

Impact of baseline best-corrected visual acuity on visual and anatomic outcomes in patients with retinal vein occlusion: Post hoc analysis of the Phase 3 QUASAR trial

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Disclosures

- **Christiana Dinah** serves as a speaker and/or consultant for AbbVie, Alimera Sciences, Apellis, Bayer, Boehringer Ingelheim, Eyepoint, Johnson & Johnson, Ocular Therapeutix, 4DMT and Roche; and has received grant funding from Apellis, Roche and Boehringer Ingelheim
- The QUASAR trial (NCT05850520) was sponsored by Bayer AG (Leverkusen, Germany) and co-funded by Regeneron Pharmaceuticals, Inc. (Tarrytown, New York). This analysis was funded by Regeneron Pharmaceuticals, Inc. (Tarrytown, New York). The sponsors participated in the design and conduct of the study, analysis of the data, and preparation of this presentation
- This study included research conducted on human patients. Institutional Review Board/Institutional Ethics Committee approval was obtained prior to study initiation
- Medical writing support was provided by Charlotte Head, BSc, ISMPP CMPP™, of MEDiSTRAVA (Yardley, Pennsylvania), funded by Regeneron Pharmaceuticals, Inc. (Tarrytown, New York). Medical writing support for this encore was provided by Melanie Govender, PhD, ISMPP CMPP™, of ApotheCom (London, UK) and funded by Bayer Consumer Care AG (Basel, Switzerland). All writing support was provided under the direction of the authors and in accordance with Good Publication Practice guidelines (*Ann Intern Med* 2022;175:1298–1304)
- Data were originally presented at The Retina Society Annual Meeting, September 23–26, 2026

Overview and Methods



BACKGROUND

Baseline BCVA strongly predicts visual outcomes in RVO^{1,2}



RATIONALE

Stratifying patients with CRVO/HRVO and BRVO by baseline vision can show whether treatment benefit is consistent across disease severity



EVIDENCE

Aflibercept 8 mg with extended dosing has achieved robust visual and anatomic improvements with fewer injections compared to aflibercept 2 mg in patients with RVO³



OBJECTIVE

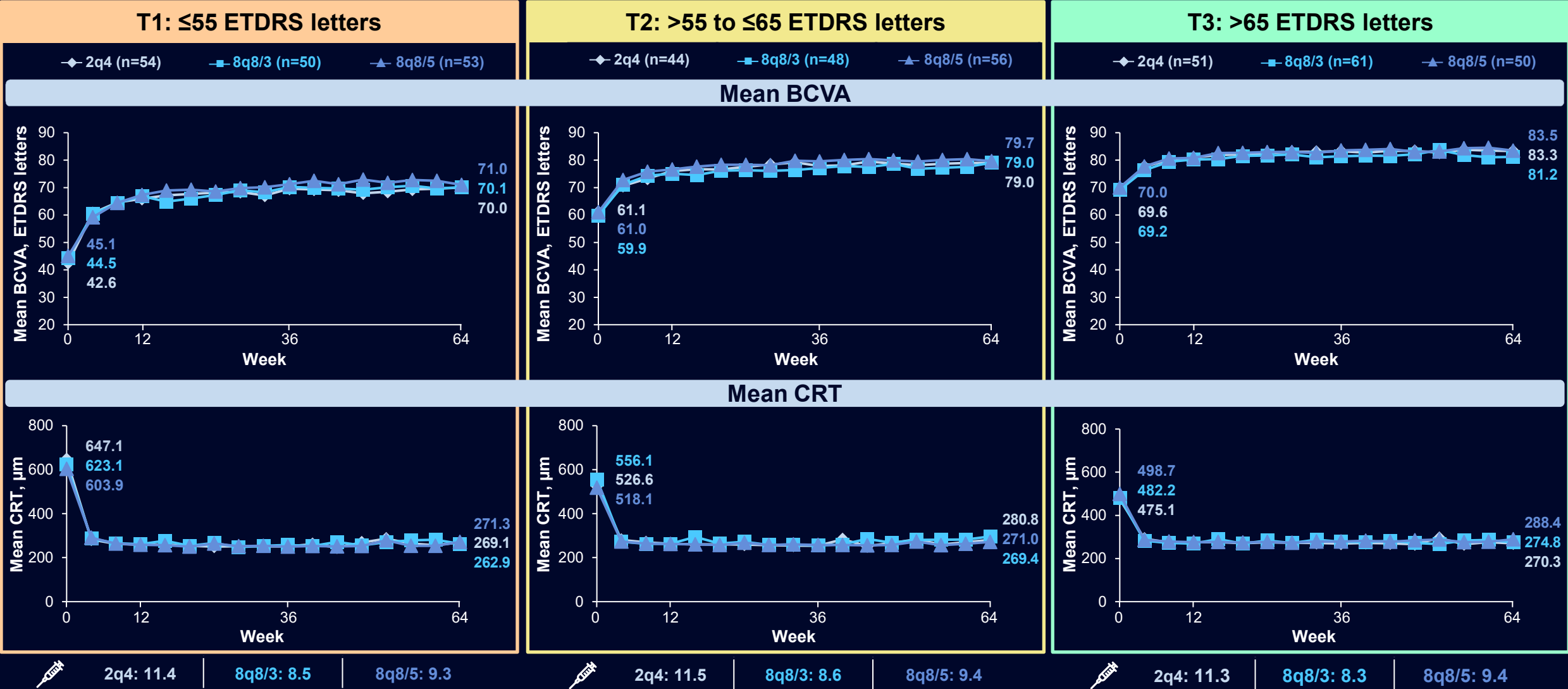
To evaluate the impact of baseline BCVA on clinical outcomes in patients with MEfRVO treated with aflibercept 8 mg versus 2 mg

