



# **SPECTRUM: Early clinical experience from the first global real-world study of aflibercept 8 mg in patients with pretreated neovascular age-related macular degeneration**

**Clare Bailey,<sup>1</sup>** Clemens Lange,<sup>2,3</sup> Varun Chaudhary,<sup>4</sup> Paolo Lanzetta,<sup>5,6</sup> Hassiba Oubraham,<sup>7</sup> Martin Kirchner,<sup>8</sup> Tobias Machewitz,<sup>9</sup> Helmut Allmeier,<sup>10</sup> Xin Zhang,<sup>10</sup> Zoran Hasanbasic,<sup>10</sup> Marion R. Munk,<sup>11,12,13</sup> on behalf of the SPECTRUM study investigators

<sup>1</sup>Department of Ophthalmology, University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, UK;

<sup>2</sup>Eye Center, Faculty of Medicine, Albert-Ludwig University Freiburg, Freiburg, Germany; <sup>3</sup>Department of Ophthalmology, St Franziskus Hospital, Münster, Germany;

<sup>4</sup>Hamilton Regional Eye Institute, St Joseph's Healthcare Hamilton, McMaster University, Hamilton, ON, Canada;

<sup>5</sup>Department of Medicine–Ophthalmology, University of Udine, Udine, Italy; <sup>6</sup>Istituto Europeo di Microchirurgia Oculare (IEMO), Udine, Milan, Italy;

<sup>7</sup>Centre OPHTA-45, Montargis, France; <sup>8</sup>Bayer AG, Leverkusen, Germany; <sup>9</sup>Bayer AG, Berlin, Germany; <sup>10</sup>Bayer Consumer Care AG, Basel, Switzerland;

<sup>11</sup>Augenarzt Praxisgemeinschaft Gutblick AG, Pfäffikon, Switzerland; <sup>12</sup>Department of Ophthalmology, University Hospital Bern, Bern, Switzerland;

<sup>13</sup>Northwestern University, Feinberg School of Medicine, Chicago, IL, USA



# SPECTRUM: Global real-world study of aflibercept 8 mg

A 24-month, non-interventional country and global cohort study planned in 18 countries



## 2 indications, 4 patient cohorts

Treatment-naïve **nAMD** and previously treated **nAMD**  
Treatment-naïve **DME** and previously treated **DME**



Primary endpoint: Change in VA from BL to Month 12



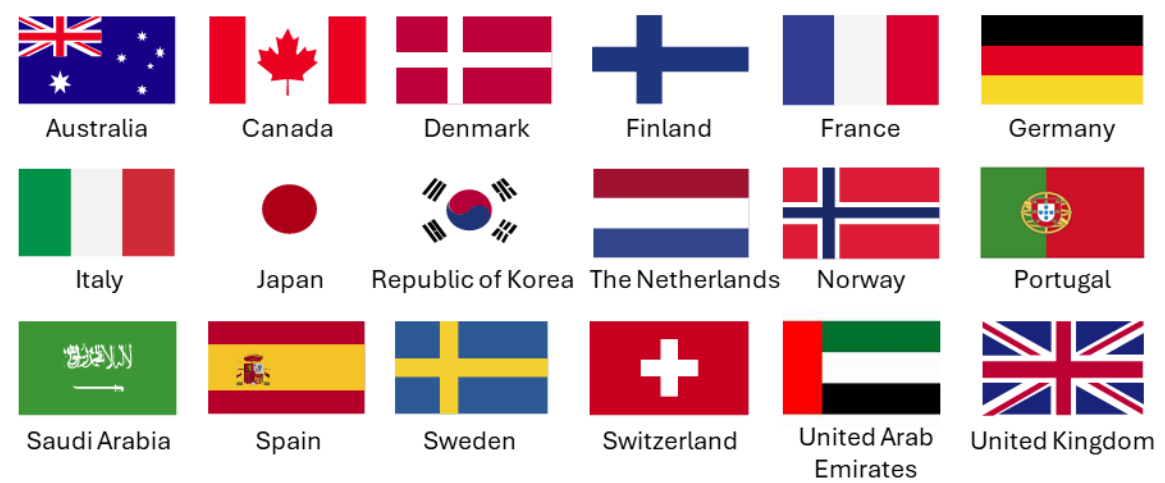
## Secondary endpoints include:

Change in VA and CRT from BL to Month 6



Number of **injections**, **visits**, and **safety** from BL to Month 6

To date, **2308** patients enrolled



BL, baseline; CRT, central retinal thickness; DME, diabetic macular edema; nAMD, neovascular age-related macular degeneration; VA, visual acuity.

# SPECTRUM inclusion criteria



## Population

Aged  $\geq 50$  years

Aged  $\geq 18$  years with  
type 1 or type 2  
diabetes mellitus



## Diagnosis

A diagnosis of nAMD

A diagnosis of DME



## Treatment

Patients across all cohorts had to have been prescribed aflibercept 8 mg as part of routine clinical practice

nAMD cohorts

DME cohorts

All patients were categorized as being either:

### Treatment-naïve

Never been exposed to any medical treatment for nAMD/DME

### Previously treated

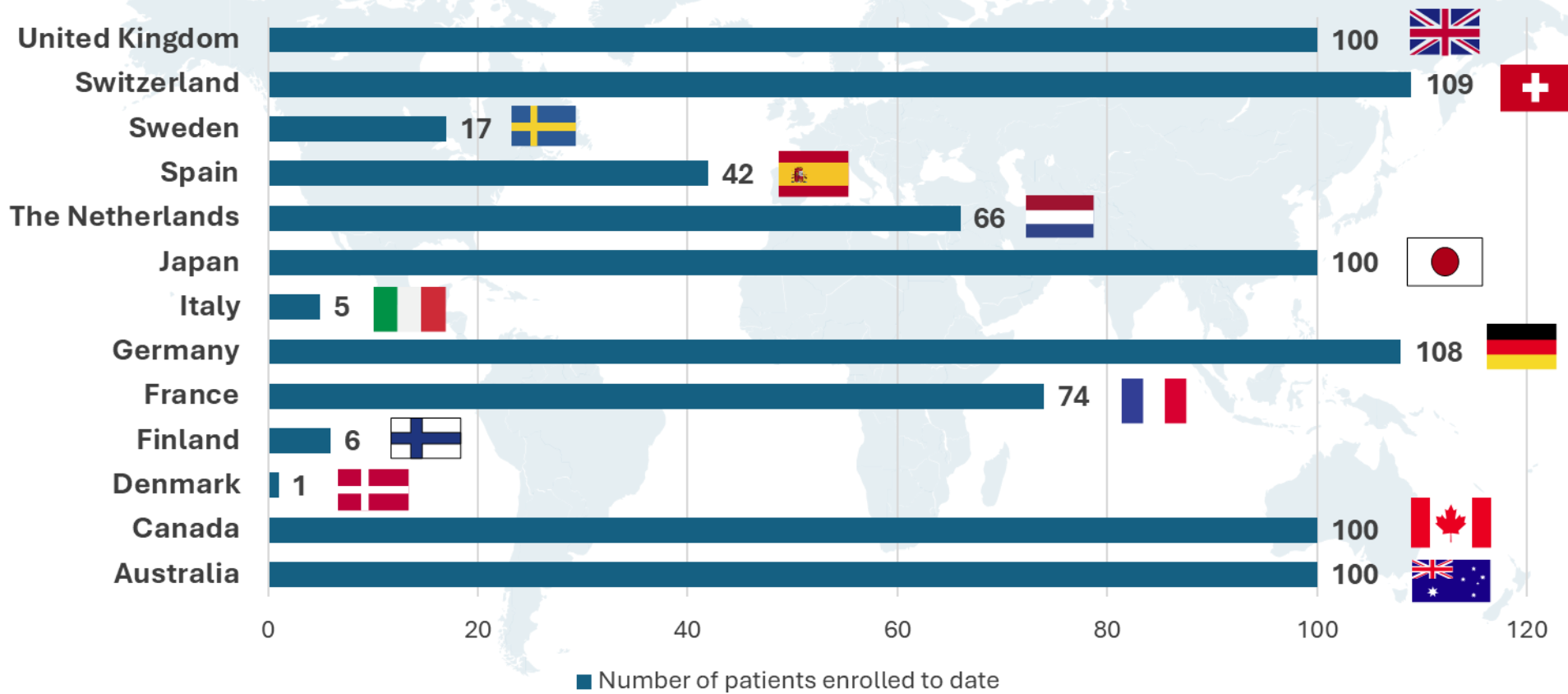
Received prior treatment, including other anti-VEGFs, up to prespecified timepoints before study start



# Enrollment overview



To date, **828** out of **1110 (75%)** planned patients have been enrolled in the **previously treated nAMD** cohort (as of April 17, 2025)





**Early outcomes in the first ~100 patients  
with previously treated nAMD  
who had a visit and VA assessment at  
Week 4**



# Baseline characteristics: Previously treated nAMD

## Analysis of patients with a VA assessment at Week 4<sup>a</sup>

**Total:** 110 patients

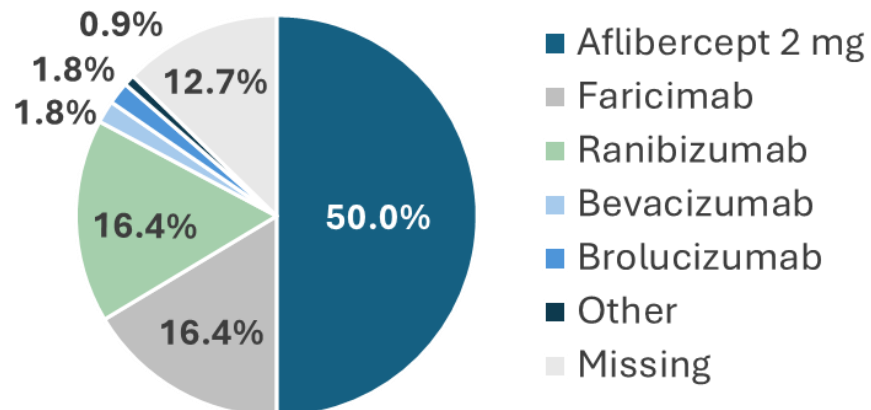
**Mean age:** 80.2 ± 8.1 years

**Median (min, max) time from nAMD diagnosis:** 31.5 (1.3, 178.7) months

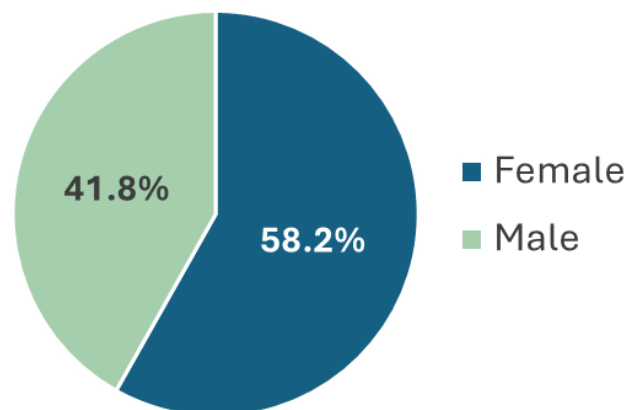
**Mean baseline VA:** 62.6 ± 19.3 ETDRS letters

**Mean baseline CRT:** 321 ± 102 μm

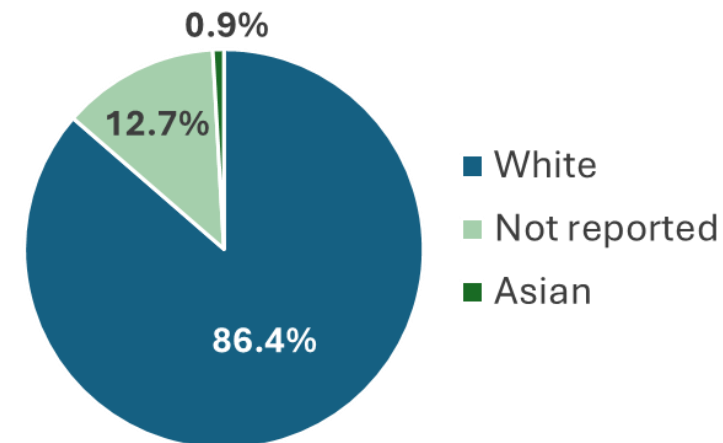
### Previous nAMD medication



### Sex



### Race<sup>b</sup>



FAS. Percentages may not add up to 100 due to rounding.

