SPECTRUM: Early global real-world results with aflibercept 8 mg in patients with treatment-naïve neovascular age-related macular degeneration

Hani Hasan,¹ Vasileios Konidaris,² Clemens Lange,^{3,4} Marion R. Munk,^{5,6,7} Paolo Lanzetta,^{8,9} Varun Chaudhary,

¹⁰ Hassiba Oubraham,¹¹ Tobias Machewitz,¹² Helmut Allmeier,¹³ Xin Zhang,¹³ Clare Bailey,¹⁴

on behalf of the SPECTRUM study investigators

¹Newcastle Upon Tyne Hospitals NHS Foundation Trust, Newcastle Upon Tyne, UK; ²Department of Ophthalmology, University Hospitals of Leicester NHS Trust, Leicester, UK; ³Eye Center, Faculty of Medicine, Albert-Ludwig University Freiburg, Freiburg, Germany; ⁴Department of Ophthalmology, St Franziskus Hospital, Münster, Germany; ⁵Augenarzt Praxisgemeinschaft Gutblick AG, Pfäffikon, Switzerland; ⁶Department of Ophthalmology, University Hospital Bern, Switzerland; ⁷Northwestern University, Feinberg School of Medicine, Chicago, IL, USA; ⁸Department of Medicine–Ophthalmology, University of Udine, Italy; ⁹Instituto Europeo di Microchirurgia Oculare (IEMO), Udine, Italy; ¹⁰Hamilton Regional Eye Institute, St Joseph's Healthcare Hamilton, McMaster University, Hamilton, ON, Canada; ¹¹Centre OPHTA-45, Montargis, France; ¹²Bayer AG, Berlin, Germany; ¹³Bayer Consumer Care AG, Basel, Switzerland; ¹⁴Department of Ophthalmology, University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, UK

Disclosures

- Hani Hasan: Speaker fees and travel grants from AbbVie, Bayer, and Roche
 - VK: Receives honoraria from AbbVie, Bayer, Novartis, and Roche. CL: Receives honoraria from Apellis, Bayer, Biogen, and Novartis. MRM: Consulting fees from AbbVie, Allergan, Apellis, Aviceda Therapeutics, Bayer, Boehringer Ingelheim, Dandelion, EyePoint, Gensight, Iveric Bio, Isarna Therapeutics, Kubota, Lumithera, Novartis, Ocuterra, Oculis, Ocular Therapeutix, RetinAl, Roche, and Zeiss. PL: Consultant for Aerie Pharmaceuticals, Allergan, Annexon, Apellis, Bausch + Lomb, Bayer, Biogen, Boehringer Ingelheim, EyePoint, Genentech, I-Care, Novartis, Ocular Therapeutix, Outlook Therapeutics, and Roche. VC: Consulting fees from EyePoint; receives grants from Bayer, Novartis, and Roche; and serves on advisory boards for Alcon, Apellis, Bayer, Boehringer Ingelheim, Novartis, and Roche. HO: Consultant for AbbVie, Bayer, Novartis, and Roche. TM: Employee of Bayer AG. **HA** and **XZ**: Employees of Bayer Consumer Care AG. **CB:** Received honoraria from Alimera Sciences, Apellis, Bayer, and Roche; and has served on advisory boards for Apellis, Bayer, Boehringer Ingelheim, Janssen, and Roche
- The SPECTRUM study (NCT06075147) was sponsored by Bayer Consumer Care AG, Basel, Switzerland
- 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)
- Data originally presented at ARVO 2025, Salt Lake City, UT, USA, May 4–8, 2025

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

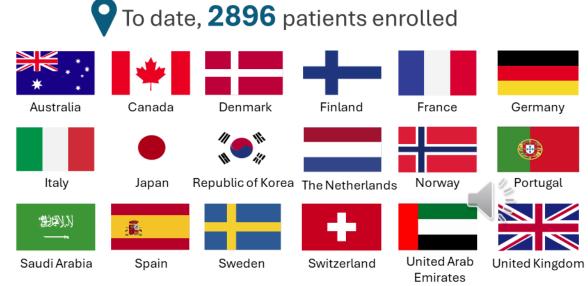
Secondary endpoints include:



Change in VA and CRT from BL to Month 6



Number of injections and visits, and safety through Month 6



SPECTRUM inclusion criteria



Population

nAMD cohorts

Aged ≥50 years

DME cohorts

Aged ≥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

All patients were categorized as being either:

Treatment-naïve

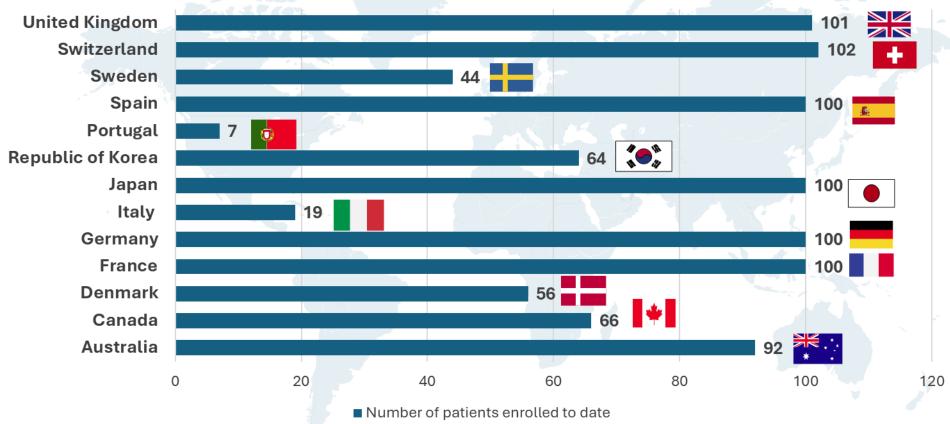
Never been exposed to any medical treatment for nAMD/DME

Previously treated

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

M Enrollment overview

To date, **951** out of **1200 (79%)** planned patients have been enrolled in the **treatment-naïve nAMD** cohort (as of May 30, 2025)





Early outcomes in the first ~100 patients with treatment-naïve nAMD who had a visit and VA assessment at Week 4





