Clinical outcomes of aflibercept 8 mg and 2 mg for macular edema following retinal vein occlusion in subgroups defined by baseline central subfield retinal thickness tertiles in the QUASAR trial

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Disclosures

- Marco Lupidi is a consultant for Appelis, FB Vision, Heidelberg Engineering, and OFF Health; an investigator for 4D Molecular Therapeutics, Boehringer-Ingelheim, and Regeneron Pharmaceuticals, Inc.; and serves of the advisory board for AbbVie, Alimera Sciences, Bayer, Lumibird-Quentel Medical, Optomed, Roche, and The Macular Onlus Foundation
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- This study included research conducted on human patients. Institutional Review Board/Institutional Ethics Committee approval was obtained prior to study initiation
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- Data were originally presented at the Clinical Trials at the Summit Meeting, June 12–13, 2026

QUASAR: Study Design and Objective

A multicenter, randomized, double-masked, Phase 3 study in patients with treatment-naïve macular edema following RVO randomized at baseline 1 (2q4) : 1 (8q8/3) : 1 (8q8/5)

2q4
Aflibercept 2 mg initiated with 9 monthly injections followed by T&E[a]
n=301

8q8/3
Aflibercept 8 mg initiated with 3 monthly injections, followed by Q8 and T&E[a]
n=293

8q8/5
Aflibercept 8 mg initiated with 5 monthly injections, followed by Q8 and T&E[a]
n=298

Primary endpoint

EOS Key secondary endpoint

	Day 1	W4	W8	W12	W16	W20	W24	W28	W32	W36	W40	W44	W48	W52	W56	W60	W64
2q4	X	X	X	X	X	X	X	X	X	T&E	T&E	T&E	T&E	T&E	T&E	T&E	
8q8/3	X	X	X	o	X	o[b]	X	o[c]	X	T&E	T&E	T&E	T&E	T&E	T&E	T&E	
8q8/5	X	X	X	X	X	o	X	o[c]	X	o[c]	X	T&E	T&E	T&E	T&E	T&E	

DRM for interval shortening

Dosing interval shortened by 4 weeks beginning at Week 16 for 8q8/3, Week 24 for 8q8/5, or Week 40 for 2q4 if both the following criteria were met at a dosing visit:

- BCVA loss of >5 letters from the reference visit, AND
- >50 µm increase in CRT from the reference visit[d]

DRM for interval extension

Dosing interval extended by 4 weeks starting at Week 32 for 8q8/3 and 2q4 and at Week 40 for 8q8/5 if both the following criteria were met at a dosing visit:

- BCVA loss of <5 letters from the reference visit,[d] AND
- CRT <320 µm Heidelberg/<300 µm Cirrus or Topcon SD-OCT

This post hoc analysis evaluated the impact of baseline CRT by tertiles on visual and anatomic outcomes in patients with macular edema following BRVO (T1: ≤452 µm, T2: >452 to ≤586 µm, T3: >586 µm) or CRVO/HRVO (T1: ≤576 µm, T2: >576 to ≤798 µm, T3: >798 µm) treated with aflibercept 8 mg versus aflibercept 2 mg in QUASAR

The primary efficacy endpoint was change from baseline in BCVA at Week 36, with a non-inferiority margin of 4 letters. Stippled boxes = initial treatment phase; X = active injection; o = sham injection. Note: Table does not reflect all dosing options once a patient's dosing interval is shortened. [a]With opportunity for extension per DRM. [b]Active injection for patients meeting DRM criteria at Week 16. [c]Active injection for patients meeting DRM criteria from Week 16 for 8q8/3 or Week 24 for 8q8/5. [d]Reference is Week 12 for 8q8/3 and Week 20 for 8q8/5 and 2q4 (denoted by green boxes on table). **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; **BCVA**, best-corrected visual acuity; **BRVO**, branch retinal vein occlusion; **CRT**, central retinal thickness; **CRVO**, central retinal vein occlusion; **DRM**, dose regimen modification; **EOS**, end of study; **HRVO**, hemiretinal vein occlusion; **Q8**, every 8 weeks; **RVO**, retinal vein occlusion; **SD-OCT**, spectral-domain optical coherence tomography; **T**, tertile; **T&E**, treat and extend; **W**, week.

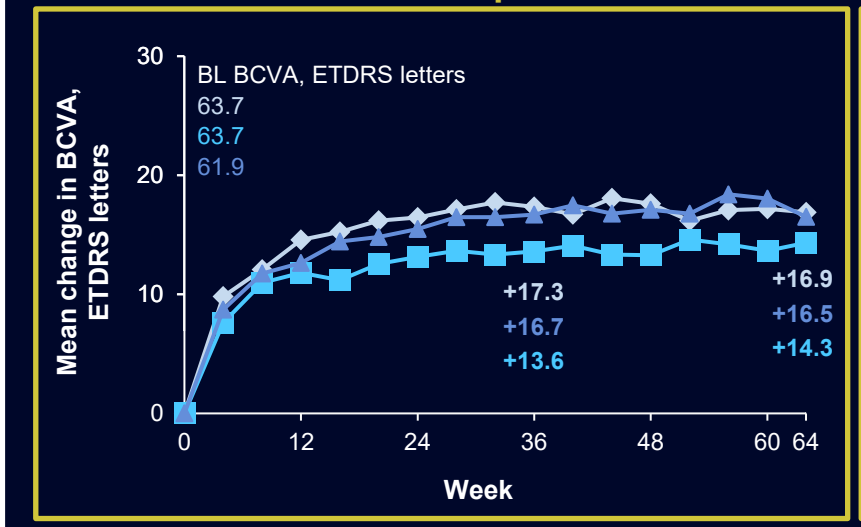
Mean Change in BCVA Through Week 64 by Baseline CRT in Patients with BRVO