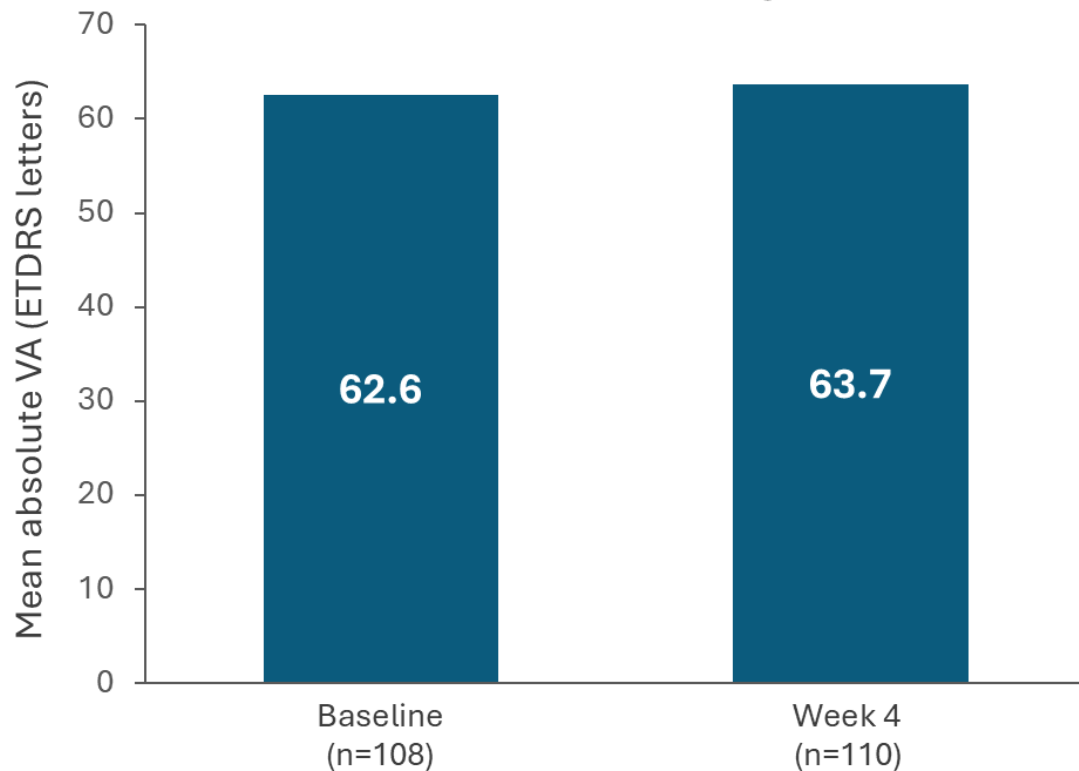
<sup>a</sup>Data are mean ± SD unless otherwise indicated. <sup>b</sup>Data on race were collected for Australia, Canada, Germany, Italy, Japan, Portugal, South Korea, Saudi Arabia, Spain, Switzerland, United Arab Emirates, and the UK only.

ETDRS, Early Treatment Diabetic Retinopathy Study; FAS, full analysis set; Max, maximum; Min, minimum; SD, standard deviation; UK, United Kingdom.