Baseline characteristics: Treatment-naïve nAMD

Analysis of patients with a VA assessment at Week 4a

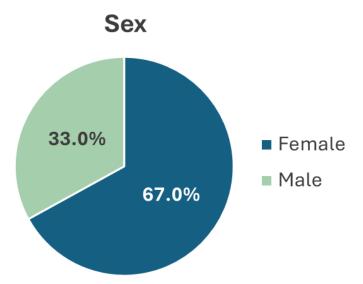
Total: 100 patients

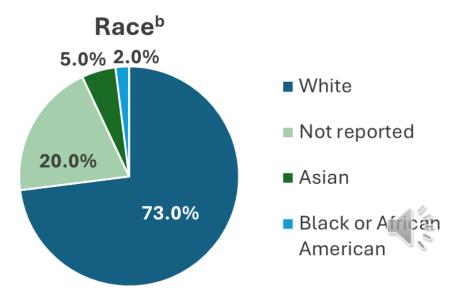
Mean age: 79.7 ± 6.6 years

Median (min, max) time from nAMD diagnosis: 0.1 (0.0, 21.9) months

Mean baseline VA: 60.2 ± 17.4 ETDRS letters

Mean baseline CRT: 374 ± 124 µm

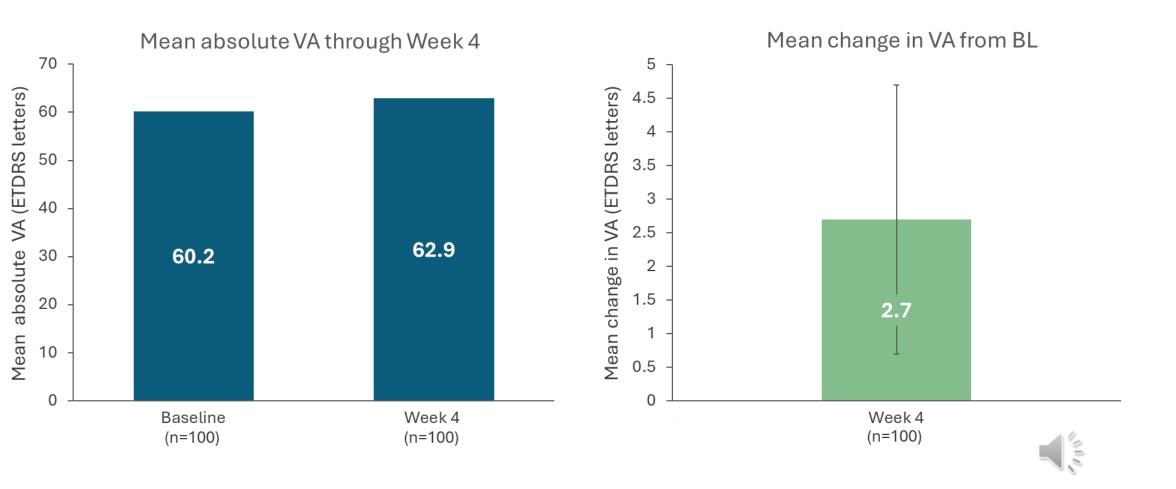




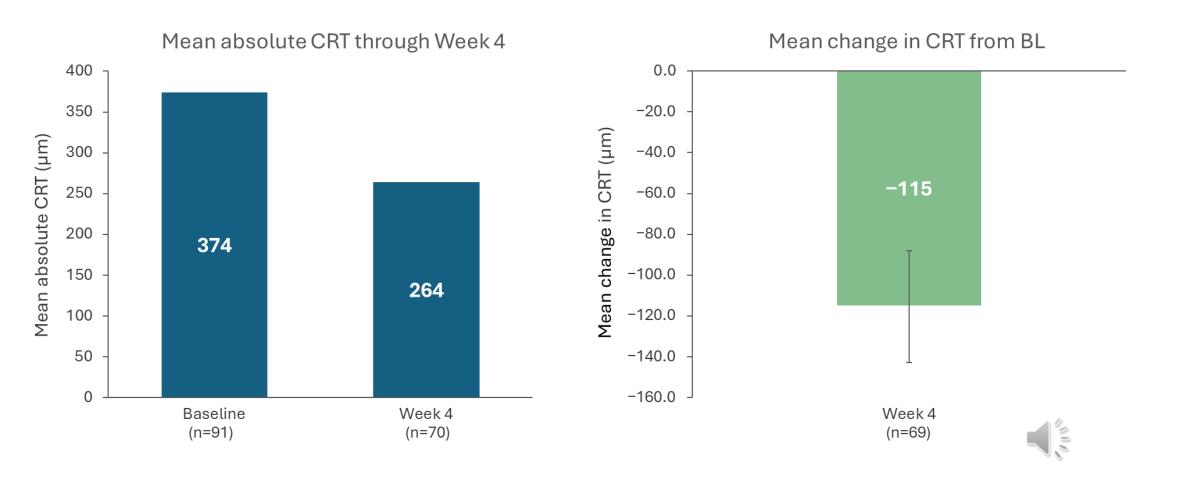
FAS. Percentages may not add up to 100 due to rounding.



