Protective Effects of ANX007 on Central Macular Ellipsoid Zone and RPE and Association with Visual Acuity in the Phase 2 ARCHER GA Study

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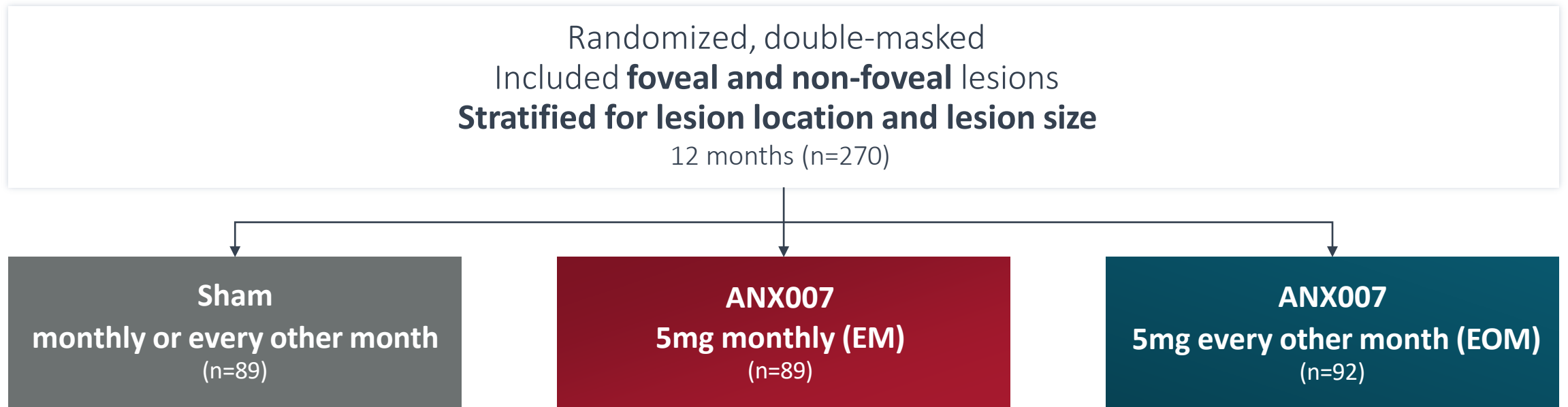
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American Society of Retina Specialists

Stockholm, Sweden

Disclosures

- 4DMT Molecular Therapeutics

- Annexon

- Regeneron

- Roche/Genentech

- Boehringer Ingelheim

ARCHER: ANX007 Phase 2 Trial in GA

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

Sham	ANX007	ANX007
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

Key Takeaways from ARCHER Phase 2 Trial

ANX007, an anti-C1q Fab antibody administered IVT, **protected against the loss of visual acuity** in the Phase 2 ARCHER study

Blocking C1q for neuroprotection prevented synapse loss and protected photoreceptors from elimination; **effect most pronounced in central fovea**

ANX007 demonstrated protection from photoreceptor loss and PR/RPE foveal invasion; Findings correlate with VA loss protection, **supportive of PR synapse protection MOA**

ANX007 treatment was **generally well-tolerated;** no CNV increase; no reported cases of vasculitis

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What is "Foveal Invasion"?

Encroachment by EZ or RPE (GA) loss into foveal zones

1 mm Diameter

1.5 mm Diameter

2 mm Diameter
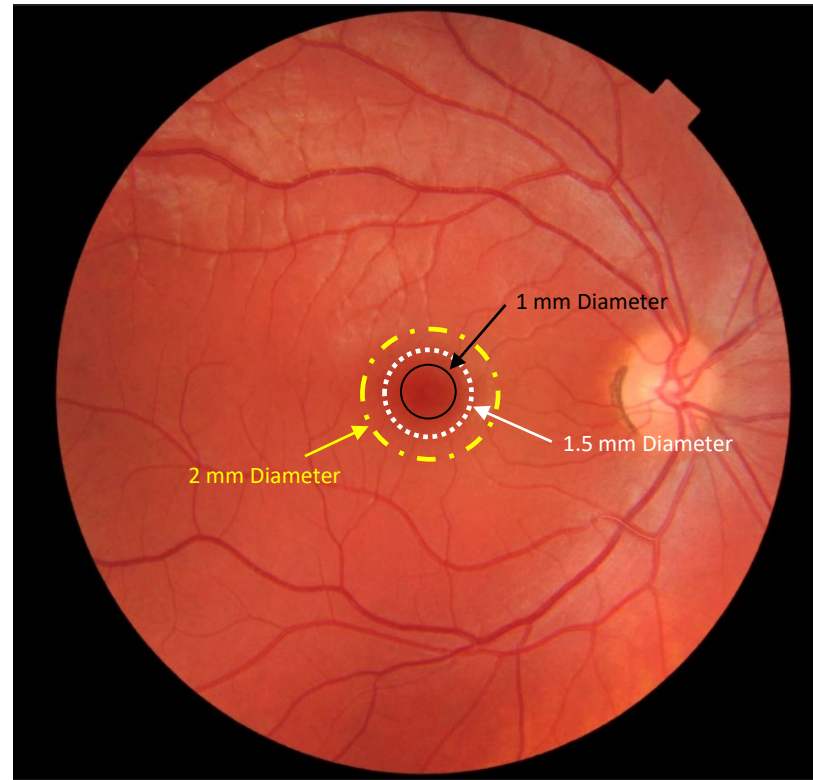
Dimensions are approximate