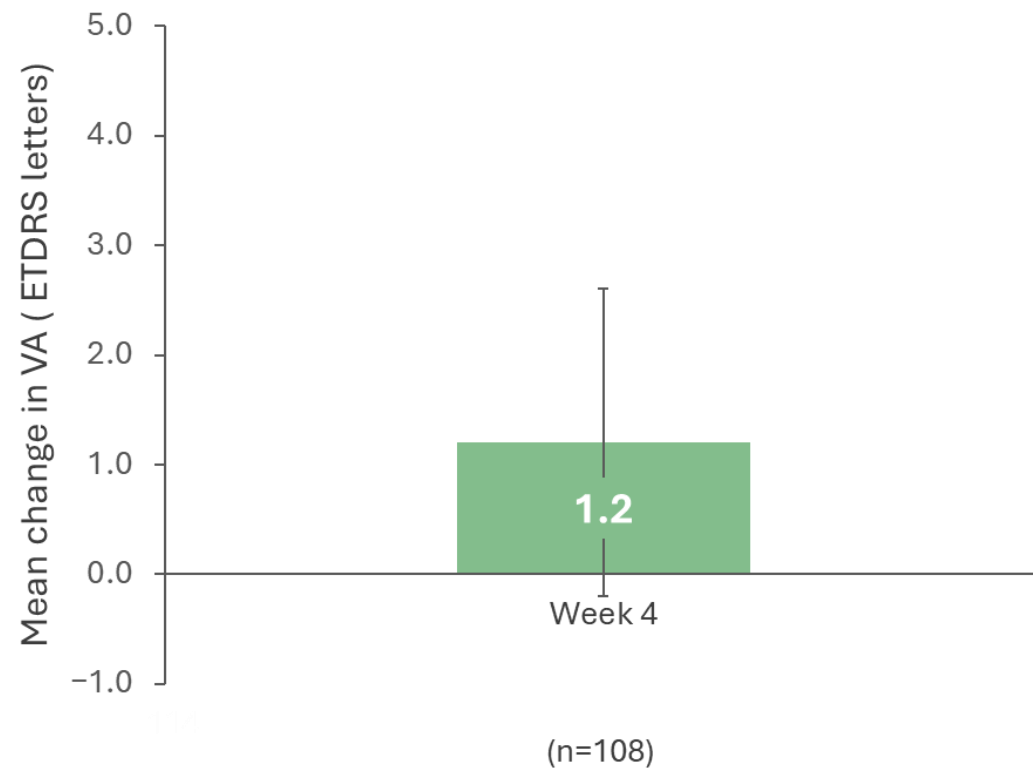


## Key endpoint: VA through Week 4

Mean absolute VA through Week 4

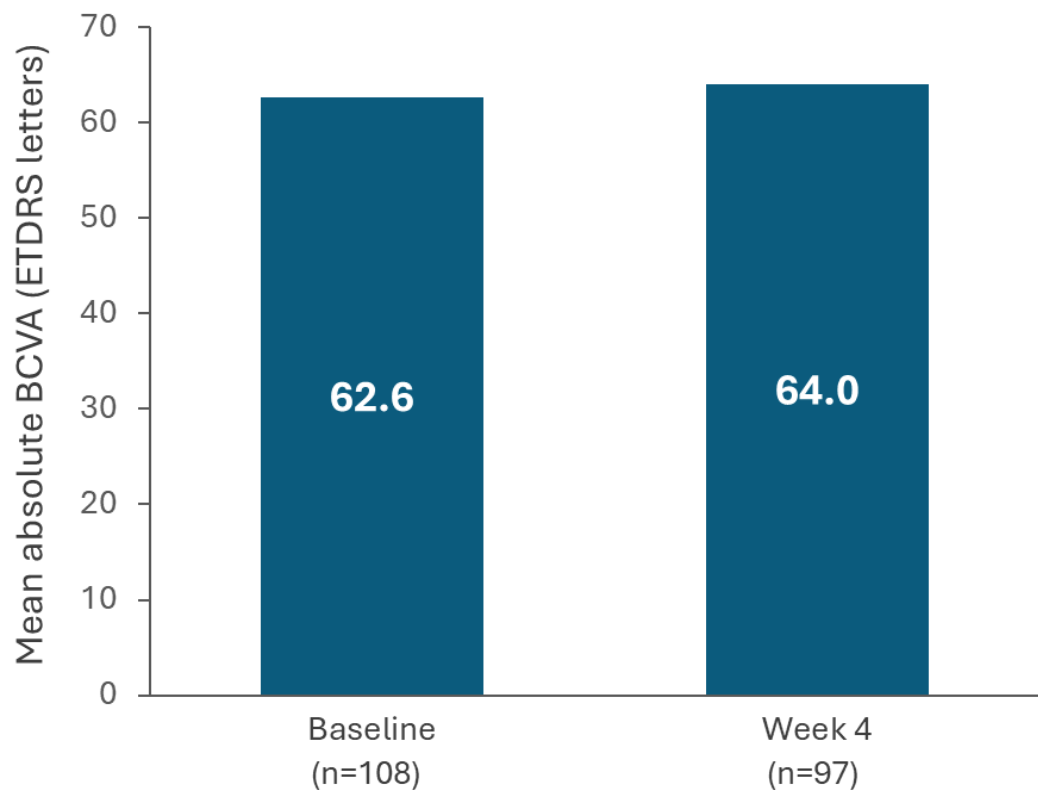


Mean change in VA from BL

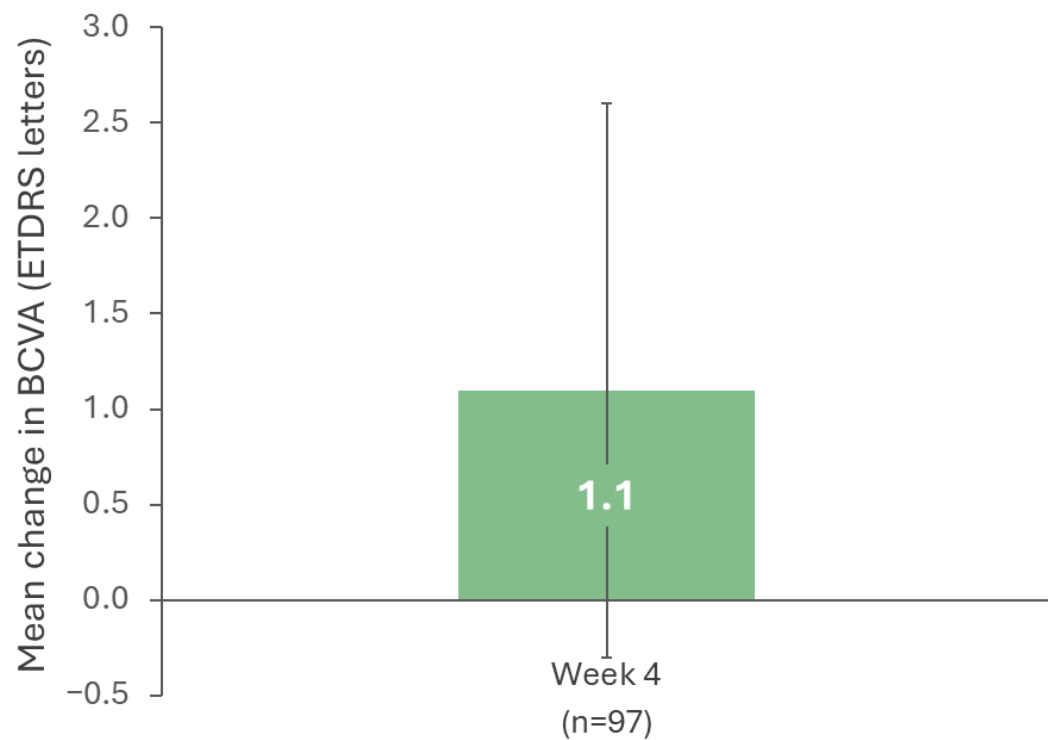


# Sensitivity analysis: BCVA through Week 4

Mean absolute BCVA through Week 4



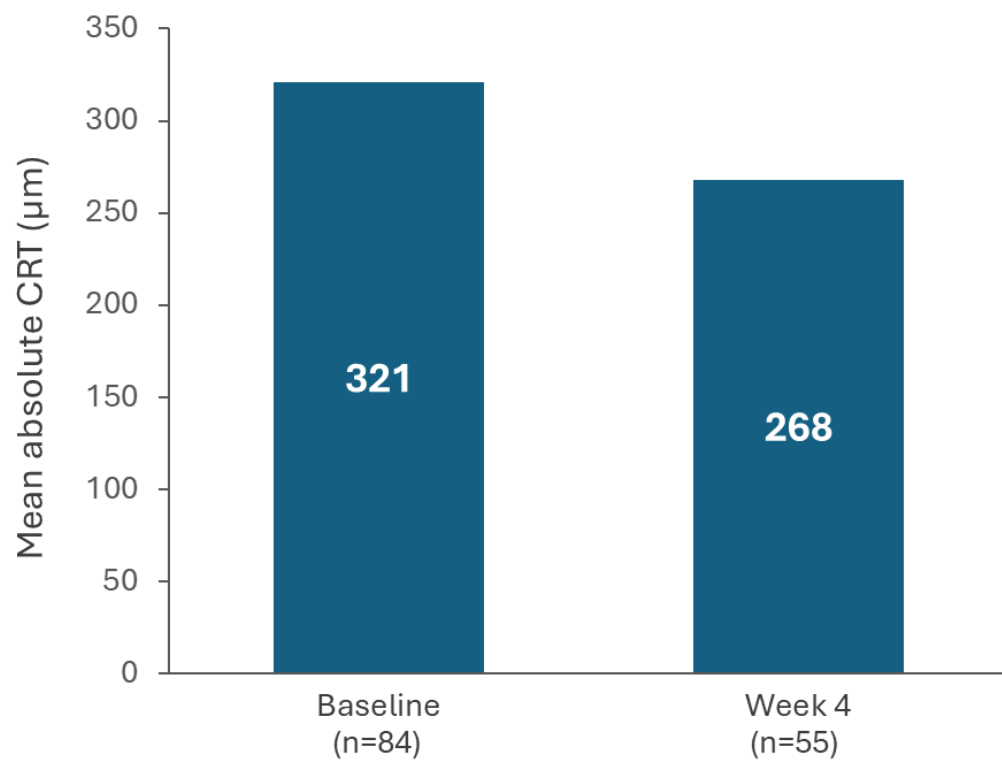
Mean change in BCVA from BL



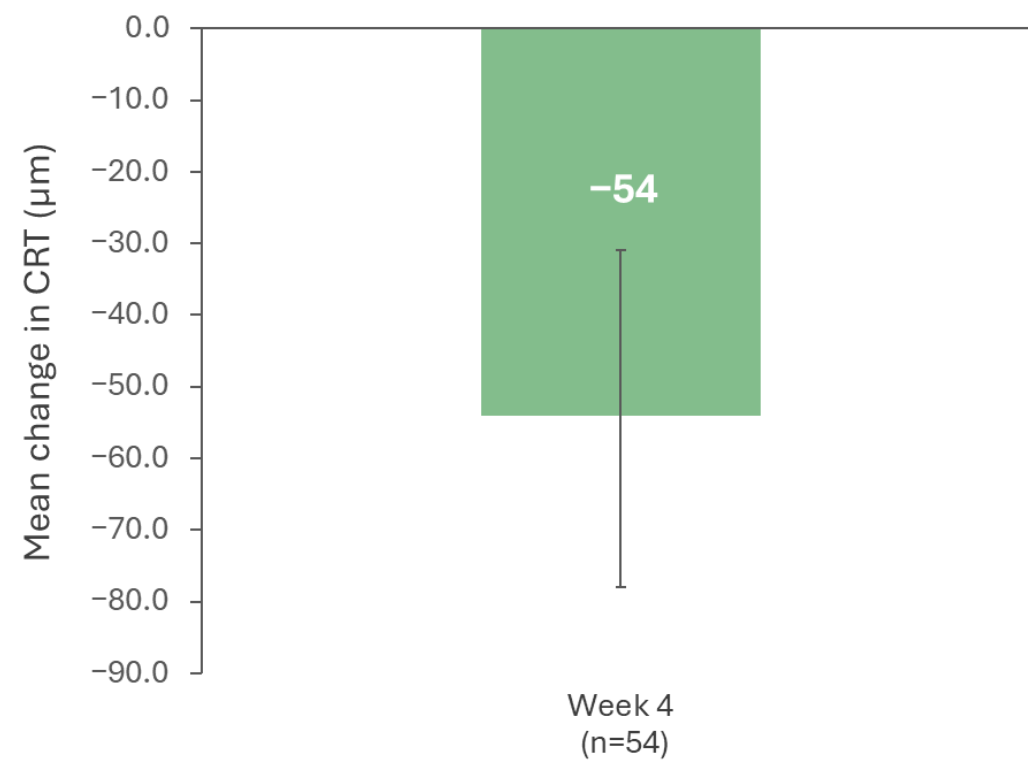


## CRT through Week 4

Mean absolute CRT through Week 4



Mean change in CRT from BL





## Safety overview: Adverse events

Ocular safety in the study eye	Total (N=110)
