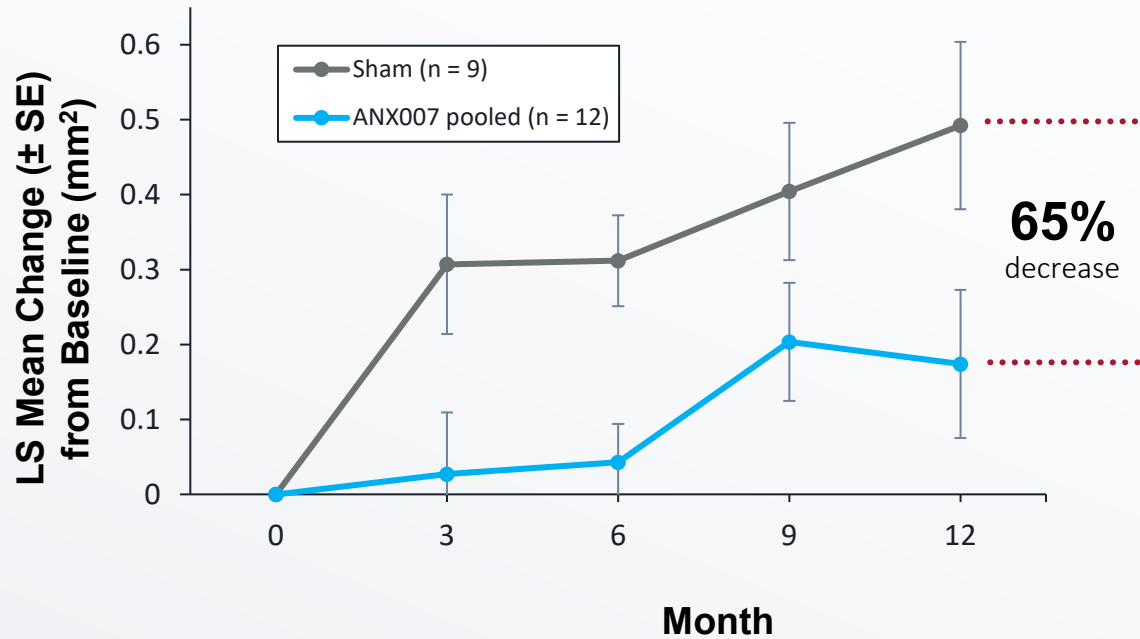
<sup>^</sup>Nominal p-value from a Chi-square test in population with baseline lesion size < 4.0 mm<sup>2</sup> and ITT population; Final Data

