PULSAR Post-Hoc Analysis: Fluid-Free Status with Aflibercept 8mg at Weeks 16, 48, and 96 by Baseline CRT and BCVA

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Disclosures

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    - **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. **JFK:** Consultant for Abbvie, Apellis, Bayer, Eyepoint Pharma, Ocuphire, Ocular Therapeutix, Opthea, Roche, Thea Pharmaceuticals, and Carl Zeiss Meditec; and member of a data safety monitoring board or advisory board for Alexion, Novo Nordisk, and Opthea. **SS:** Receives funding/fees from Allergan, Apellis, Bayer, Biogen, Boehringer Ingelheim, EyeBiotech, Novartis, Optos, and Roche. **SL** and **XZ**: Employees of Bayer Consumer Care AG.**TM**: Employee of Bayer AG
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PULSAR: 96-Week, Multicenter, Double-Masked Study in Patients with Treatment-Naïve nAMD

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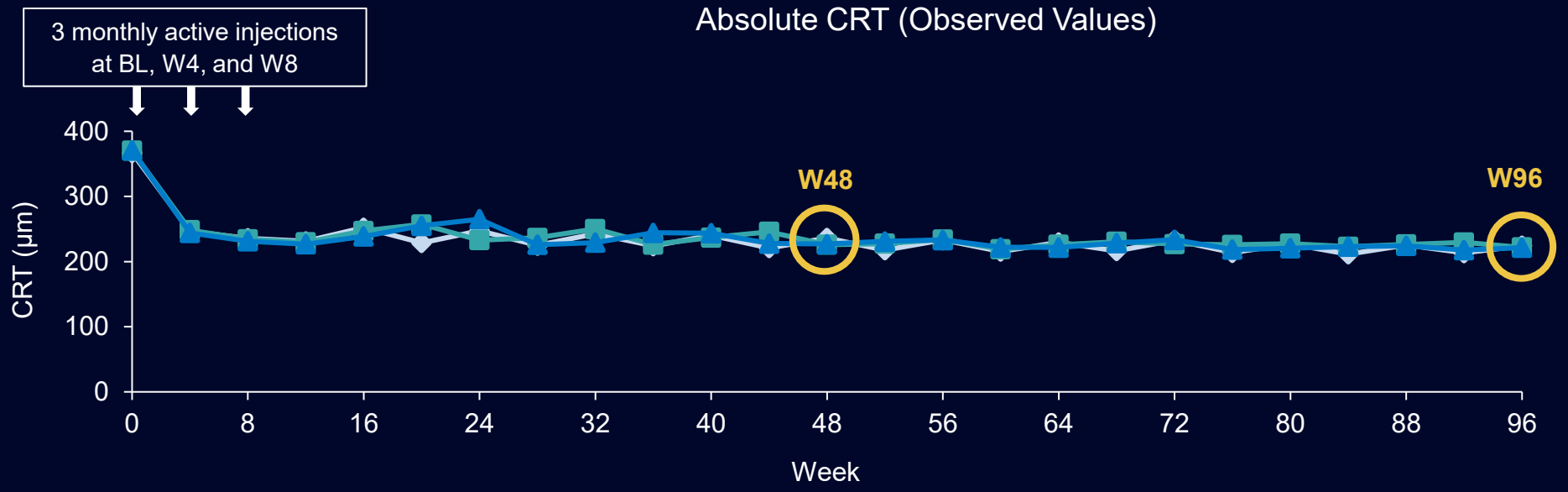
Patients were randomly assigned (1:1:1) to receive aflibercept 8q12 (n=335), 8q16 (n=338), or 2q8 (n=336), each after 3 monthly injections

At W48, aflibercept 8 mg demonstrated non-inferior BCVA gains with extended dosing intervals versus aflibercept 2 mg in patients with nAMD,[1] with no new safety signals



LS means CRT (µm) change from baseline[a,b]

	W48	W96
2q8	–136	–147
8q12	–147	–152
8q16	–147	–149

FAS: 2q8 n=336; 8q12 n=335; 8q16 n=338 (at BL). [a]LS mean values (data post-ICE were censored); [b]LS means were generated using MRMM, with baseline CRT measurement as a covariate, and treatment group (aflibercept 2q8, 8q12, 8q16), visit, and stratification variables (geographic region [Japan vs Rest of World] and BL BCVA [<60 vs ≥60]) as fixed factors, and interaction terms for baseline and visit and for treatment and visit. **2q8**, aflibercept 2 mg every 8 weeks; **8q12**, aflibercept 8 mg every 12 weeks; **8q16**, aflibercept 8 mg every 16 weeks; **BCVA**, best-corrected visual acuity; **BL**, baseline; **CRT**, central subfield retinal thickness; **FAS**, full analysis set; **ICE**, intercurrent event; **LS**, least squares; **MMRM**, mixed model for repeated measures; **nAMD**, neovascular age-related macular degeneration; **W**, week. [1]Lanzetta P, et al. *Lancet*. 2024;403:1141–1152.