Ocular TEAEs, n (%)	6 (5.5)
Serious ocular TEAEs, n (%)	1 (0.9)



No non-ocular TEAEs were reported



**Early outcomes in the first ~100 patients  
with previously treated nAMD  
who had a visit and VA assessment at  
Week 8**



# Baseline characteristics: Previously treated nAMD

## Analysis of patients with a VA assessment at Week 8<sup>a</sup>

**Total:** 104 patients

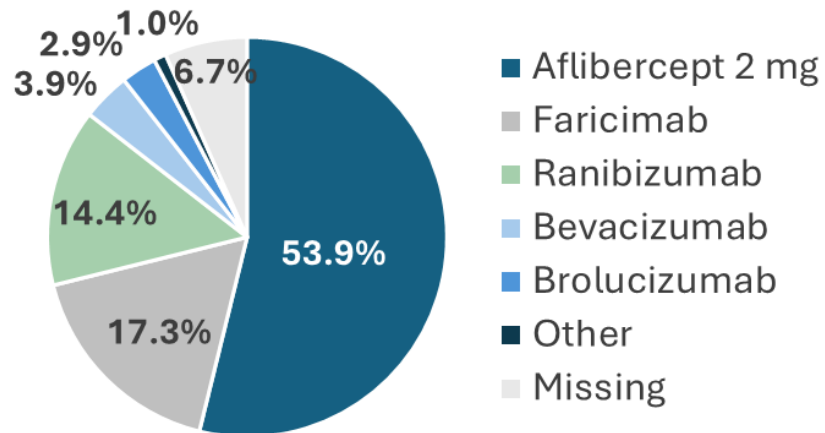
**Mean age:** 79.5 ± 7.3 years

**Median (min, max) time from nAMD diagnosis:** 36.9 (1.4, 178.9) months

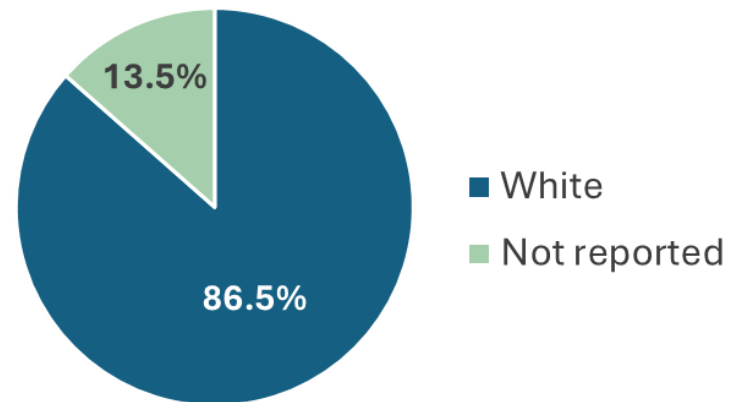
**Mean baseline VA:** 61.6 ± 19.4 ETDRS letters

