



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

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

¹Department of Ophthalmology, University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, UK;

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

⁴Hamilton Regional Eye Institute, St. Joseph's Healthcare Hamilton, McMaster University, Hamilton, ON, Canada;

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

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

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

¹³Northwestern University, Feinberg School of Medicine, Chicago, IL, USA





SPECTRUM

Disclosures

- **Clare Bailey:** Receives honoraria from Alimera Sciences, Apellis, Bayer, and Roche; and has served on advisory boards for Apellis, Bayer, Boehringer Ingelheim, Janssen, and Roche
 - **CL:** Receives honoraria from Apellis, Bayer, Biogen, and Novartis. **VC:** Consulting fees from EyePoint; receives grants from Bayer, Novartis, Roche; and serves on advisory boards for Alcon, Apellis, Bayer, Boehringer Ingelheim, Novartis, and Roche. **PL:** Consultant for Aerie Pharmaceuticals, Allergan, Annexon, Apellis, Bausch + Lomb, Bayer, Biogen, Boehringer Ingelheim, EyePoint Pharmaceuticals, Genentech, I-Care, Novartis, Ocular Therapeutix, Outlook Therapeutics, and Roche. **HO:** Consultant for AbbVie, Bayer, Novartis, and Roche. **MK** and **TM:** Employees of Bayer AG. **HA, XZ,** and **ZH:** Employees of Bayer Consumer Care AG. **MRM:** Consulting fees from AbbVie, Allergan, Apellis, Aviceda Therapeutics, Bayer, Boehringer-Ingelheim, Dandelion, EyePoint, Gensight, Isarna Therapeutics, Iveric Bio, Kubota, Lumithera, Novartis, Ocuterra, Oculis, Ocular Therapeutix, RetinAI, Roche, and Zeiss
- The SPECTRUM study (NCT06075147) was sponsored by Bayer AG (Leverkusen, Germany)
- The sponsor participated in the design and conduct of the study, analysis of the data, and preparation of this presentation
- Medical writing support, under the direction of the authors, was provided by ApotheCom and funded by Bayer Consumer Care AG (Basel, Switzerland), in accordance with Good Publication Practice (GPP) guidance (*Ann Intern Med.* 2022;175:1298–1304)



SPECTRUM: Global real-world study of aflibercept 8 mg

A 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



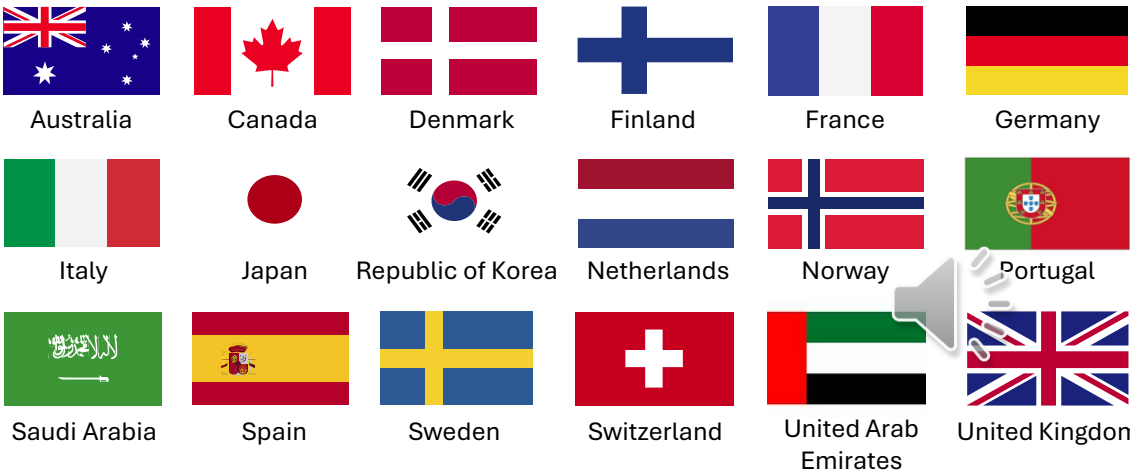
Secondary endpoints include:

Change in **VA** and **CRT** from BL to Month 6



Number of **injections**, **visits**, and **safety** through Month 6

 To date, **2149** patients enrolled



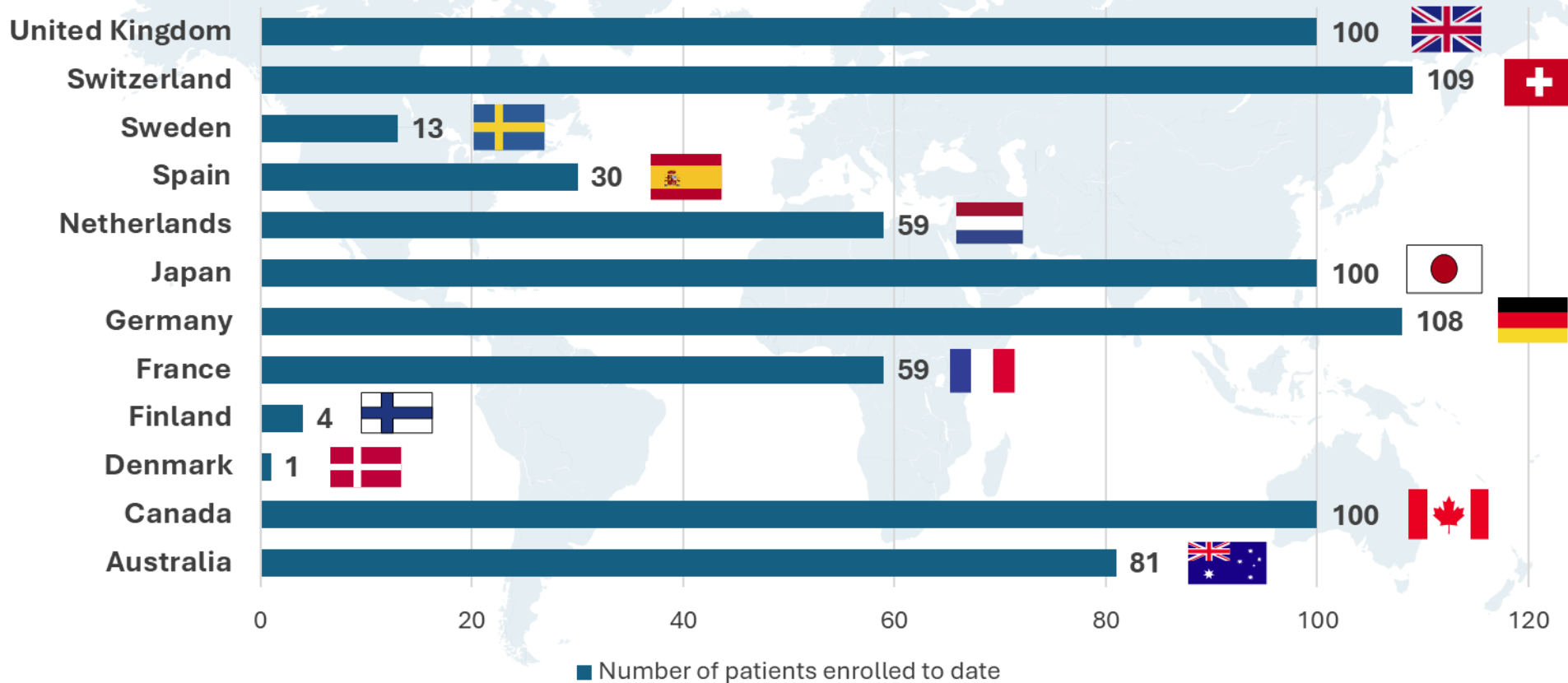
BL, baseline; CRT, central retinal thickness; DME, diabetic macular edema; nAMD, neovascular age-related macular degeneration; VA, visual acuity.