- Clinical outcomes were assessed using tertile analysis stratified by baseline BCVA in patients with BRVO or CRVO/HRVO

BRVO	T1: ≤55 ETDRS letters (n=157)	T2: >55 to ≤65 ETDRS letters (n=148)	T3: >65 ETDRS letters (n=162)
CRVO/HRVO	T1: ≤47 ETDRS letters (n=141)	T2: >47 to ≤59 ETDRS letters (n=140)	T3: >59 ETDRS letters (n=144)

1. Sen P et al. *Ophthalmol Retina*. 2021;5(11):1115–1124. 2. Scott IU et al. *JAMA Ophthalmol*. 2017;135(6):639–649. 3. Hariprasad SM. Presented at: American Society of Retina Specialists Annual Meeting; July 30–August 2, 2025; Long Beach, CA. BCVA, best-corrected visual acuity; BRVO, branch retinal vein occlusion; CRVO, central retinal vein occlusion; ETDRS, Early Treatment Diabetic Retinopathy Study; HRVO, hemiretinal vein occlusion; MEfRVO, macular edema following retinal vein occlusion; RVO, retinal vein occlusion; T, tertile.

Aflibercept 8 mg: Consistent BCVA and CRT Improvements Achieved with Fewer Injections Than Aflibercept 2 mg Across Baseline BCVA Tertiles



FAS, observed cases excluding intercurrent events.
Mean number of injections reported for patients in the FAS who completed the Week 64 visit.
2q4, aflibercept 2 mg administered every 4 weeks; 8q8/3, aflibercept 8 mg administered every 8 weeks, after 3 initial injections at 4-week intervals; 8q8/5, aflibercept 8 mg administered every 8 weeks, after 5 initial injections at 4-week intervals; CRT, central retinal thickness; FAS, full analysis set.