**Mean baseline CRT:** 316 ± 102 μm

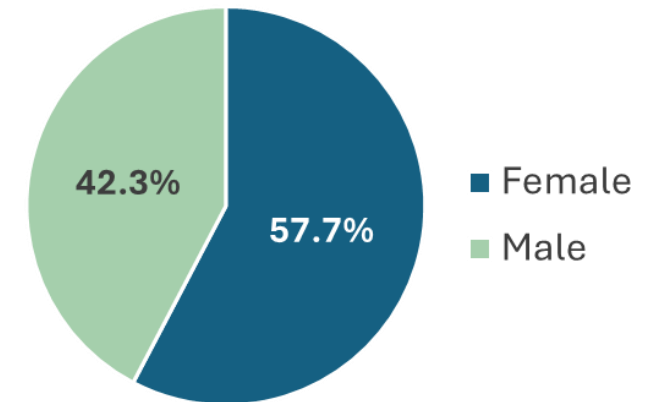
### Previous nAMD medication



### Race<sup>b</sup>



### Sex

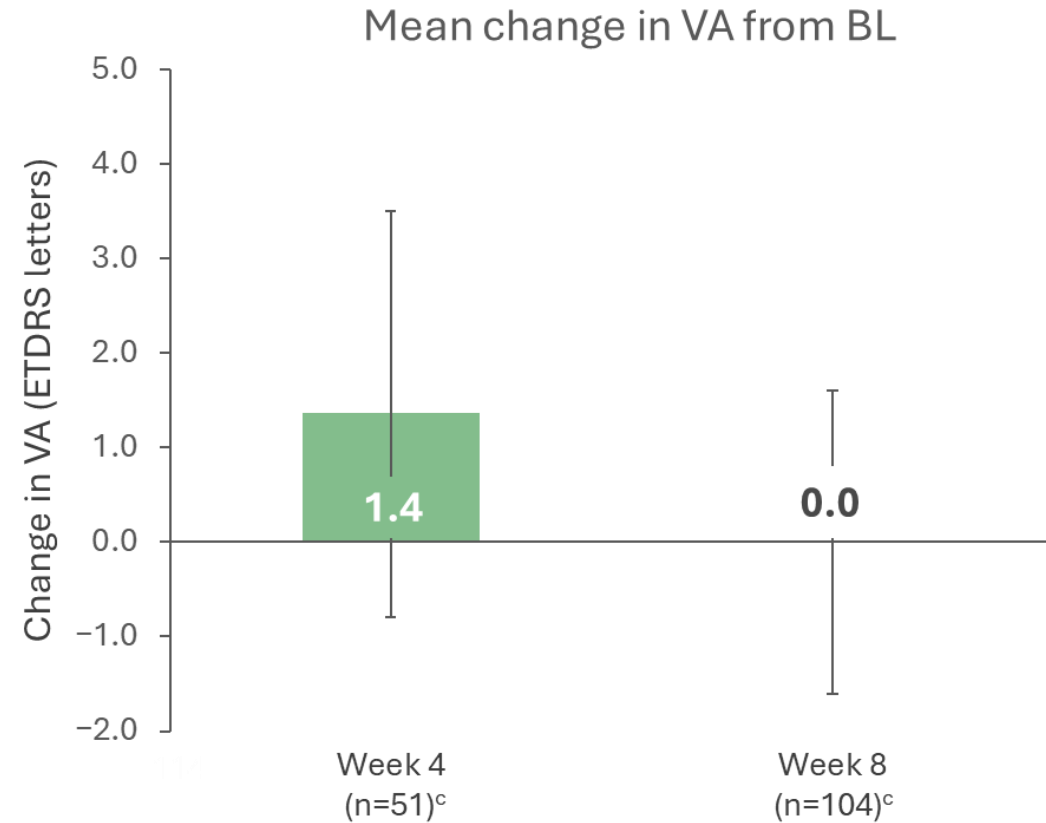
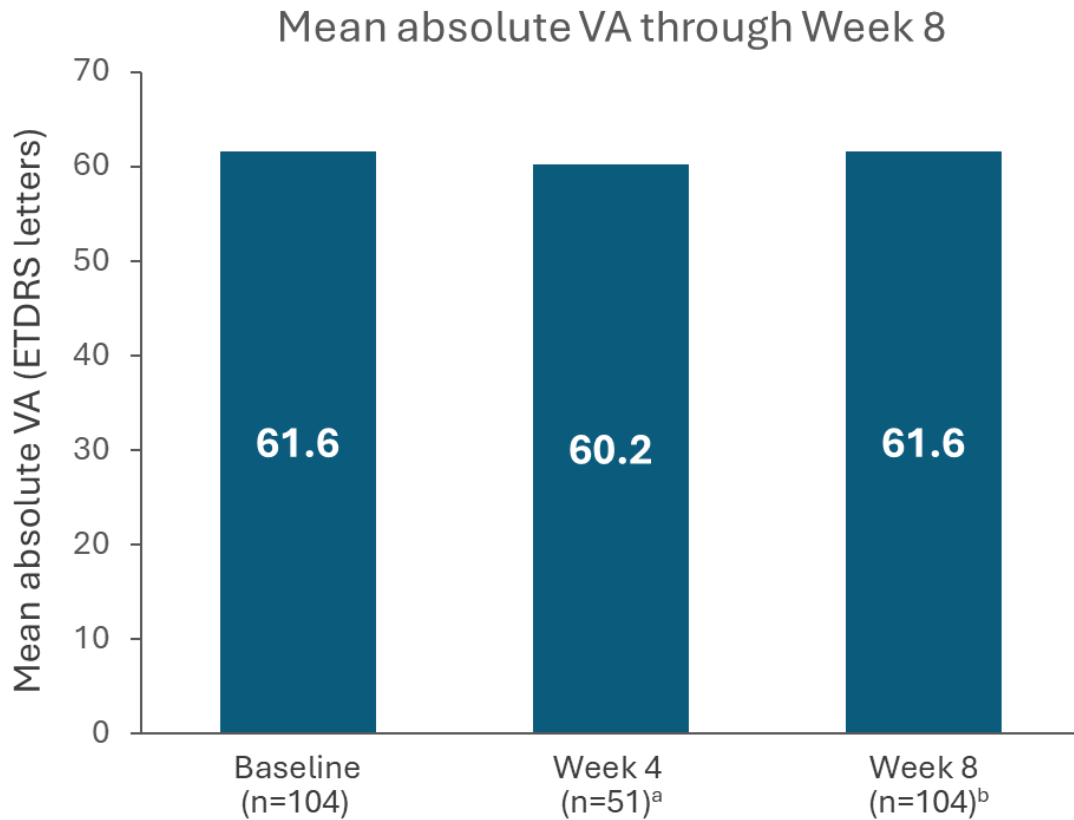


FAS. Percentages may not add up to 100 due to rounding.