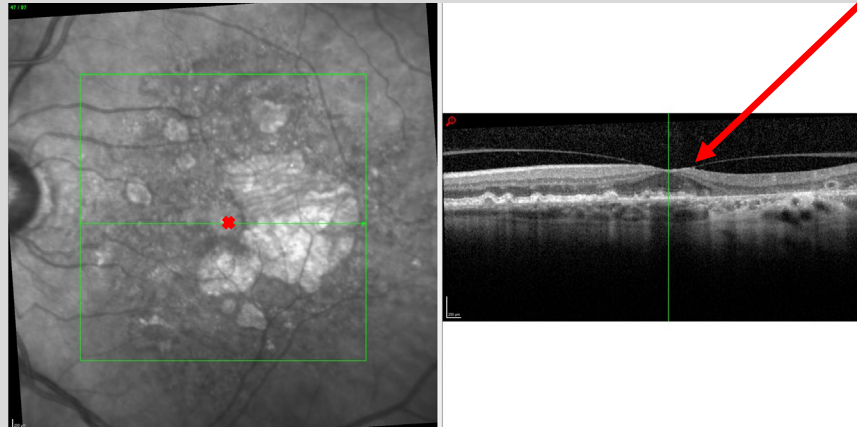# Methods

Study Images

- ARCHER Heidelberg study images

  - OCT

    - 97-line HR volume scans
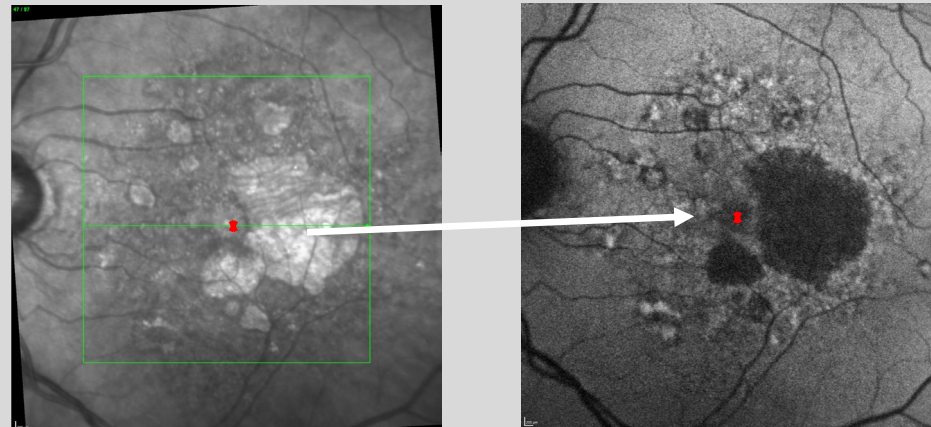
  - FAF/NIR images

Methods

GA (RPE) Foveal Invasion

- GA (RPE loss) measured on FAF (OCT/NIR)