quasar

BRVO

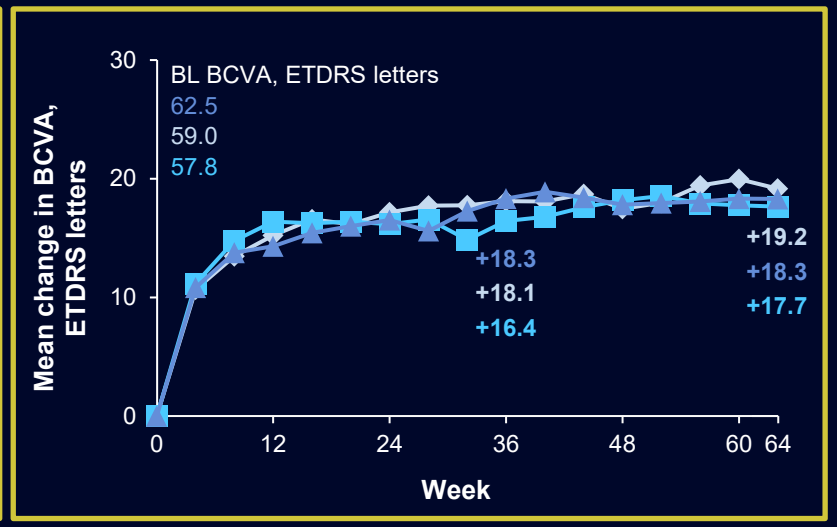
2q4 8q8/3 8q8/5

T1: ≤452 µm



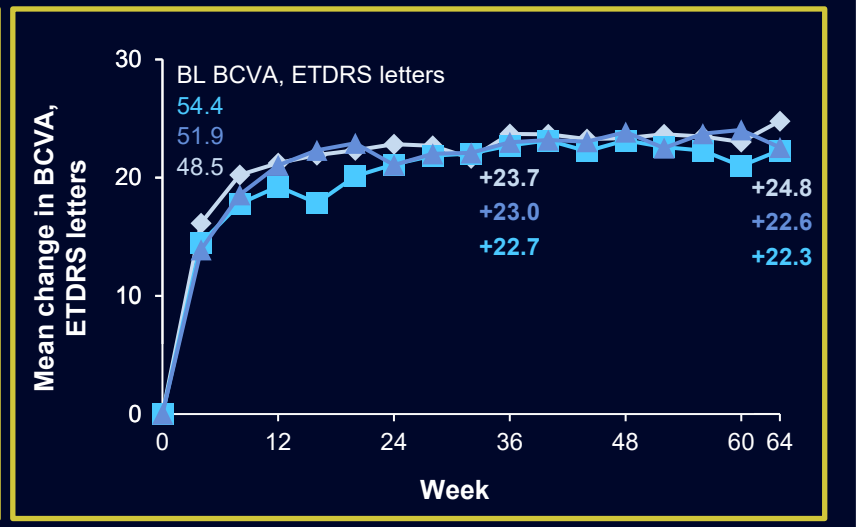
	Mean number of injections[a]
2q4 (n=48)	11.2
8q8/3 (n=53)	8.1
8q8/5 (n=54)	9.4

T2: >452 to ≤586 µm



	Mean number of injections[a]
2q4 (n=55)	11.6
8q8/3 (n=52)	8.5
8q8/5 (n=49)	9.4

T3: >586 µm



	Mean number of injections[a]
2q4 (n=46)	11.4
8q8/3 (n=54)	8.8
8q8/5 (n=56)	9.3

In BRVO, aflibercept 8 mg achieved robust improvements in BCVA through Week 64, with fewer injections than aflibercept 2 mg across all baseline CRT tertiles

Patients with BRVO in the FAS, observed cases excluding intercurrent events.
[a]Patients who completed the Week 64 visit.
BL, baseline.