Enrollment overview



To date, **764** out of **1110 (69%)** planned patients have been enrolled in the **previously treated nAMD** cohort





Enrollment overview

**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

Interim analysis of patients with a VA assessment at Week 8^a

Total: 104 patients

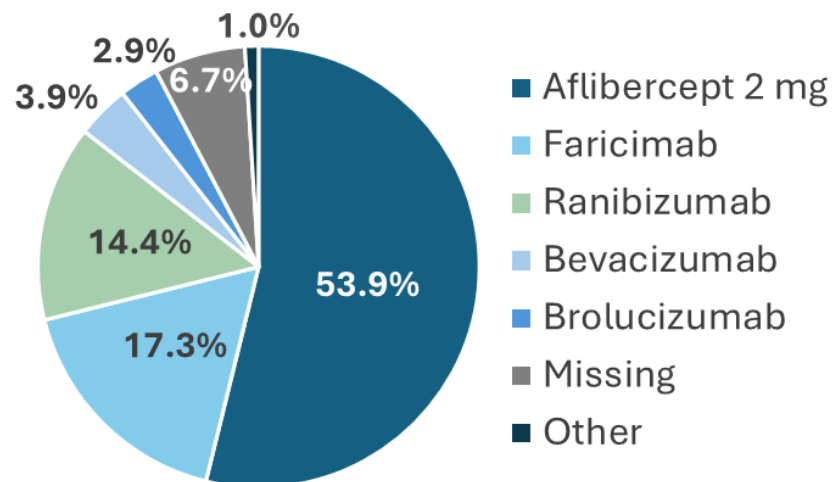
Mean age: 79.5 ± 7.3 years

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

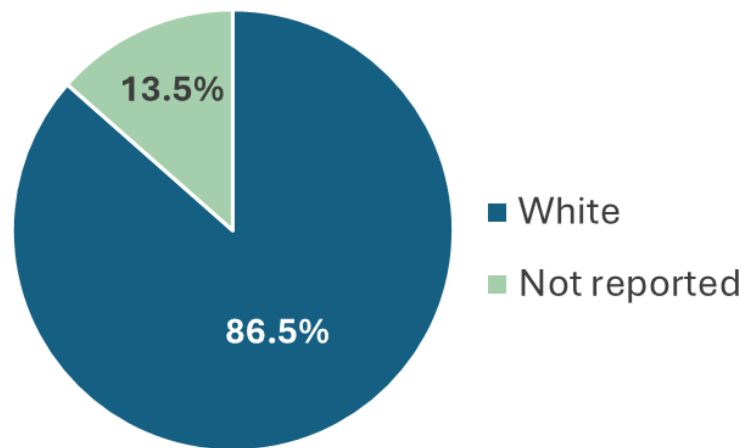
Mean baseline VA: 61.6 ± 19.4 ETDRS letters