Key endpoint: VA through Week 4

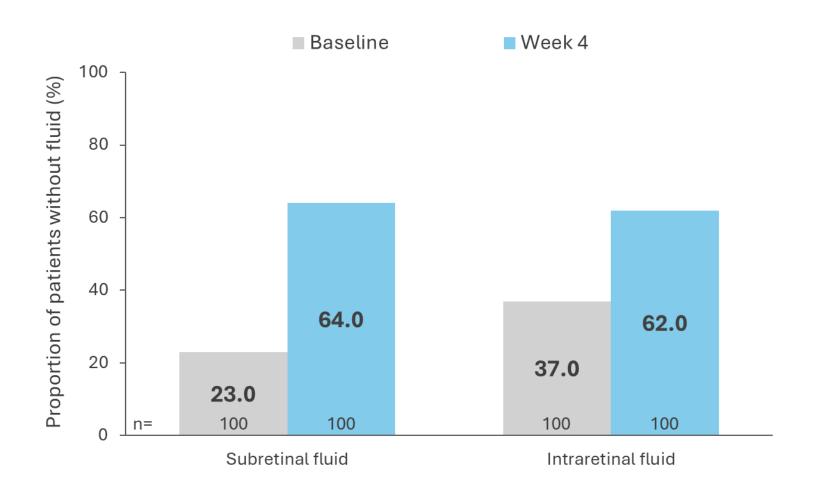


CRT through Week 4





Proportion of patients without fluid through Week 4







Safety overview: Adverse events

	Total (N=100)
Ocular TEAEs in the study eye, n (%)	3 (3.0)
Non-ocular TEAEs, n (%)	1 (1.0)



No serious ocular or non-ocular TEAEs were reported



Early outcomes in the first ~100 patients with treatment-naïve nAMD who had a visit and VA assessment at Week 8