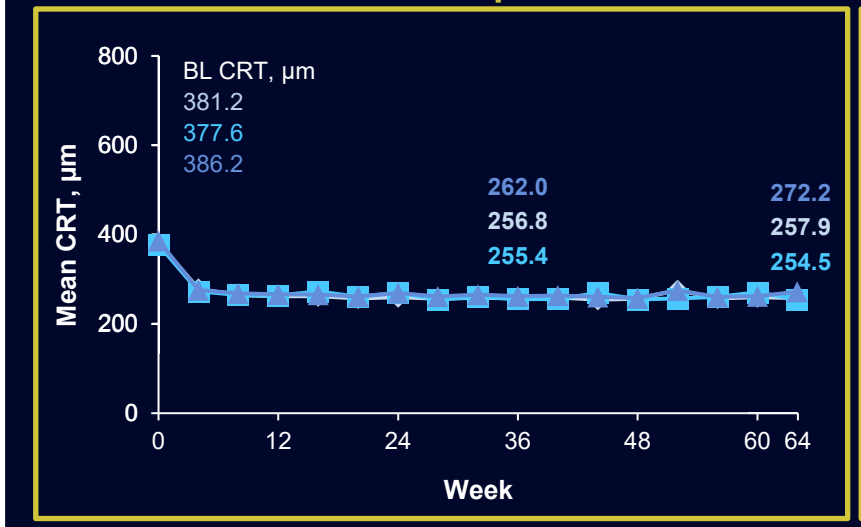
Mean CRT Through Week 64 by Baseline CRT in Patients with BRVO

quasar

BRVO

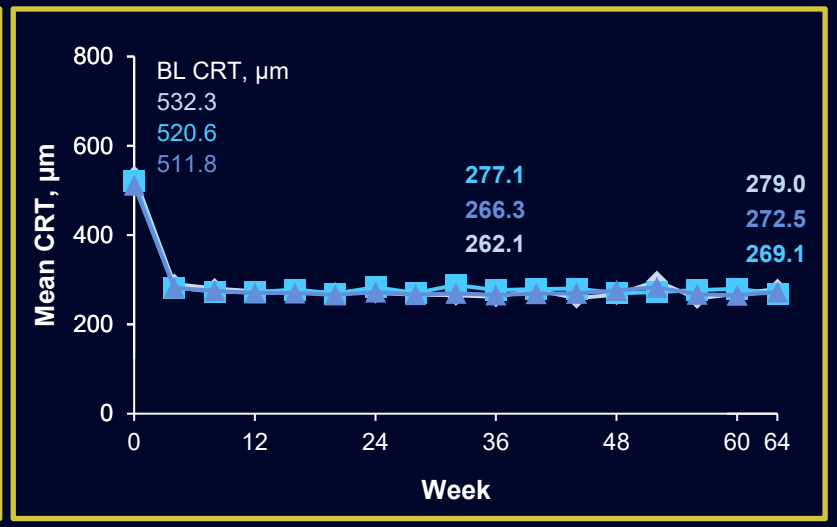
2q4 8q8/3 8q8/5

T1: ≤452 µm



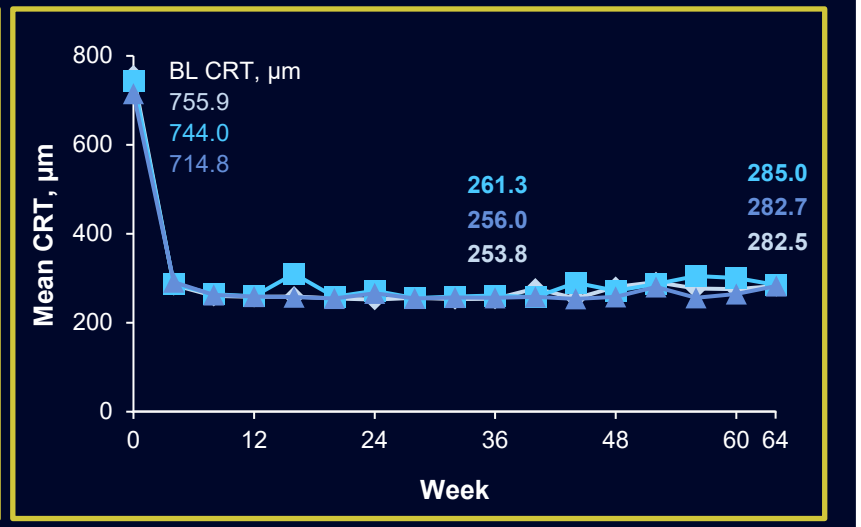
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T3: >586 µm