# ANX007 Functional and Structural Benefits Greatest in Eyes with Less Advanced Dry AMD / GA

More EZ remaining = more pronounced ANX007 response

**TOTAL EZ LOSS (EZ = 0  $\mu\text{m}$  thickness)  
CENTRAL 2.0 mm SUBDOMAIN**

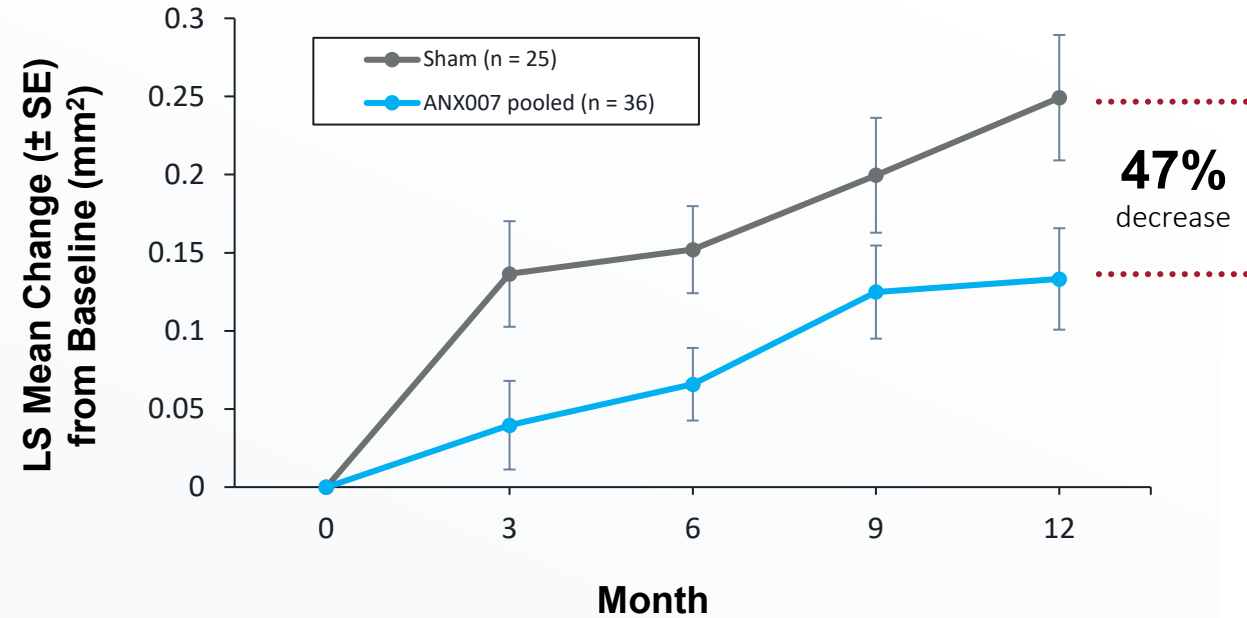
**< 80% EZ LOSS @ BASELINE**



Nominal p-value vs sham<sup>^</sup>

ANX007 Pooled vs Sham 0.0259

**< 98% EZ LOSS @ BASELINE**



ANX007 Pooled vs Sham 0.0203

<sup>^</sup>Nominal p-values from a mixed model for repeated measures analysis; Heidelberg Spectralis OCT population with baseline OCT data; excludes patients with >80% and >98% loss at baseline

# ANX007 Generally Well-Tolerated

ADVERSE EVENTS OF SPECIAL INTEREST n (%)	SHAM (N=89)	ANX007 EM (N=89)	ANX007 EOM (N=92)
Choroidal Neovascularization	3 (3.4%)	4 (4.5%)	4 (4.3%)
Endophthalmitis	0	1 (1.1%)	2 (2.2%)
Retinal Vascular Occlusion	0	0	1 <sup>^</sup> (1.1%)
<b>Retinal Vasculitis – No Cases Reported</b>			
Intraocular Inflammation <sup>+</sup>	0	2 (2.2%)	1 (1.1%)
<b>Ischemic Optic Neuropathy<sup>+</sup> - No Cases Reported</b>			

## INTRAOCULAR INFLAMMATION DETAILS\* n

### Iritis – 1

Resolved with topical steroids in 2 days  
No Vasculitis

### Vitritis – 1

Resolved with topical steroids in 9 days  
No Vasculitis

### Vitreous Debris – 1

KP on endothelium, prior treatment with topical steroids  
No Vasculitis

\*Event Verbatim term listed

<sup>^</sup>Isolated cilioretinal artery occlusion; no vasculitis confirmed by DSMC and reading center

<sup>+</sup>Not AESI, included because of current interest

# ANX007: A Novel Neuroprotective Agent Demonstrating Consistent Vision Protection Now in Phase 3

**Blocking C1q for neuroprotection**, prevented synapse loss and protected photoreceptors from elimination in animal models

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**ANX007 consistently protected against the loss of visual acuity** in ARCHER Phase 2 study

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**ANX007 has even greater effect in eyes with less advanced disease** – lower LLVD, smaller GA lesions, more intact EZ

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**ANX007 was generally well-tolerated** with strong benefit / risk profile

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**Global Phase 3 program NOW ONGOING**