Baseline characteristics: Treatment-naïve nAMD

Analysis of patients with a VA assessment at Week 8^a

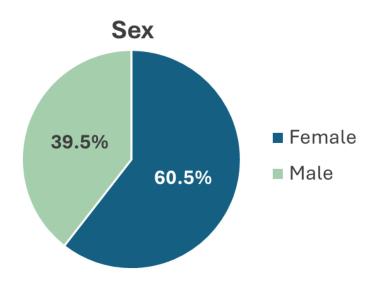
Total: 114 patients

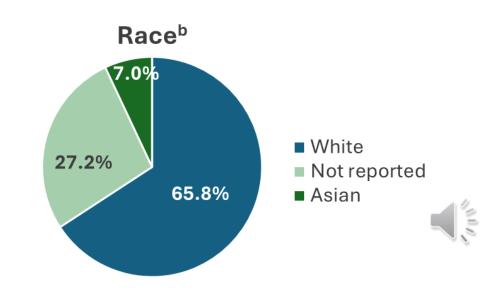
Mean age: 80.8 ± 7.1 years

Median (min, max) time from nAMD diagnosis: 0.2 (0.0, 21.9) months

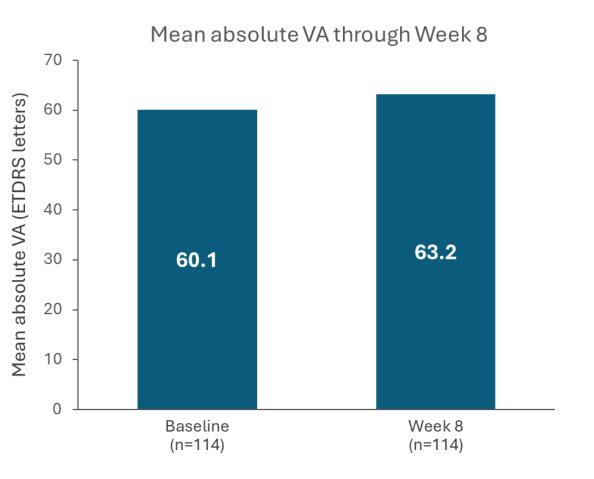
Baseline VA: 60.1 ± 17.4 FTDRS letters

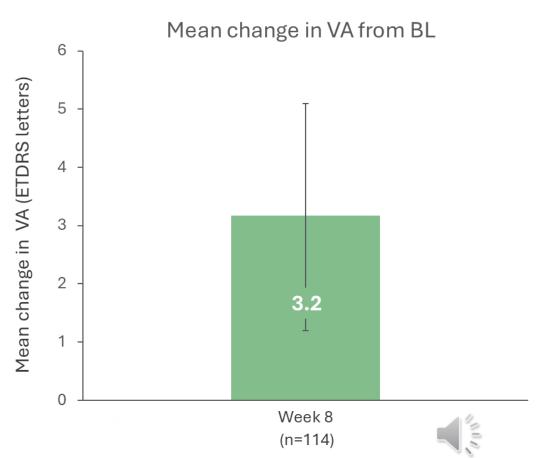
Baseline CRT: 358 ± 110 µm



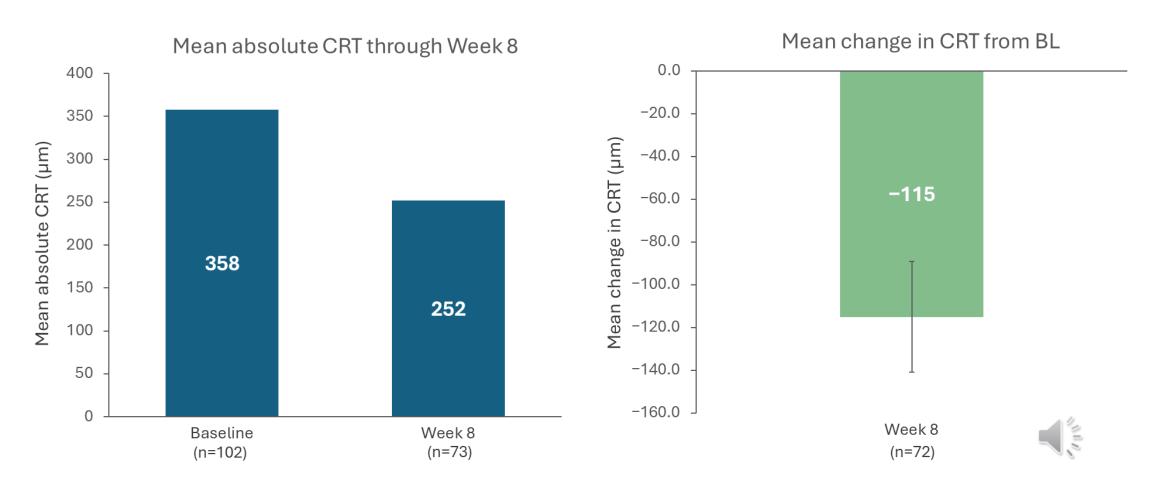


Rey endpoint: VA through Week 8



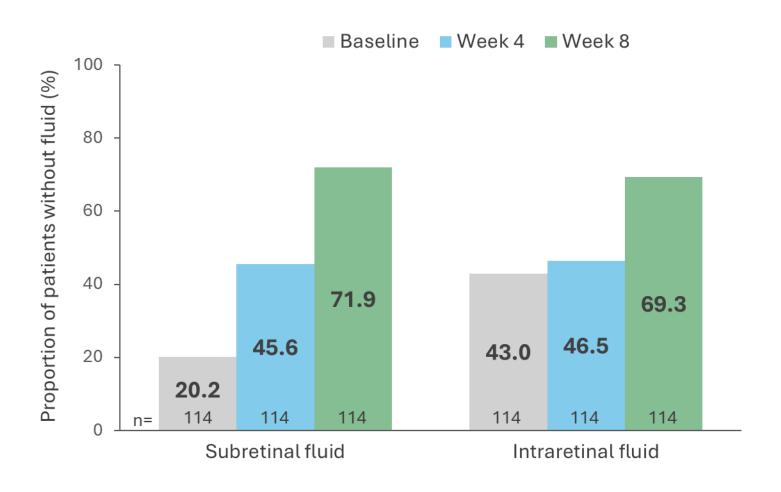


CRT through Week 8





Proportion of patients without fluid through Week 8







Safety overview: Adverse events

	Total (N=114)
Ocular TEAEs in the study eye, n (%)	3 (2.6)
Non-ocular TEAEs, n (%)	5 (4.4)



No serious ocular or non-ocular TEAEs were reported



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



More than **2800** patients enrolled in SPECTRUM across **17 countries** to date



More than 900 patients enrolled in the treatment-naive nAMD cohort across
13 countries to date



Early clinical outcomes at Week 4/Week 8

Improved VA through Week 4 and Week 8
 (+2.7 and +3.2 ETDRS letters, respectively) and reduced CRT



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 treatment-naïve nAMD in patients receiving aflibercept 8 mg

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