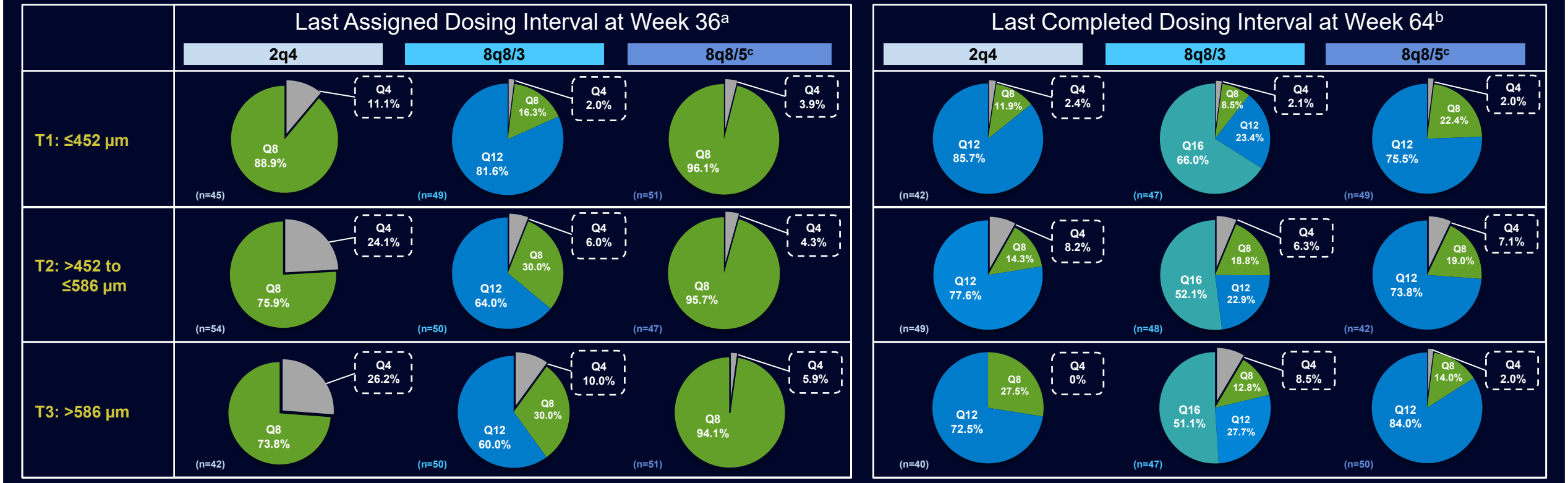
	Mean number of injections[a]
2q4 (n=46)	11.4
8q8/3 (n=54)	8.8
8q8/5 (n=56)	9.3

In BRVO, aflibercept 8 mg achieved robust CRT reduction through Week 64, with fewer injections than aflibercept 2 mg across all baseline CRT tertiles

Patients with BRVO in the FAS, observed cases excluding intercurrent events.
[a]Patients who completed the Week 64 visit.

Dosing Intervals by Baseline CRT in Patients with BRVO

quasar BRVO



- **At Week 36, fewer patients required Q4 dosing with aflibercept 8 mg versus 2 mg across all baseline CRT tertiles**
- **By Week 64, the proportion of patients who required Q4 dosing was comparable between treatment groups**

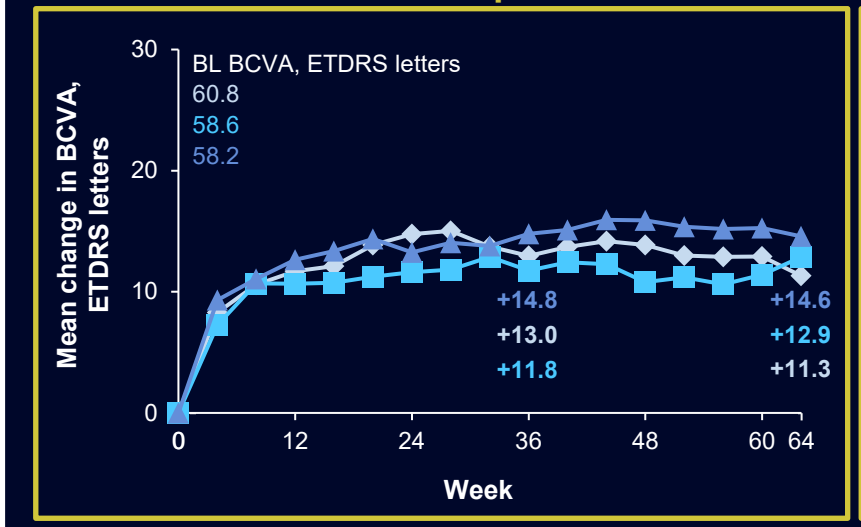
Values may not add up to 100% because of rounding.
[a]Patients with BRVO in the FAS who completed the Week 36 visit. [b]Patients with BRVO in the FAS who completed the Week 64 visit. [c]Per study design, dosing interval extension was not possible in the 8q8/5 group until Week 40.
Q4, every 4 weeks; **Q8**, every 8 weeks; **Q12**, every 12 weeks, **Q16**, every 16 weeks.