<sup>a</sup>Data are mean ± SD unless otherwise indicated. <sup>b</sup>Data on race were collected for Australia, Canada, Germany, Italy, Japan, Portugal, South Korea, Saudi Arabia, Spain, Switzerland, United Arab Emirates, and the UK only. 12



## Key endpoint: VA through Week 8

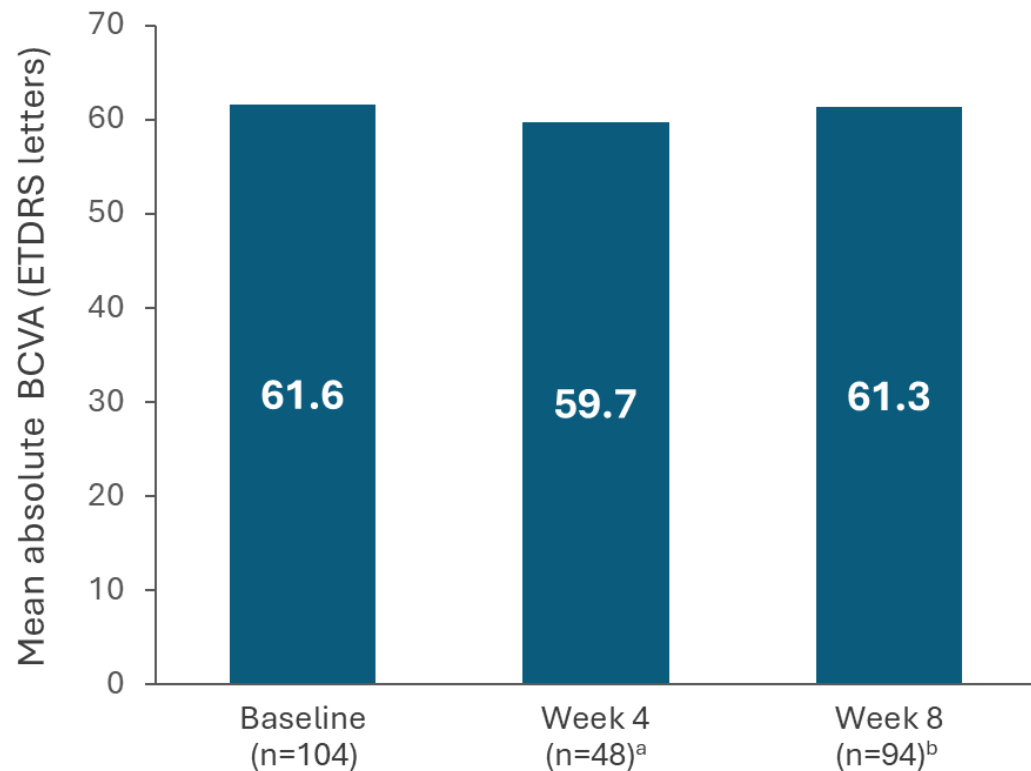


FAS, OC. Values have been rounded to the nearest decimal point. Error bars are 95% CI. This analysis was based on patients with a VA assessment at Week 8. <sup>a</sup>Patients with a VA assessment at BL and Week 4. <sup>b</sup>Patients with a VA assessment at BL and Week 8. <sup>c</sup>Mean VA change at Week 4 and Week 8 from BL was calculated in 51 and 104 patients with a VA assessment at Week 4 and Week 8, respectively.