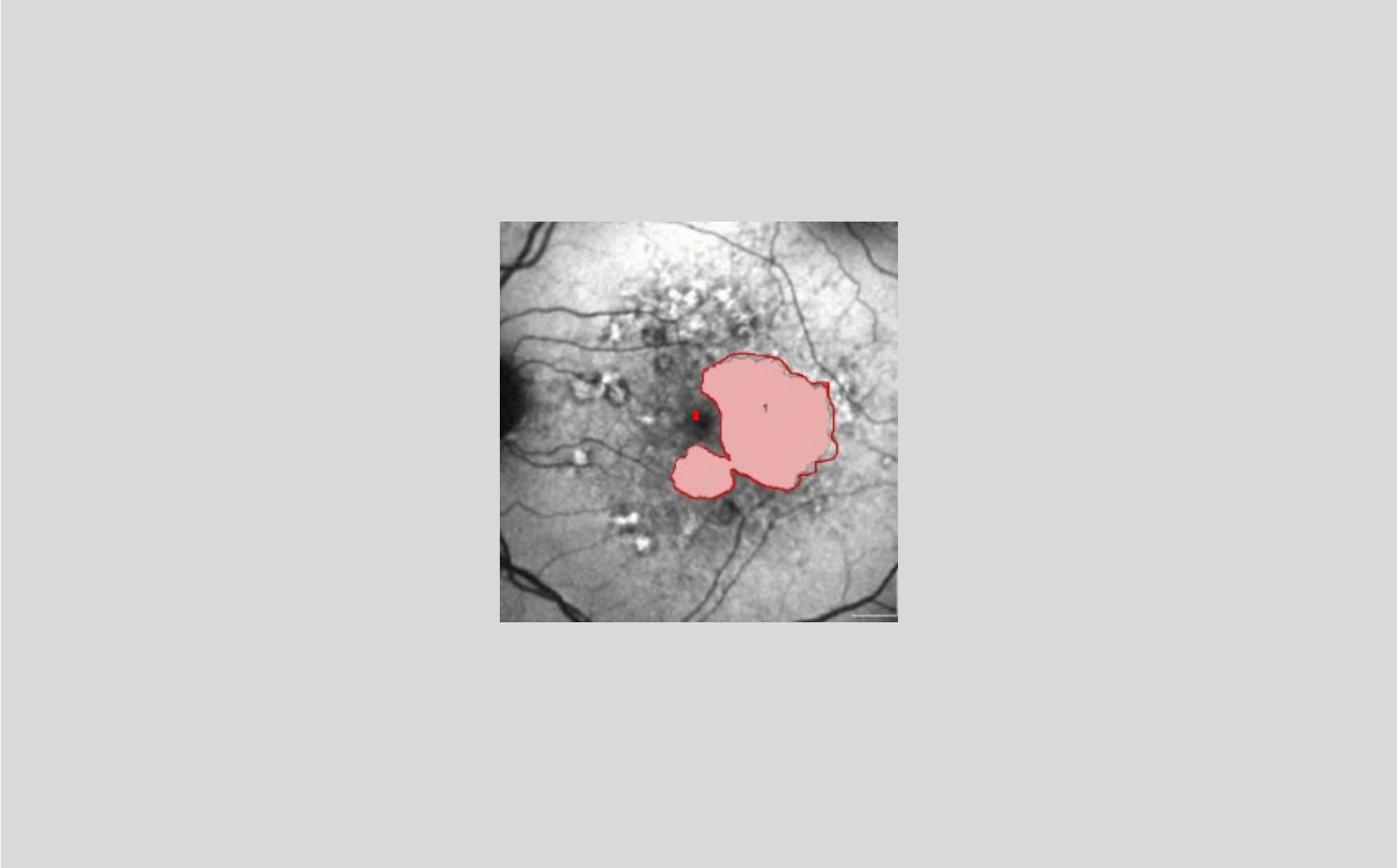# Centerpoint Identified on OCT and IR Image

Vertical green line on OCT B-scan (right image) is seen
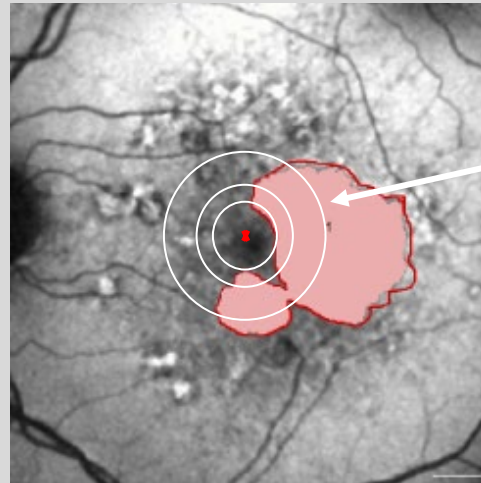as short hash mark on IR image (red X)