Mean Change in BCVA Through Week 64 by Baseline CRT in Patients with CRVO/HRVO

quasar
CRVO/ HRVO

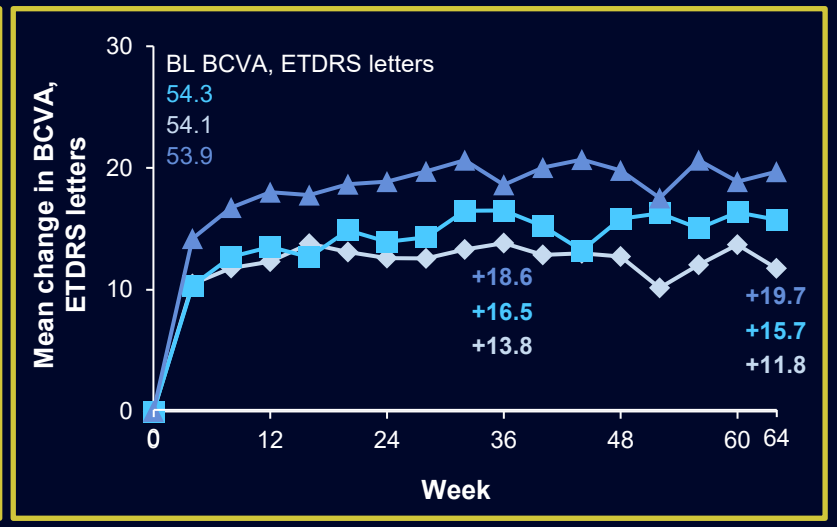
2q4 8q8/3 8q8/5

T1: ≤576 µm



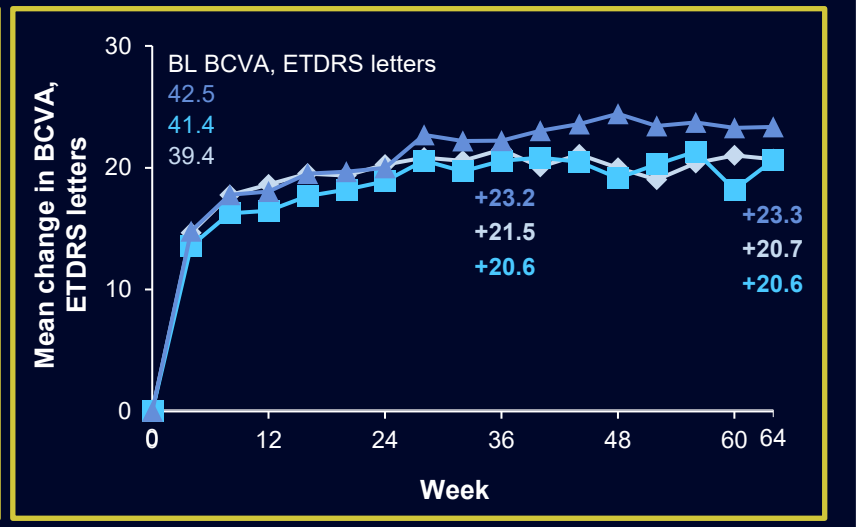
	Mean number of injections[a]
2q4 (n=41)	11.7
8q8/3 (n=45)	8.6
8q8/5 (n=55)	9.4

T2: >576 to ≤798 µm



	Mean number of injections[a]
2q4 (n=61)	11.9
8q8/3 (n=43)	8.3
8q8/5 (n=38)	9.7

T3: >798 µm



	Mean number of injections[a]
2q4 (n=49)	12.2
8q8/3 (n=46)	8.4
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In CRVO/HRVO, aflibercept 8 mg achieved robust improvements in BCVA through Week 64, with fewer injections than aflibercept 2 mg across all baseline CRT tertiles

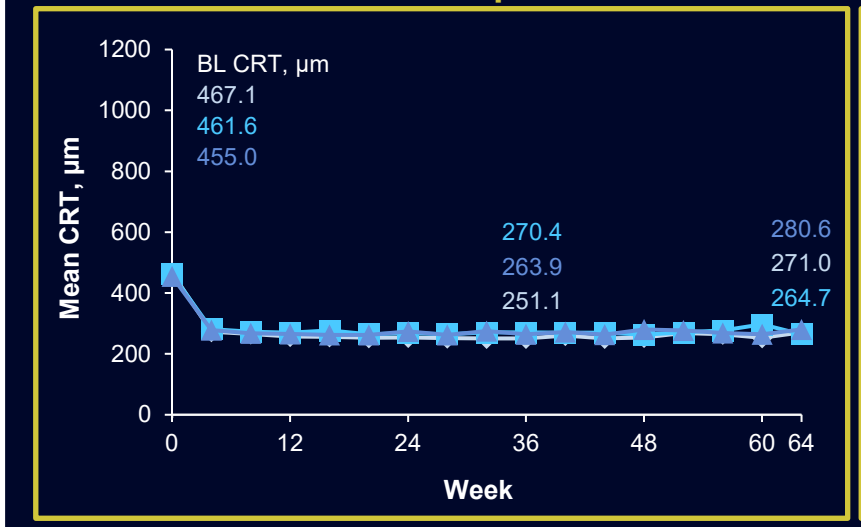
Patients with CRVO/HRVO in the FAS, observed cases excluding intercurrent events.
[a]Patients who completed the Week 64 visit.