Dosing Intervals by Baseline BCVA in Patients with BRVO

Last Assigned Dosing Interval at Week 36^a

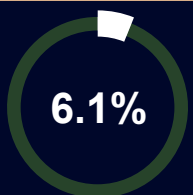
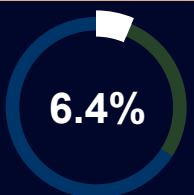
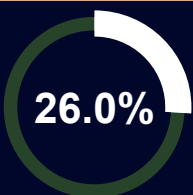
Q4 Q8 Q12 Q16

2q4

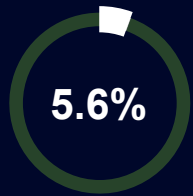
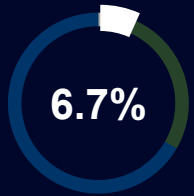
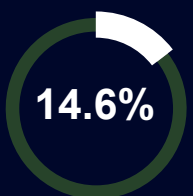
8q8/3

8q8/5^c

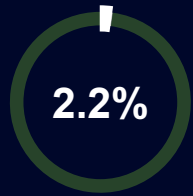
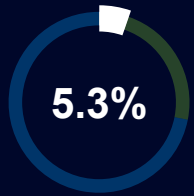
T1:
≤55 ETDRS
letters



T2:
>55 to ≤65
ETDRS
letters



T3:
>65 ETDRS
letters

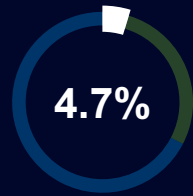
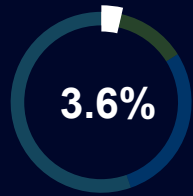
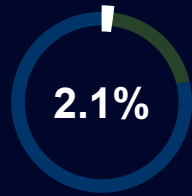
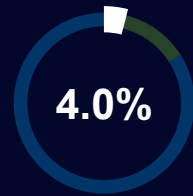
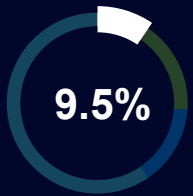
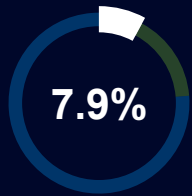
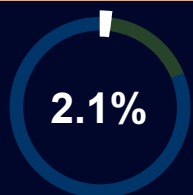
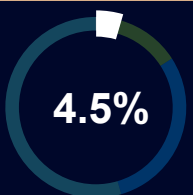
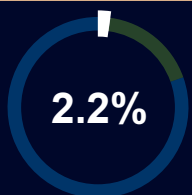


Last Completed Dosing Interval at Week 64^b

2q4

8q8/3

8q8/5^c



At Week 36, fewer patients required Q4 dosing with aflibercept 8 mg versus 2 mg across all baseline BCVA tertiles

By Week 64, the proportion of patients requiring Q4 dosing was comparable across treatment groups

Values may not add up to 100% because of rounding. ^aPatients in the FAS who completed the Week 36 visit. ^bPatients in the FAS who completed the Week 64 visit. ^cPer study design, dosing interval extension was not possible in the 8q8/5 group until Week 40.
N values for each treatment group by baseline BCVA tertile. Week 36: T1: n=50 (2q4), n=47 (8q8/3), n=49 (8q8/5); T2: n=41 (2q4), n=45 (8q8/3), n=54 (8q8/5); T3: n=50 (2q4), n=57 (8q8/3), n=46 (8q8/5). Week 64: T1: n=46 (2q4), n=44 (8q8/3), n=48 (8q8/5); T2: n=38 (2q4), n=42 (8q8/3), n=50 (8q8/5); T3: n=47 (2q4), n=56 (8q8/3), n=43 (8q8/5).
Q4, every 4 weeks; Q8, every 8 weeks; Q12, every 12 weeks; Q16, every 16 weeks.

Dosing Intervals by Baseline BCVA in Patients with BRVO

Q4

Q8

Q12

Q16

T1:

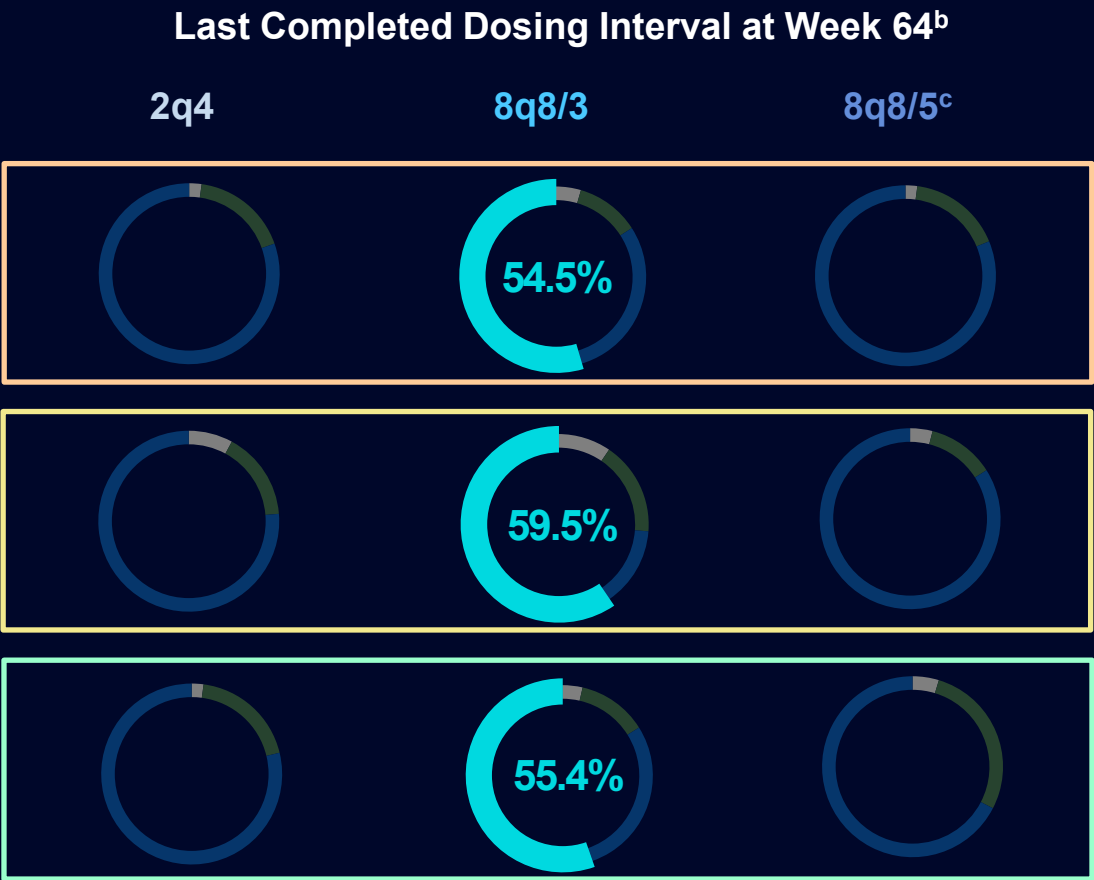
≤55 ETDRS letters

T2:

>55 to ≤65 ETDRS letters

T3:

>65 ETDRS letters

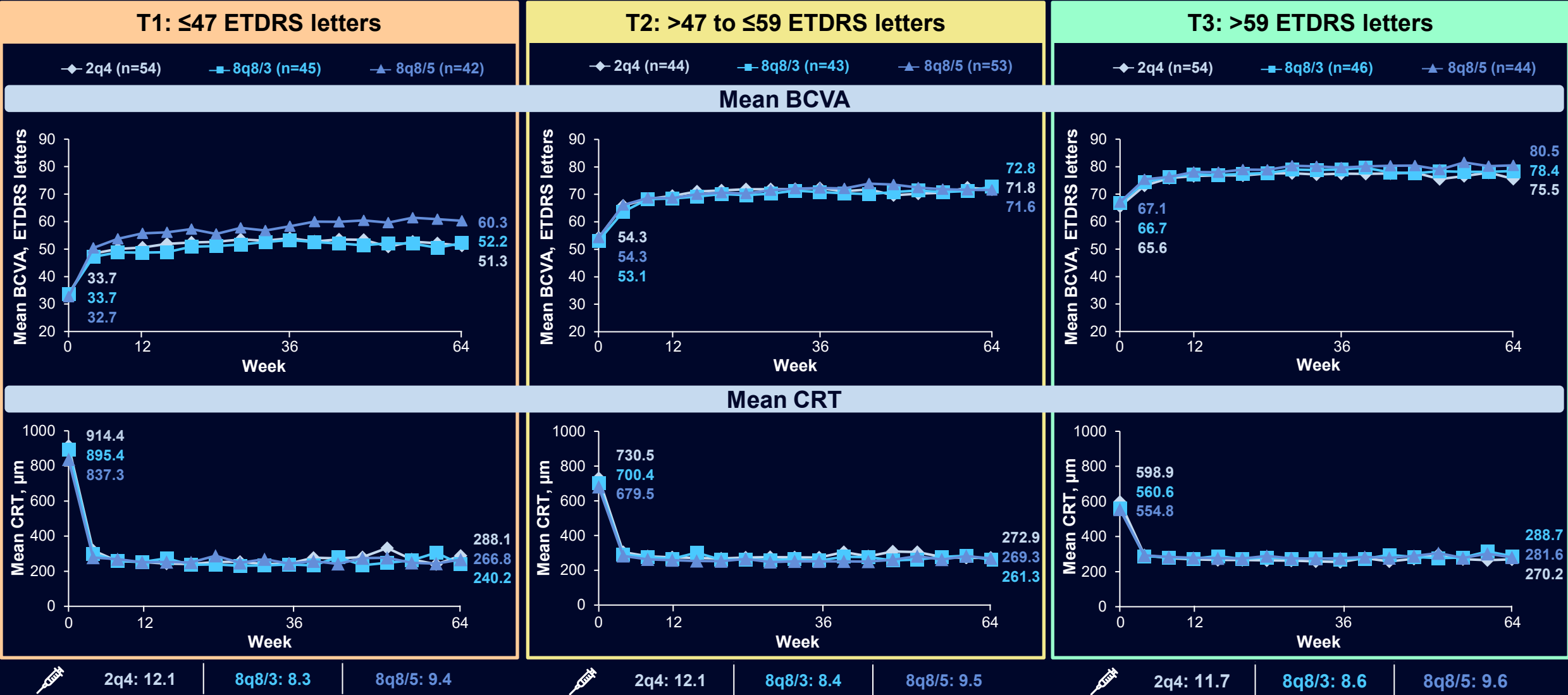


At Week 64, ≥55% of patients in the 8q8/3 group completed a Q16 dosing interval regardless of baseline BCVA

^cPer study design, dosing interval extension to Q16 was not possible in the 8q8/5 group

Values may not add up to 100% because of rounding. ^aPatients in the FAS who completed the Week 36 visit. ^bPatients in the FAS who completed the Week 64 visit. N values for each treatment group by baseline BCVA tertile. Week 64: T1: n=46 (2q4), n=44 (8q8/3), n=48 (8q8/5); T2: n=38 (2q4), n=42 (8q8/3), n=50 (8q8/5); T3: n=47 (2q4), n=56 (8q8/3), n=43 (8q8/5).

Aflibercept 8 mg: Consistent BCVA and CRT Improvements Achieved with Fewer Injections Than Aflibercept 2 mg Across Baseline BCVA Tertiles



FAS, observed cases excluding intercurrent events.
Mean number of injections reported for patients in the FAS who completed the Week 64 visit.

Dosing Intervals by Baseline BCVA in Patients with CRVO/HRVO

Last Assigned Dosing Interval at Week 36^a

Last Completed Dosing Interval at Week 64^b

Q4 Q8 Q12 Q16

2q4

8q8/3

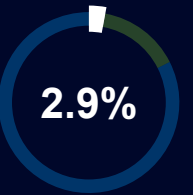
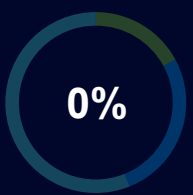
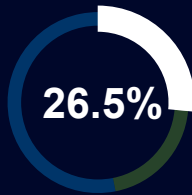
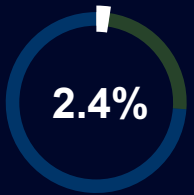
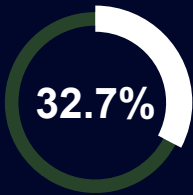
8q8/5^c