IR Image Registered to FAF Image

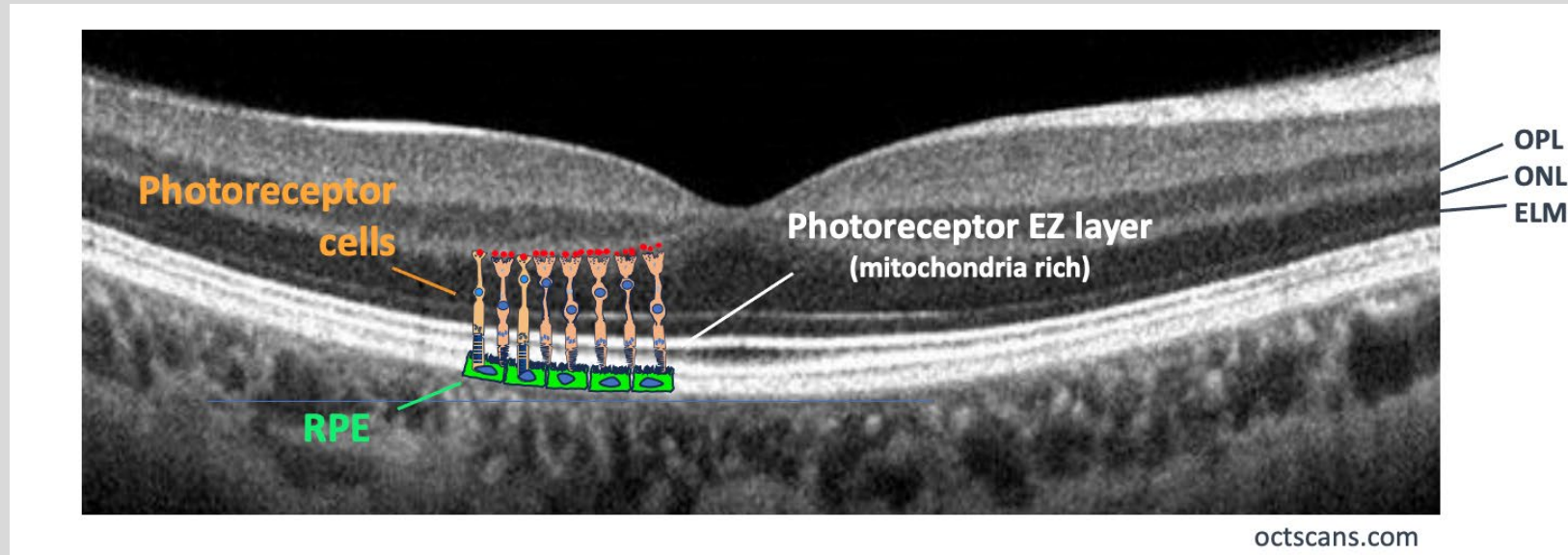# GA Region Overlaid on FAF Image with Marked Centerpoint
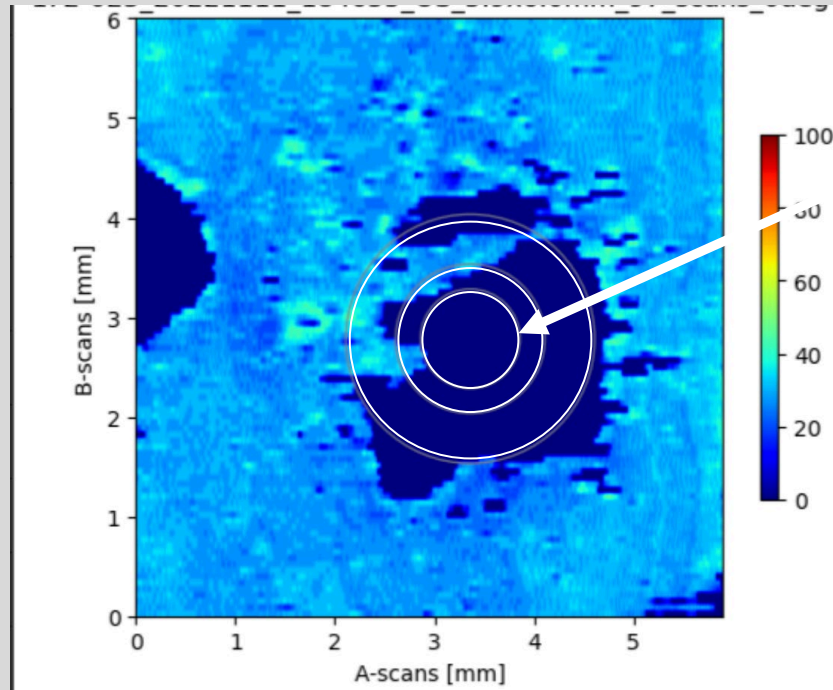
Invasion into Concentric Circles