Mean baseline CRT: 316 ± 102 μm

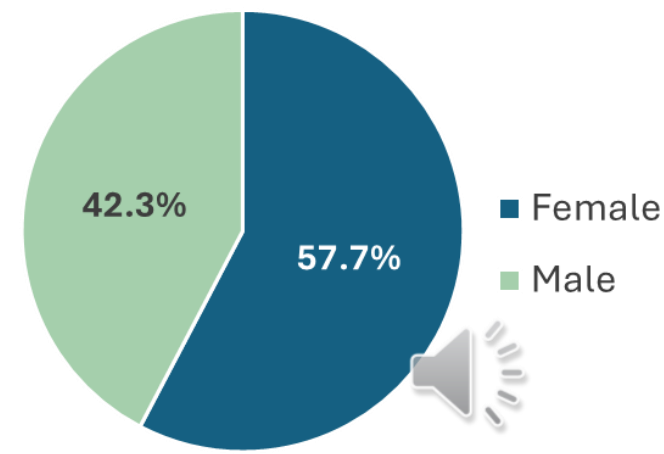
Previous nAMD medication



Race^b



Sex



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

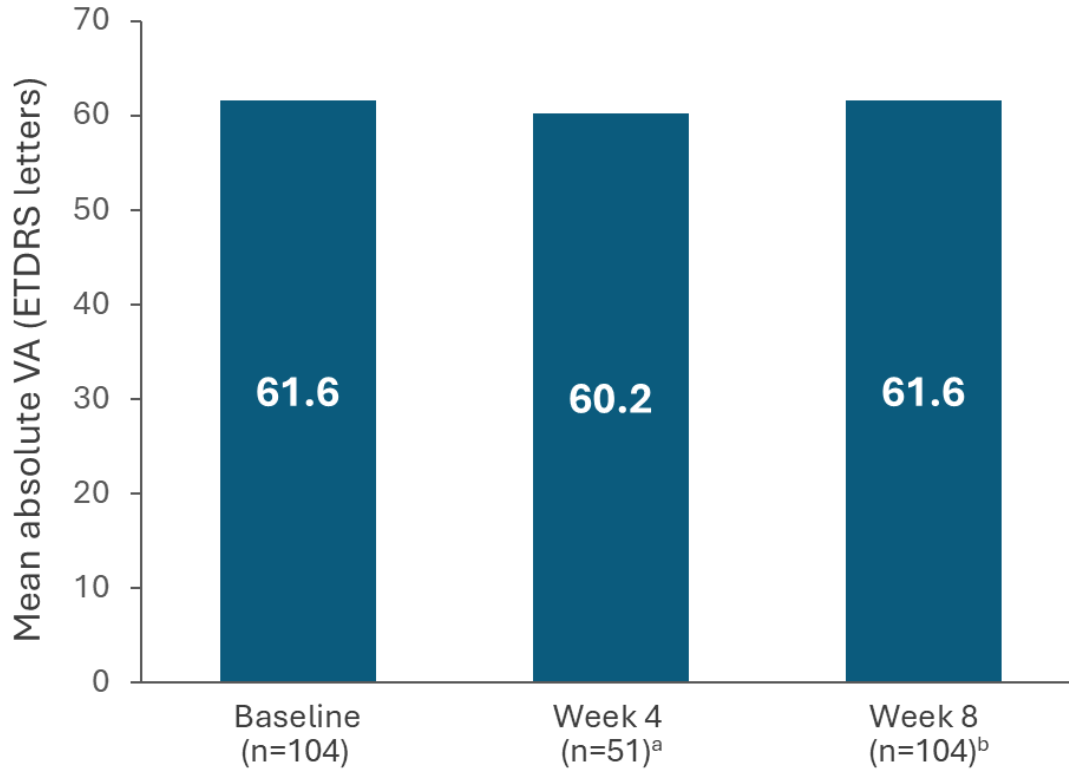
^aData are mean ± SD unless otherwise indicated. ^bData on race were collected for Australia, Canada, Germany, Italy, Japan, Portugal, South Korea, Saudi Arabia, Spain, Switzerland, United Arab Emirates, and the UK only.

ETDRS, Early Treatment Diabetic Retinopathy Study; FAS, full analysis set.