2q4

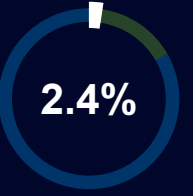
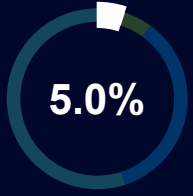
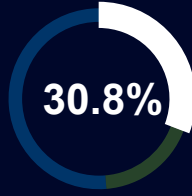
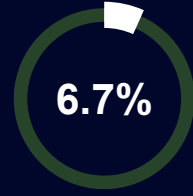
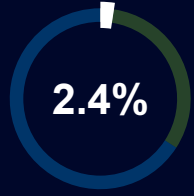
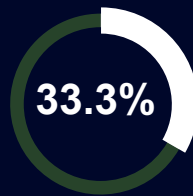
8q8/3

8q8/5^c

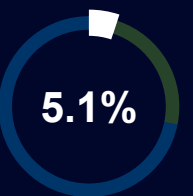
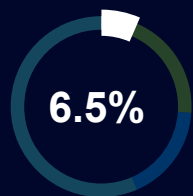
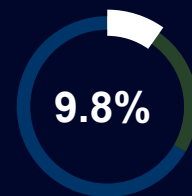
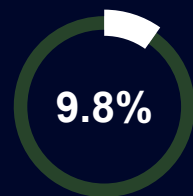
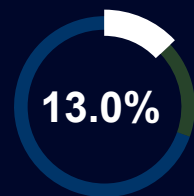
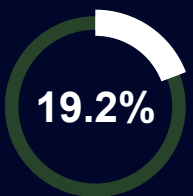
T1:
≤47 ETDRS
letters



T2:
>47 to ≤59
ETDRS
letters



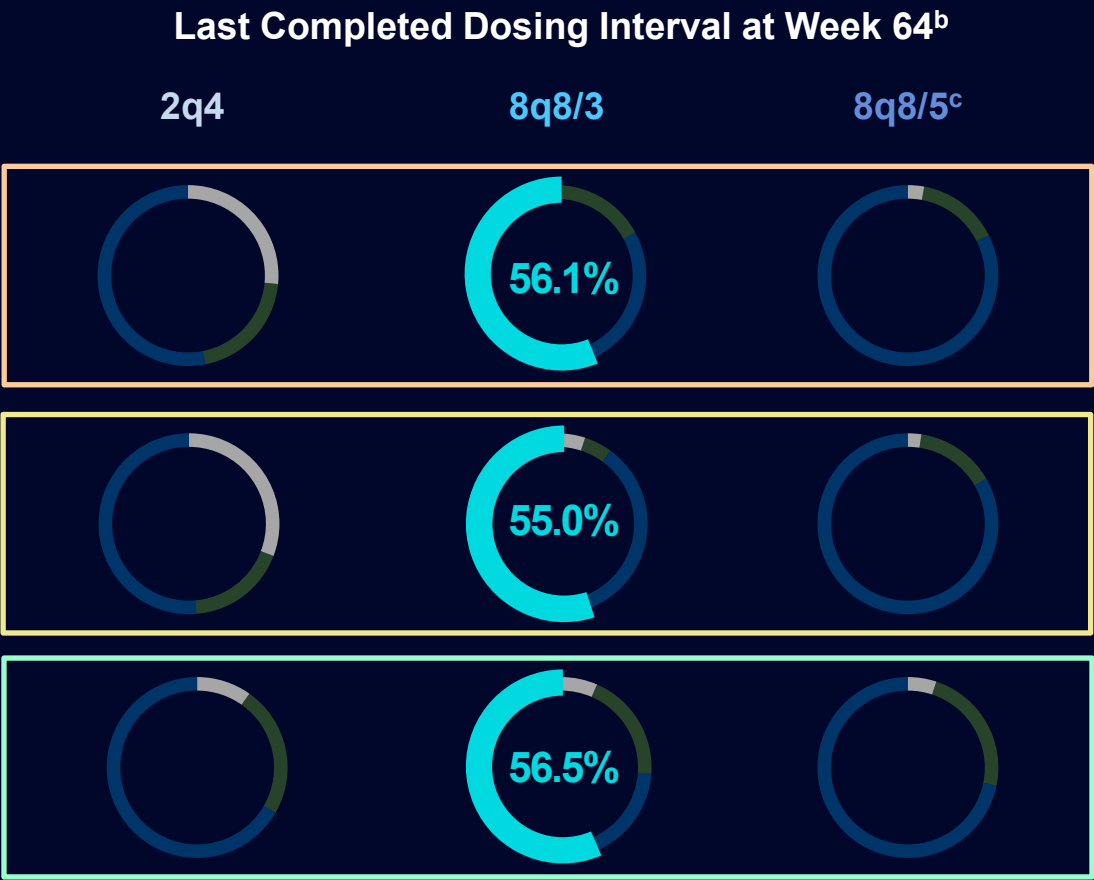
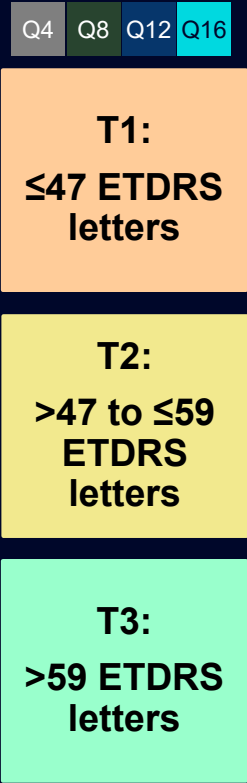
T3:
>59 ETDRS
letters