Mean CRT Through Week 64 by Baseline CRT in Patients with CRVO/HRVO

quasar
CRVO/ HRVO

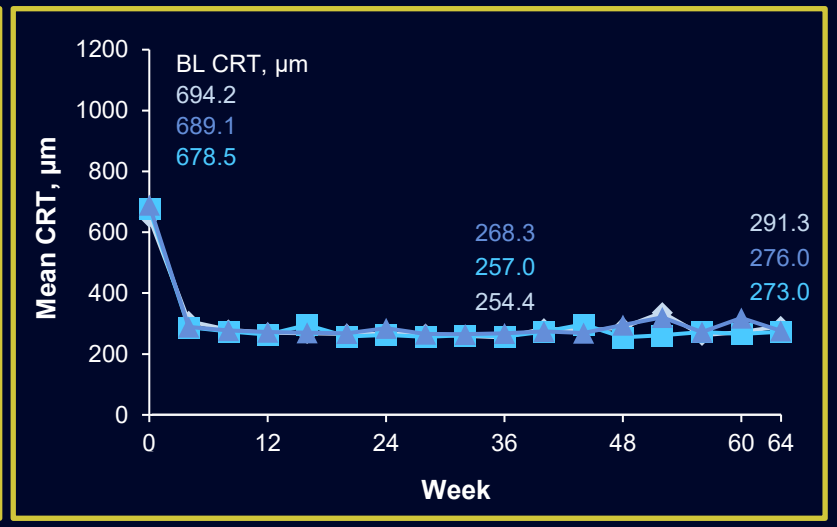
2q4 8q8/3 8q8/5

T1: ≤576 µm



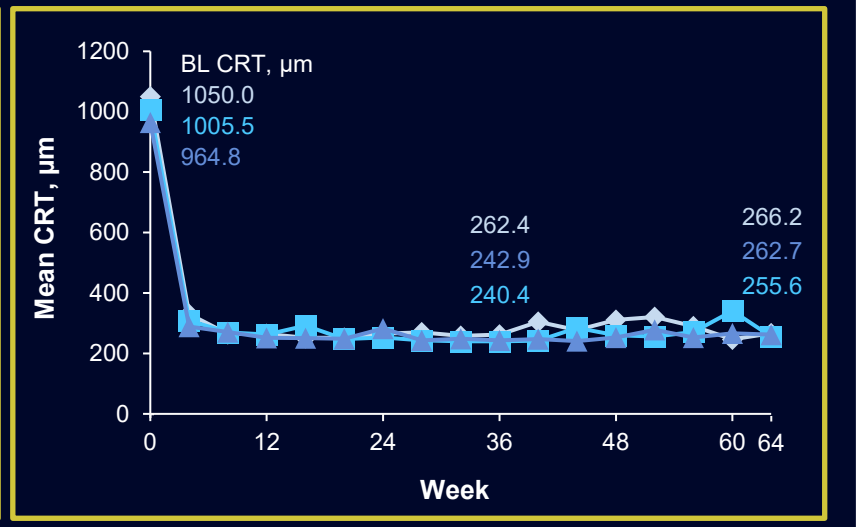
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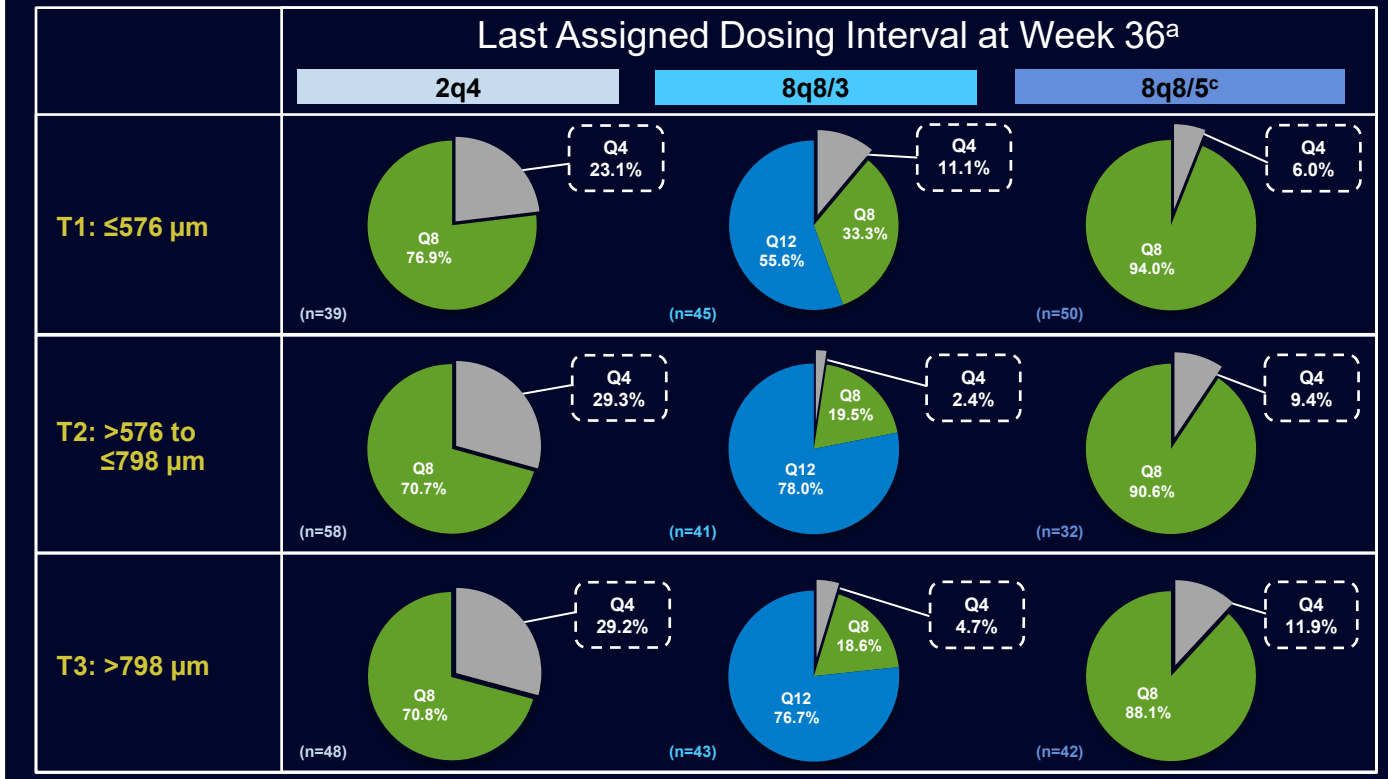