Foveal invasion

Methods

Foveal Invasion: Total EZ loss (EZ = 0 μm)

En Face Map Total EZ loss (EZ = 0 μm)
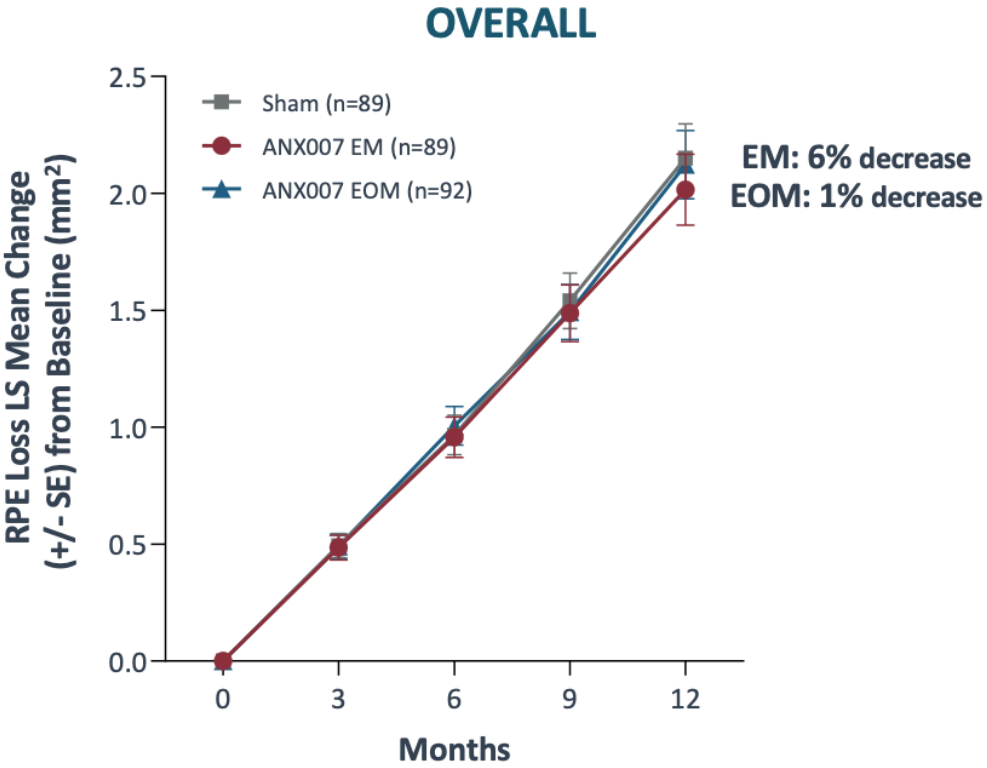

In-house AI Algorithm
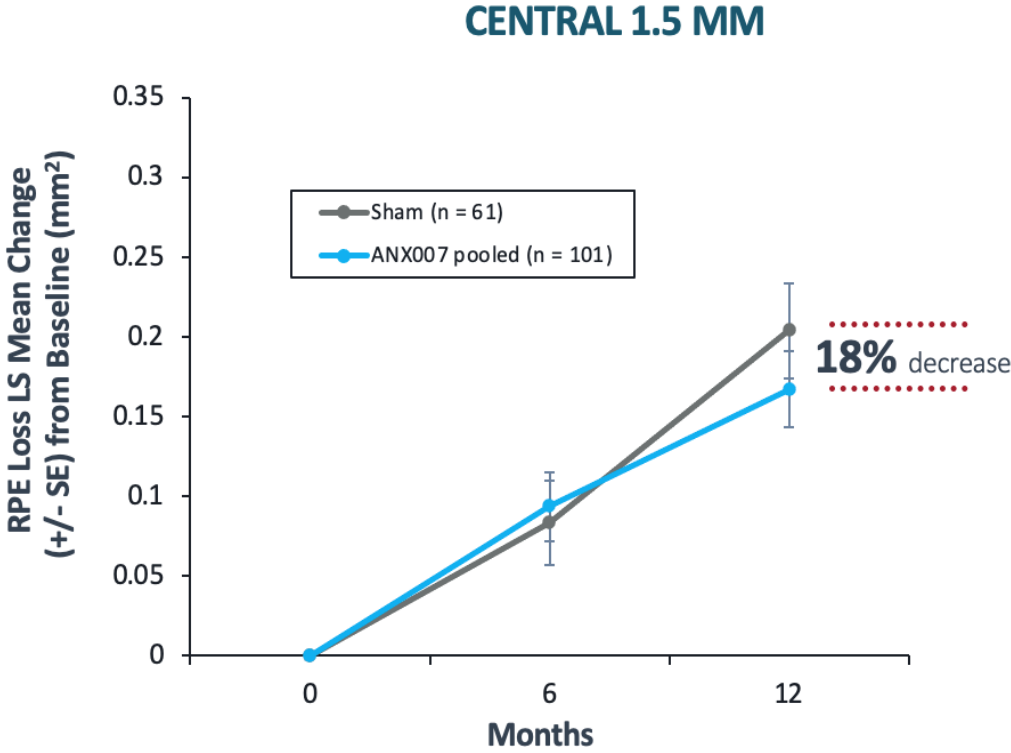
Foveal invasion

Study Results

GA (RPE) Foveal Invasion

# ANX007 Reduced RPE Loss in Foveal Center (1.5 mm) Through 12 Months

From a mixed model for repeated measures (MMRM) analysis;
ITT Population