At Week 36 and Week 64, fewer patients required Q4 dosing with aflibercept 8 mg versus 2 mg across all baseline BCVA tertiles

Values may not add up to 100% because of rounding. ^aPatients in the FAS who completed the Week 36 visit. ^bPatients in the FAS who completed the Week 64 visit. ^cPer study design, dosing interval extension was not possible in the 8q8/5 group until Week 40. N values for each treatment group by baseline BCVA tertile. Week 36: T1: n=52 (2q4), n=42 (8q8/3), n=38 (8q8/5); T2: n=42 (2q4), n=41 (8q8/3), n=45 (8q8/5); T3: n=52 (2q4), n=46 (8q8/3), n=41 (8q8/5). Week 64: T1: n=49 (2q4), n=41 (8q8/3), n=34 (8q8/5); T2: n=39 (2q4), n=40 (8q8/3), n=42 (8q8/5); T3: n=51 (2q4), n=46 (8q8/3), n=39 (8q8/5).

Dosing Intervals by Baseline BCVA in Patients with CRVO/HRVO



At Week 64, ≥55% of patients in the 8q8/3 group completed a Q16 dosing interval regardless of baseline BCVA

^cPer study design, dosing interval extension to Q16 was not possible in the 8q8/5 group

Values may not add up to 100% because of rounding. ^aPatients in the FAS who completed the Week 36 visit. ^bPatients in the FAS who completed the Week 64 visit. N values for each treatment group by baseline BCVA tertile. Week 64: T1: n=49 (2q4), n=41 (8q8/3), n=34 (8q8/5); T2: n=39 (2q4), n=40 (8q8/3), n=42 (8q8/5); T3: n=51 (2q4), n=46 (8q8/3), n=39 (8q8/5).

Conclusions

Aflibercept 8 mg achieved robust visual and anatomic improvements with fewer injections versus aflibercept 2 mg through Week 64, regardless of baseline BCVA or RVO subtype

Consistent with previous studies,^{1,2} patients with lower baseline BCVA achieved greater visual gains; however, their final BCVA was lower than those who started with better vision

Most patients in the 8q8/3 group completed a Q16 dosing interval at Week 64, regardless of baseline BCVA or RVO subtype

- Fewer patients with CRVO/HRVO required Q4 dosing with aflibercept 8 mg versus 2 mg at Week 64