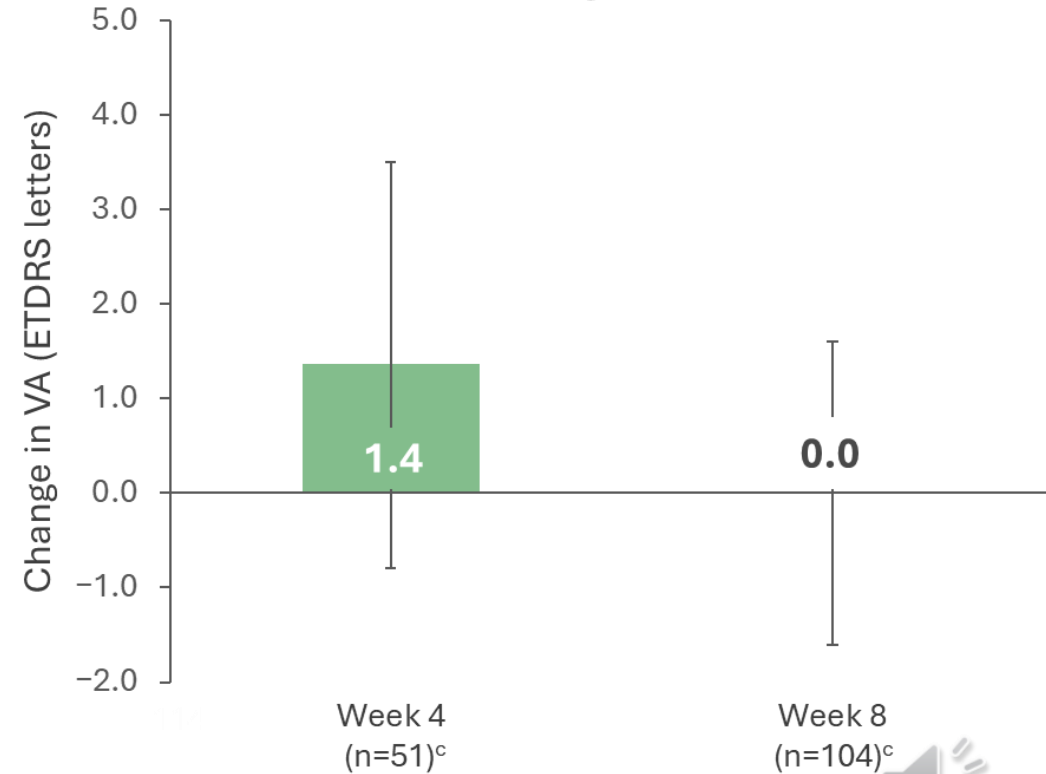


VA through Week 8

Mean absolute VA through Week 8



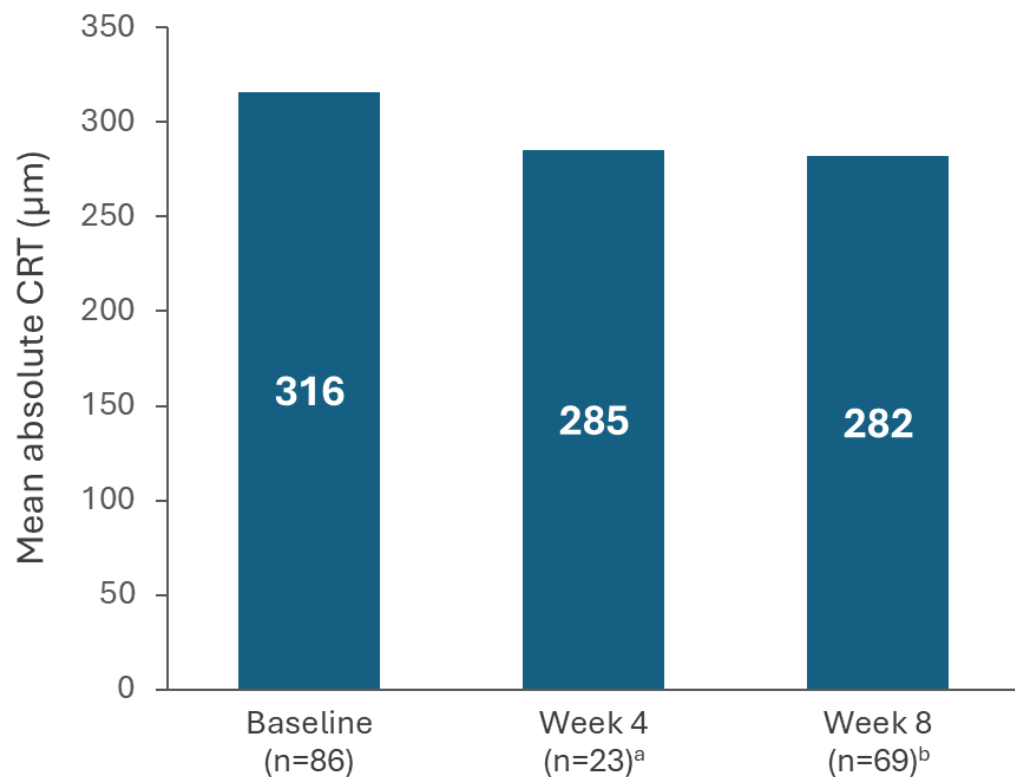
Mean change in VA from BL



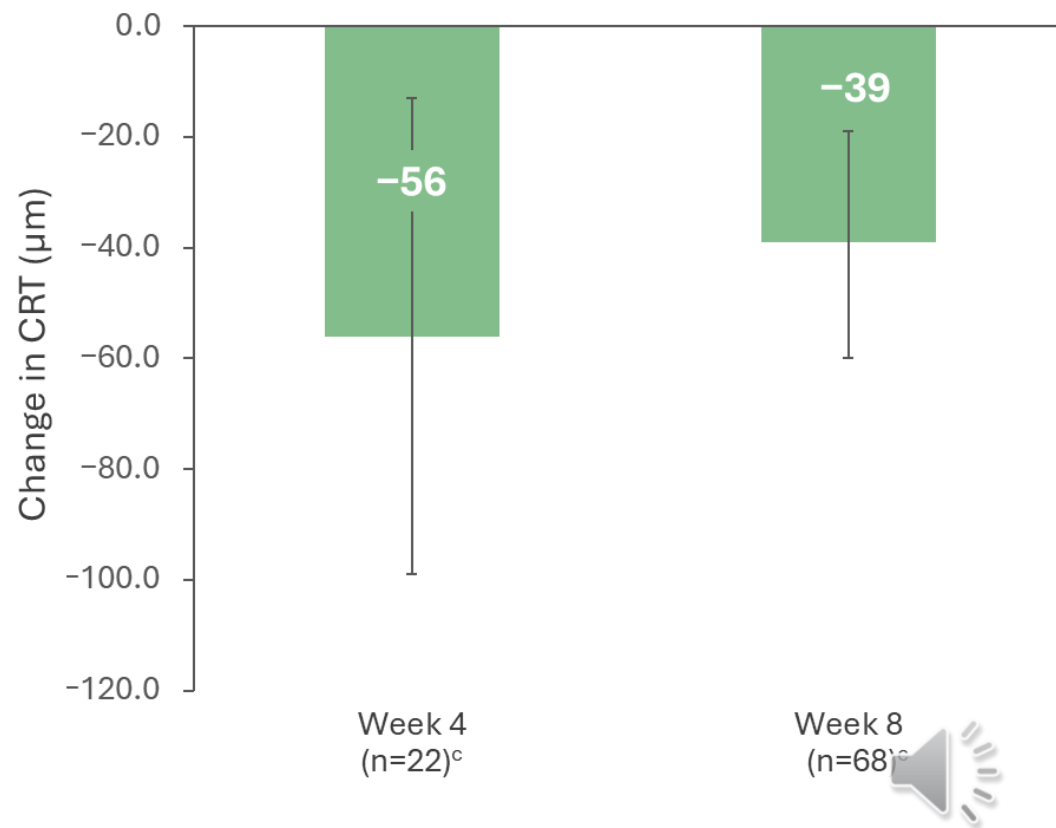
FAS, OC. Values have been rounded to the nearest decimal point. ^aPatients with a VA assessment at BL and Week 4. ^bPatients with a VA assessment at BL and Week 8. ^cMean VA change at Week 4 and Week 8 from BL was calculated in patients with a VA assessment at Week 4 and Week 8, respectively; error bars are 95% CI. CI, confidence intervals; OC, observed cases.