From a mixed model for repeated measures (MMRM) analysis;
Heidelberg Spectralis OCT population with baseline OCT data, excludes patients with >98% atrophy at baseline

ANX007 Reduced Number of Eyes with at Least 25% RPE Invasion over 12 Months

EYES WITH SUBSTANTIAL RPE LOSS FROM BASELINE* IN CENTRAL 1.5 MM AT 12 MONTHS#

>60% fewer eyes with substantial RPE loss in central 1.5 mm subfield
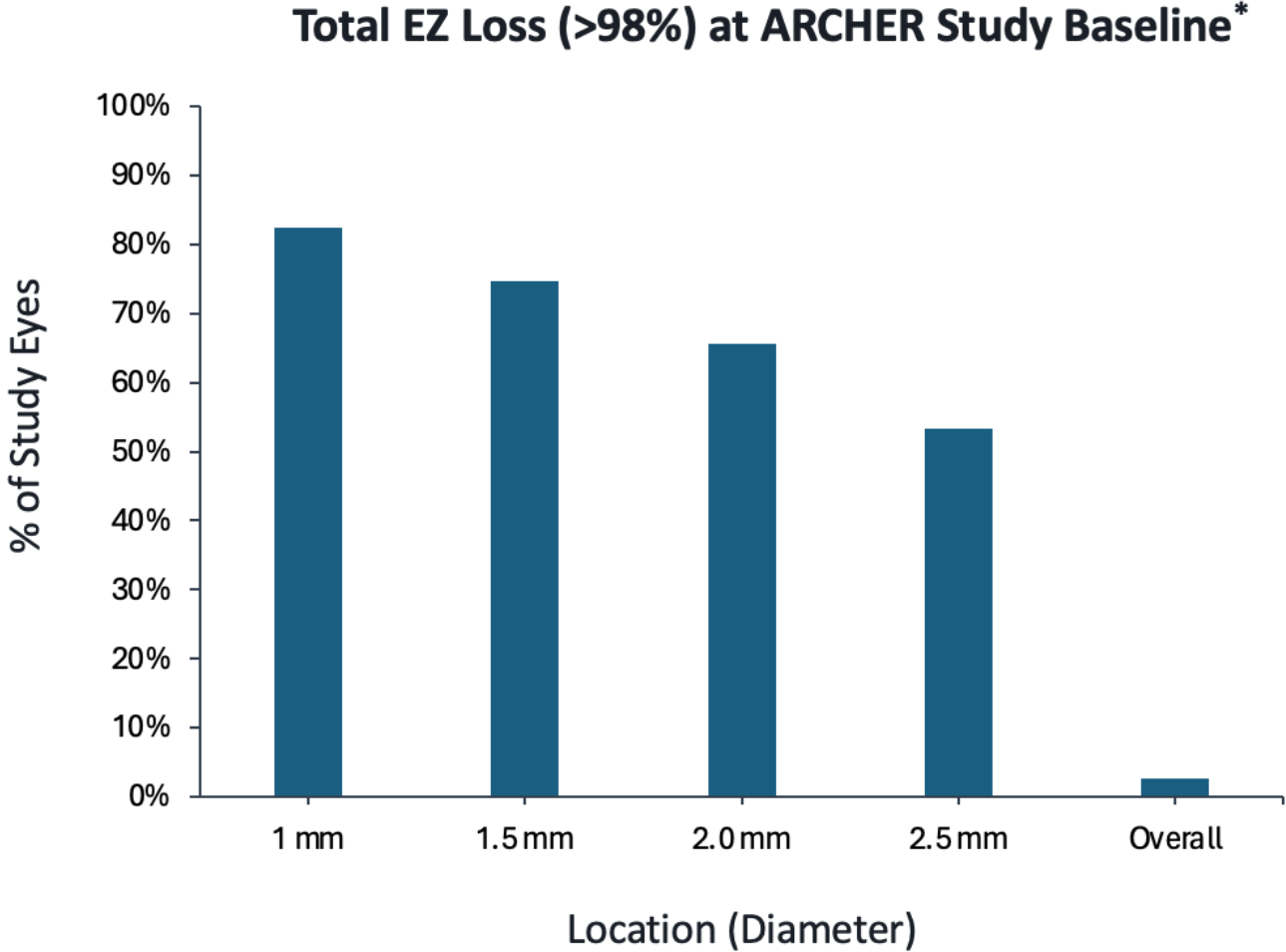
Sham (6/32)