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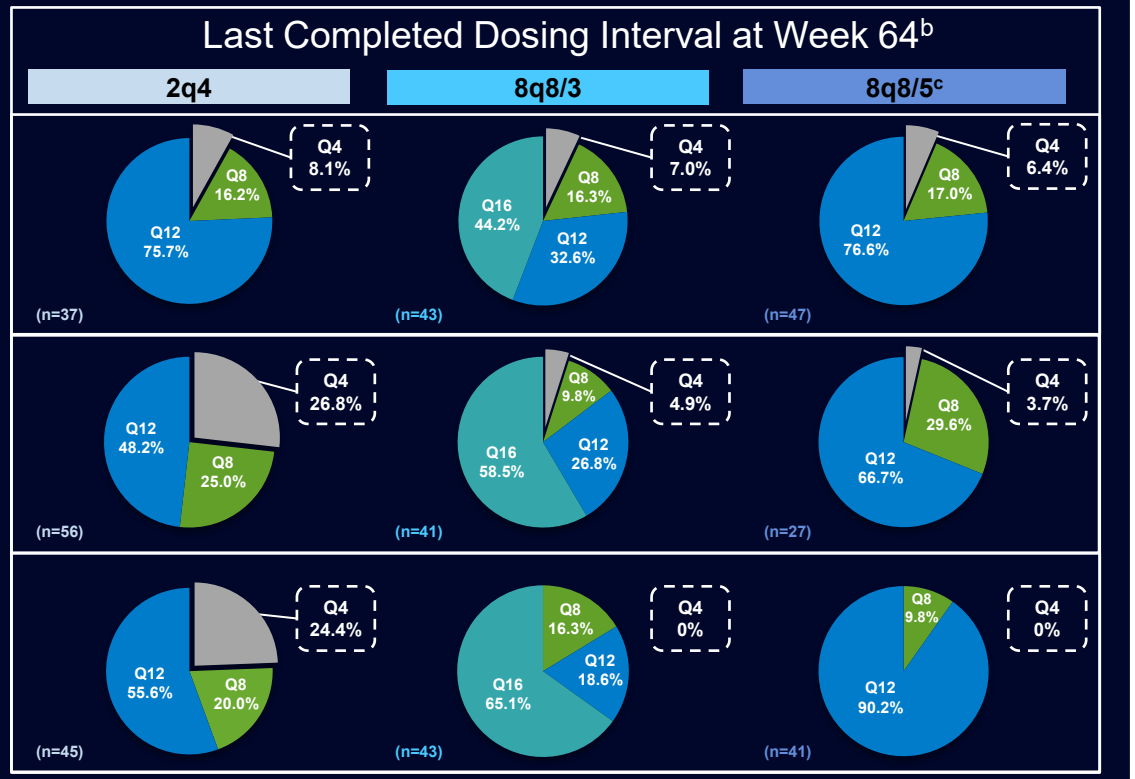
In CRVO/HRVO, aflibercept 8 mg achieved robust CRT reduction through Week 64, with fewer injections than aflibercept 2 mg across all baseline CRT tertiles

Patients with CRVO/HRVO in the FAS, observed cases excluding intercurrent events.
[a]Patients who completed the Week 64 visit.