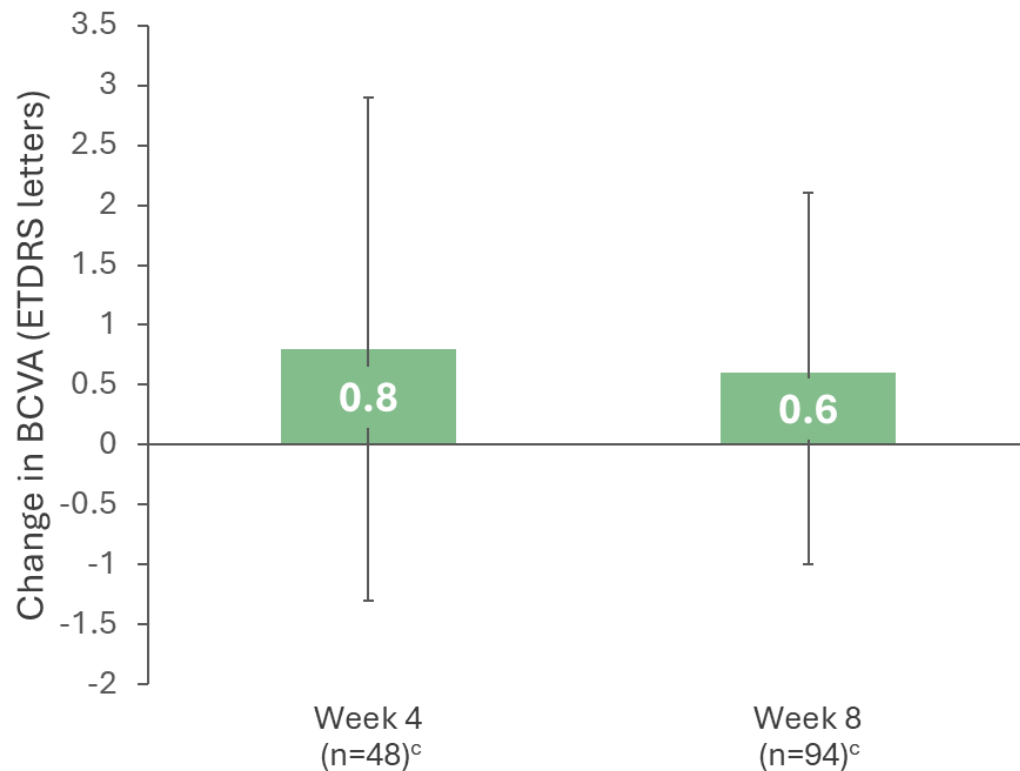


# Sensitivity analysis: BCVA through Week 8

Mean absolute BCVA through Week 8



Mean change in BCVA from BL

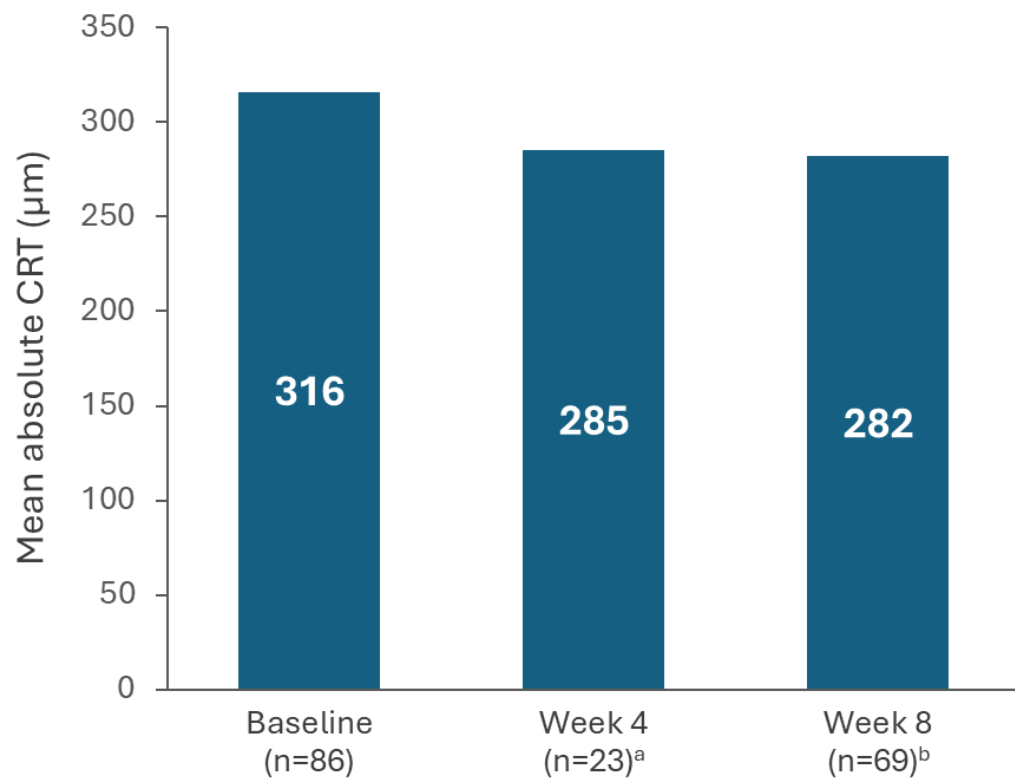


FAS, OC. Values have been rounded to the nearest decimal point. Error bars are 95% CI. This analysis was based on patients with a BCVA assessment at Week 8. <sup>a</sup>Patients with a BCVA assessment at BL and Week 4.

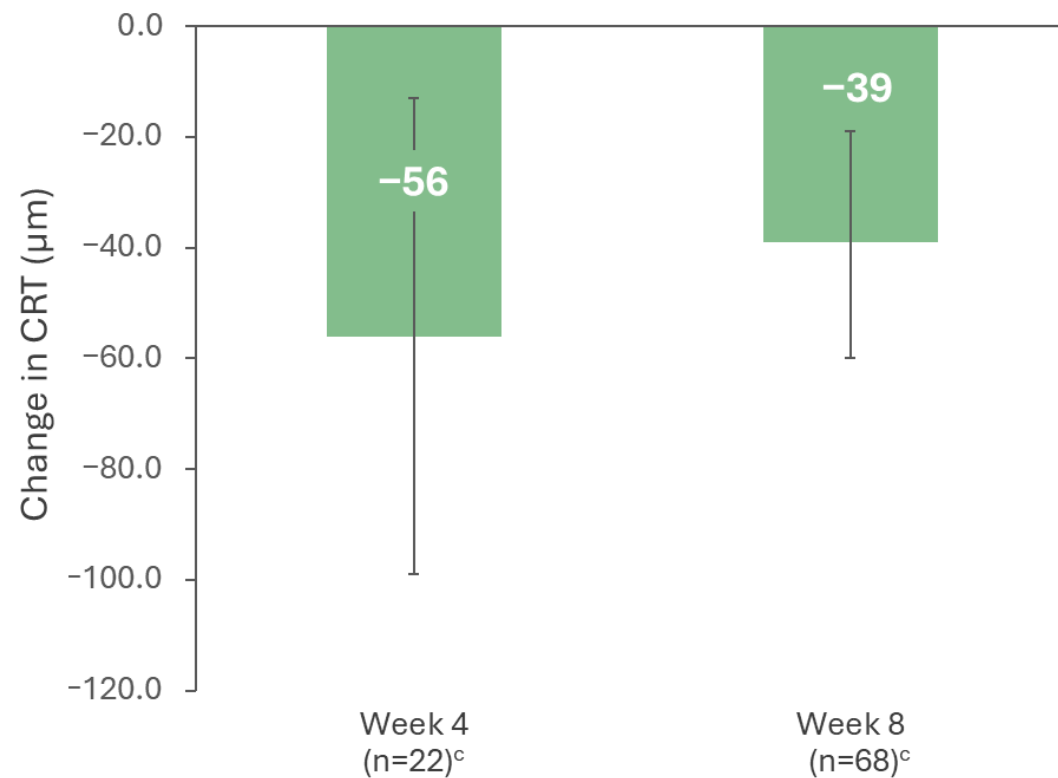
<sup>b</sup>Patients with a BCVA assessment at BL and Week 8. <sup>c</sup>Mean BCVA change at Week 4 and Week 8 from BL was calculated in 48 and 94 patients with a BCVA assessment at Week 4 and Week 8, respectively.

# CRT through Week 8

Mean absolute CRT through Week 8



Mean change in CRT from BL





# Safety overview: Adverse events

Ocular safety in the study eye	Total (N=104)
Ocular TEAEs, n (%)	4 (3.9)
Serious ocular TEAEs, n (%)	0



No non-ocular TEAEs were reported





# Early findings from SPECTRUM support the real-world effectiveness and safety of aflibercept 8 mg in the treatment of previously treated nAMD



More than **2000** patients enrolled in SPECTRUM across **17 countries** to date



More than **800** patients enrolled in the **previously treated nAMD cohort** across **13 countries** to date



## Early clinical outcomes at Week 4/Week 8

- Stable VA and BCVA and reduced CRT following switch to aflibercept 8 mg



## Safety outcomes at Week 4/Week 8

- No new safety signals identified
- No cases of IOI or serious ocular TEAEs



As the **first global real-world study of aflibercept 8 mg**, early findings from SPECTRUM will help **inform clinical management** of previously treated nAMD in patients receiving aflibercept 8 mg

**Month 6 data** will be presented in **2025**, with Month 12 and Month 24 analyses on track