ANX007 Pooled (4/54)

% of Eyes
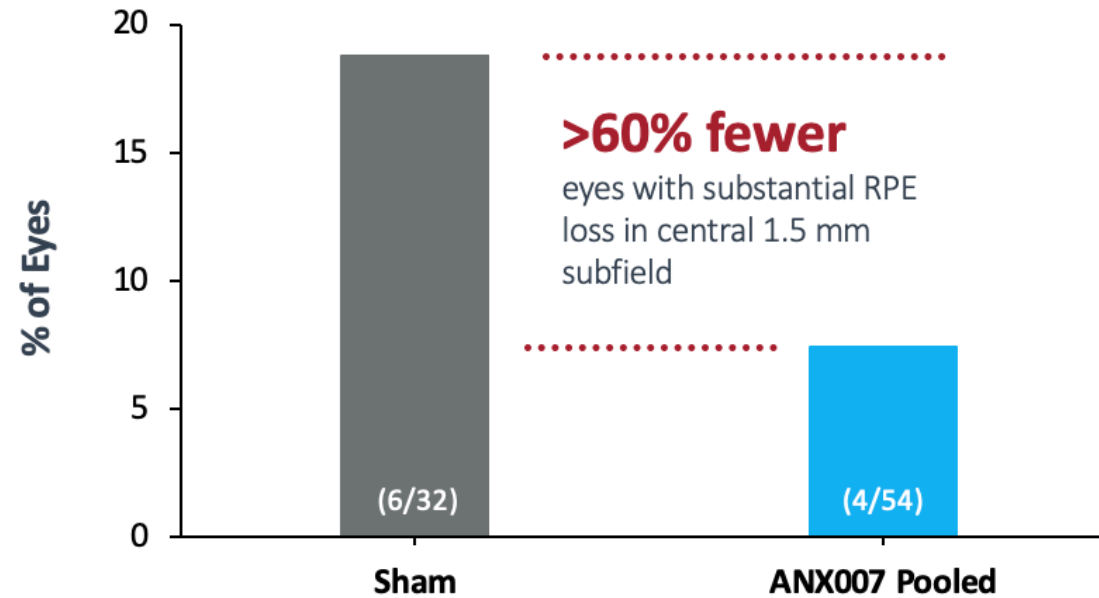
#Eyes with at least 25% of RPE intact in the central 1.5mm at baseline (n = 86) in patients with Heidelberg Spectralis OCT scans (overall total n=193)
*Substantial RPE loss defined as 25% absolute loss of RPE