Dosing Intervals by Baseline CRT in Patients with CRVO/HRVO

quasar CRVO/HRVO



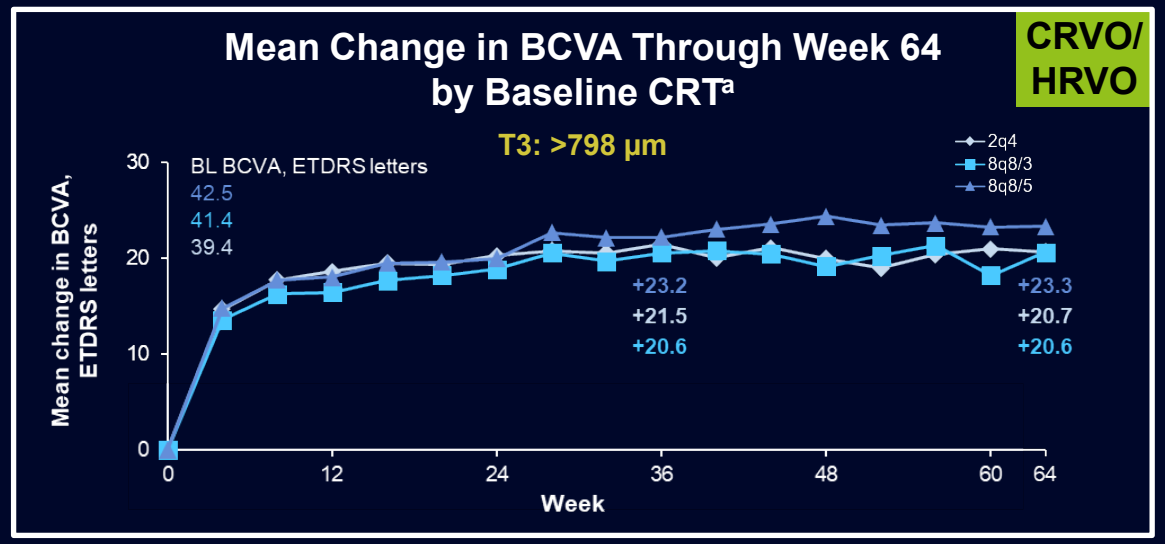


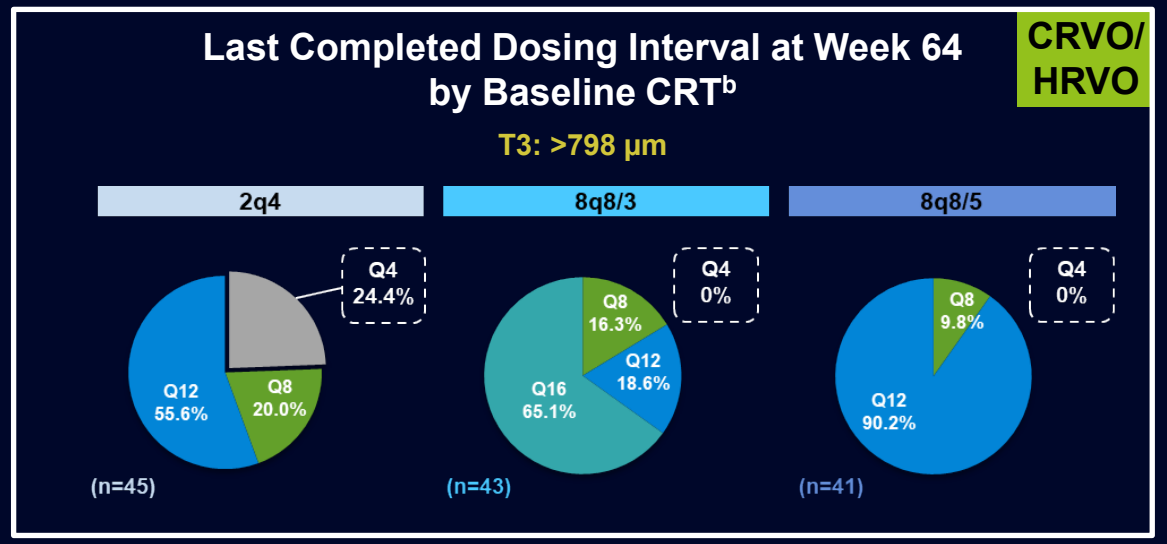
At both Weeks 36 and 64 substantially fewer CRVO/HRVO patients treated with aflibercept 8 mg required Q4 dosing compared with 2 mg across all baseline CRT tertiles

Values may not add up to 100% because of rounding.
[a]Patients with CRVO/HRVO in the FAS who completed the Week 36 visit. [b]Patients with CRVO/HRVO in the FAS who completed the Week 64 visit. [c]Per study design, dosing interval extension was not possible in the 8q8/5 group until Week 40.

Conclusions

- Aflibercept 8 mg achieved robust visual and anatomic improvements through Week 64 in patients with macular edema following RVO across all baseline CRT tertiles, with fewer injections compared to aflibercept 2 mg
- In BRVO and CRVO/HRVO, more patients with severe disease (CRT T3) had extension to ≥Q12 with aflibercept 8 mg compared to 2 mg at Week 64
- In CRVO/HRVO, substantially fewer patients required Q4 dosing with aflibercept 8 mg compared to 2 mg at both Weeks 36 and 64 across CRT T2 and T3





[a]Patients with CRVO/HRVO in the FAS, observed cases excluding intercurrent events. [b]Patients with CRVO/HRVO in the FAS who completed the Week 64 visit. Values may not add up to 100% because of rounding.