CRT through Week 8

Mean absolute CRT through Week 8

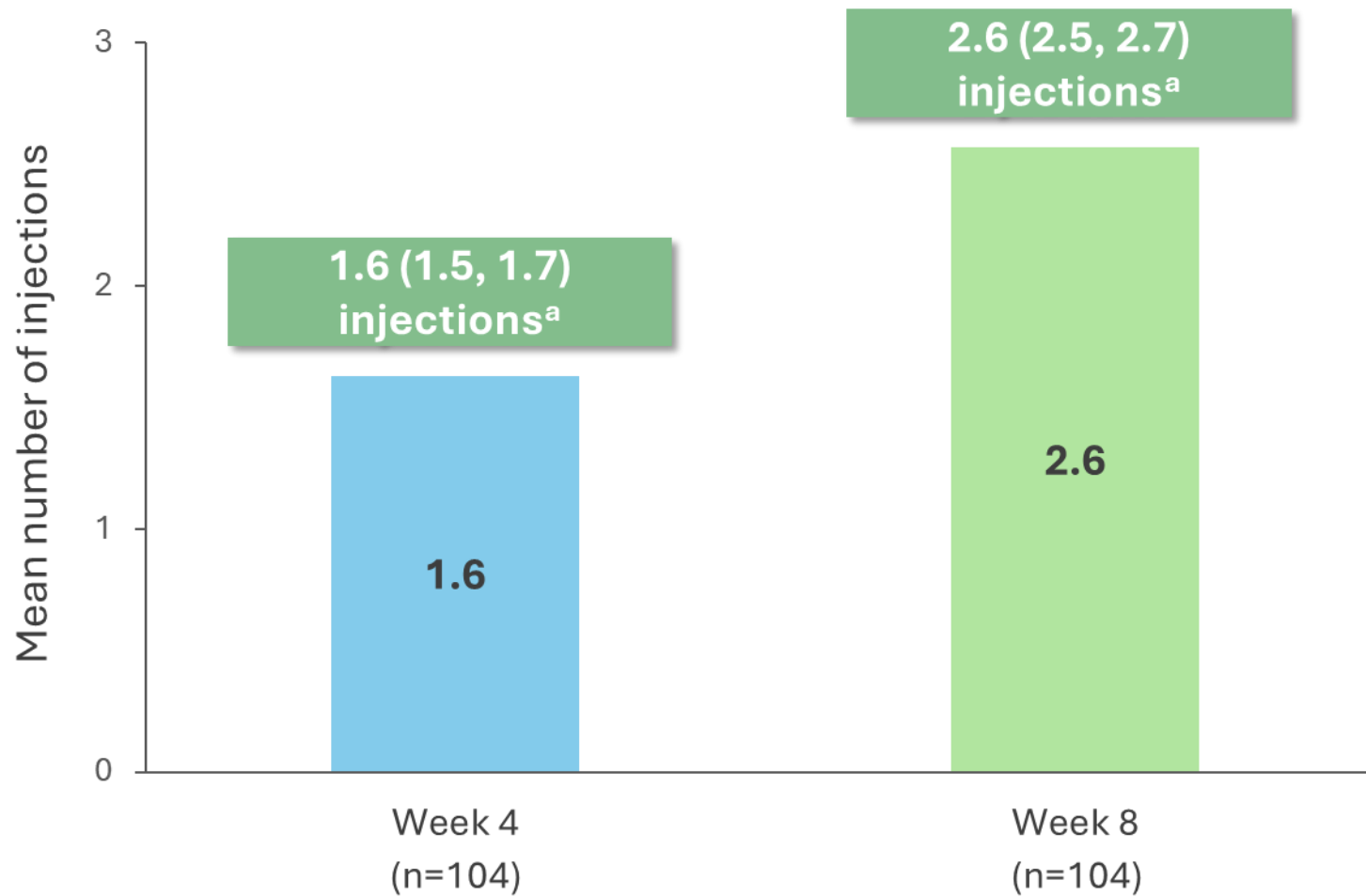


Mean change in CRT from BL





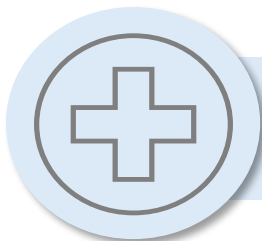
Mean number of aflibercept 8 mg injections in the study eye through Week 8





Safety overview

Ocular safety in the study eye	Total (N=104)
Ocular TEAEs, n (%)	4 (3.9)
Conjunctival hemorrhage	1 (1.0)
Vitreous floaters	1 (1.0)
Not yet coded	2 (1.9)
Study drug-related ocular TEAEs, n (%)	2 (1.9)
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



2149/4035 patients enrolled in SPECTRUM across **16 countries** to date



764/1110 patients enrolled in the **previously treated nAMD cohort** across **12 countries** to date



Early clinical outcomes at Week 8

- Stable VA following switch to aflibercept 8 mg
- Reduction in CRT ($-39\ \mu\text{m}$)



Safety outcomes at 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