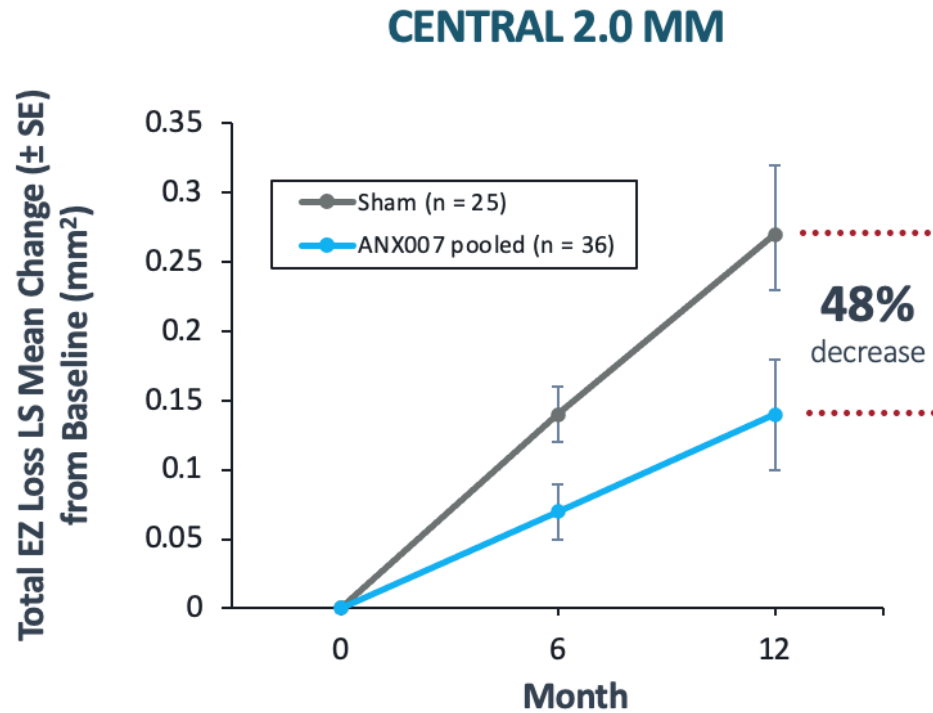# Study Results

EZ Foveal Invasion

Eyes with >98% total EZ loss/invasion at baseline

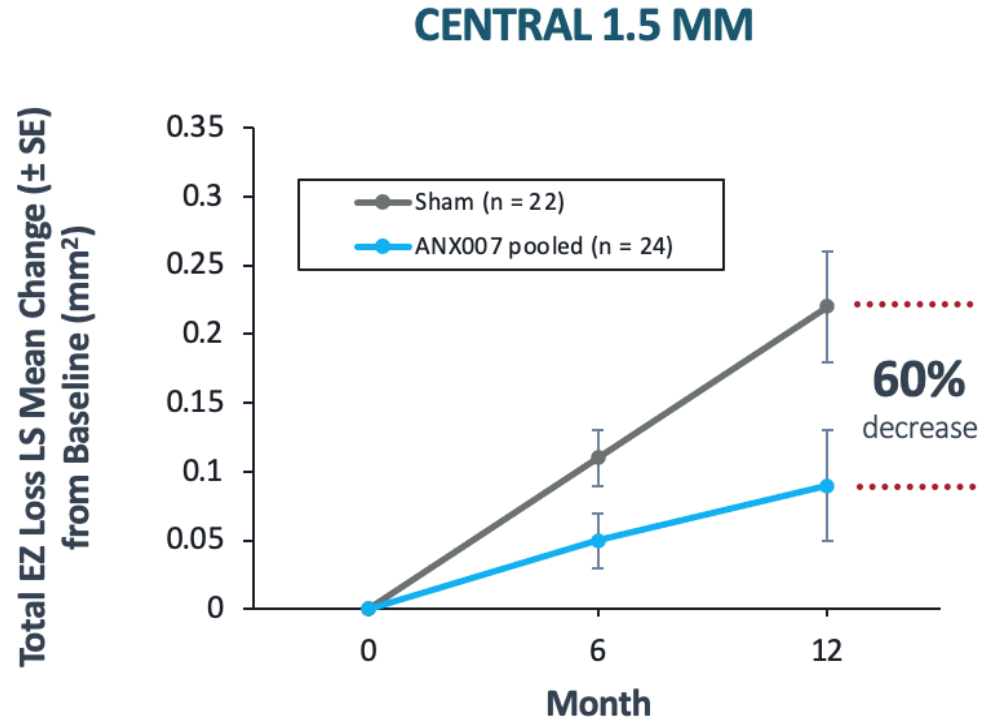**Total EZ Loss (>98%) at ARCHER Study Baseline***

*ARCHER study Heidelberg Spectralis OCT population with baseline OCT data (n = 193)

ANX007 Protected from Photoreceptor Loss Through 12 Months

TOTAL EZ LOSS (EZ = 0 μm)

Total EZ loss treatment effect near foveal center (48-60%) greater than overall (24-29%)

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