Proportion of Patients Without Retinal Fluid in Center Subfield

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Rapid and superior fluid control with 8 mg after monthly initial injections

Resilient fluid control at Y1 and Y2 with fewer injections for 8 mg versus 2q8

Matched timepoints[d]: 14–23% higher fluid resolution with 8 mg versus 2 mg[e] when fluid was assessed 8w after each active injection[f] (assessment starting 8w after the third active injection)

FAS, LOCF (censoring data post ICE); FAS: 2q8 n=336; 8q12 n=335; 8q16 n=338; all 8 mg n=673. The absence of retinal fluid was defined as no IRF and no SRF in center subfield. [a]P-value: 1-sided CMH; weighting scheme adjusted by geographic region and BL BCVA (<60 vs ≥60); [b]Patients completing Week 48; [c]Patients completing Week 96; [d]OC, FAS. OC prior to ICE adjusted by geographic region and BL BCVA (<60 vs ≥60); visits were matched such that patients in any treatment group received the same number of active injections; [e]Difference between absolute percentages in the 8 mg and 2 mg group divided by the percentages in the 2 mg group; [f]With an interval of ≥8w afterwards. **8w**, 8 weeks; **CMH**, Cochran-Mantel-Haenszel; **inj**, injection; **IRF**, intraretinal fluid; **LOCF,** last observation carried forward; **OC**, observed cases; **SRF**, subretinal fluid; **Y**, year.

Matched Timepoints: CRT Change from Baseline

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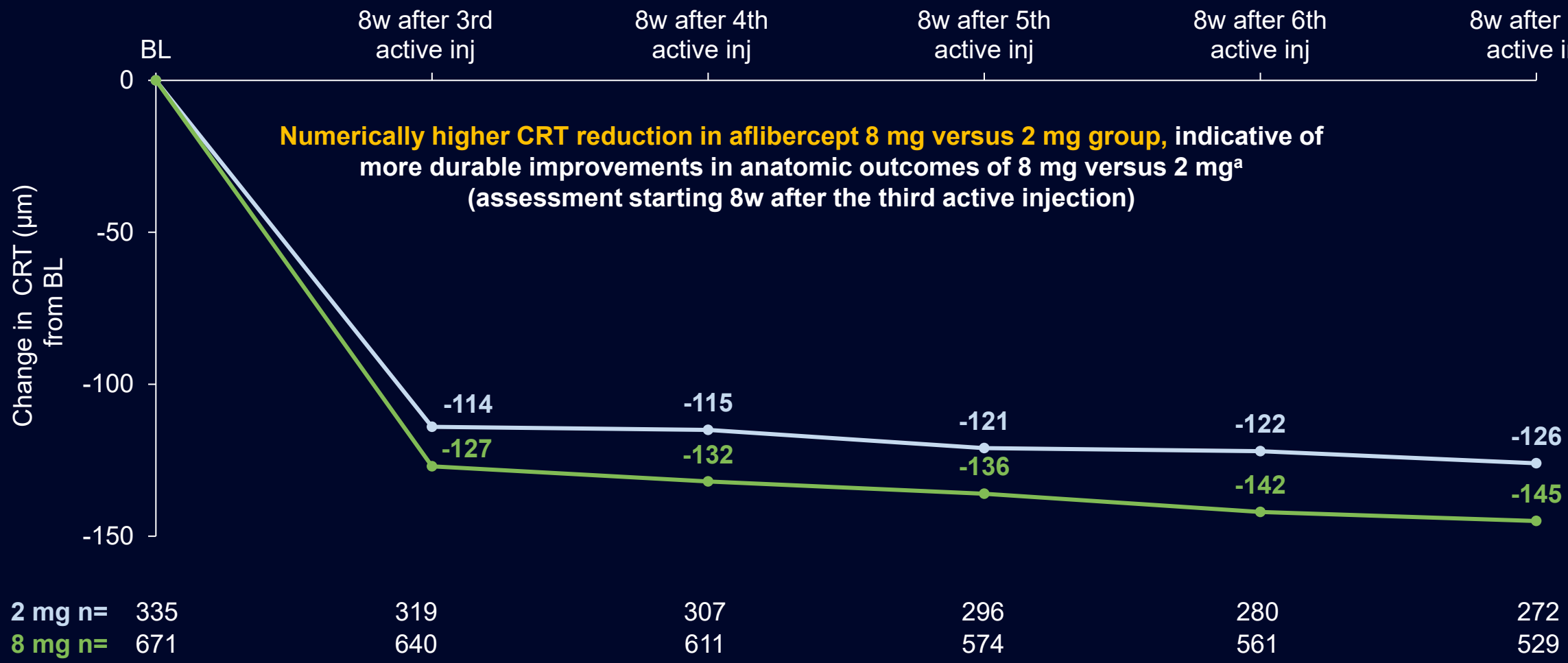
Numerically higher CRT reduction in aflibercept 8 mg versus 2 mg group, indicative of more durable improvements in anatomic outcomes of 8 mg versus 2 mg[a] (assessment starting 8w after the third active injection)



	BL	8w after 3rd active inj	8w after 4th active inj	8w after 5th active inj	8w after 6th active inj	8w after 7th active inj
2 mg n=	335	319	307	296	280	272
8 mg n=	671	640	611	574	561	529

OC, FAS. OC prior to ICE adjusted by geographic region and baseline BCVA (<60 vs ≥60). Visits were matched such that patients in any treatment group received the same number of active injections.
[a]With an interval of ≥8w afterwards.

Proportion of Patients Without Fluid in the Center Subfield at Weeks 16, 48, and 96 Stratified by Baseline CRT

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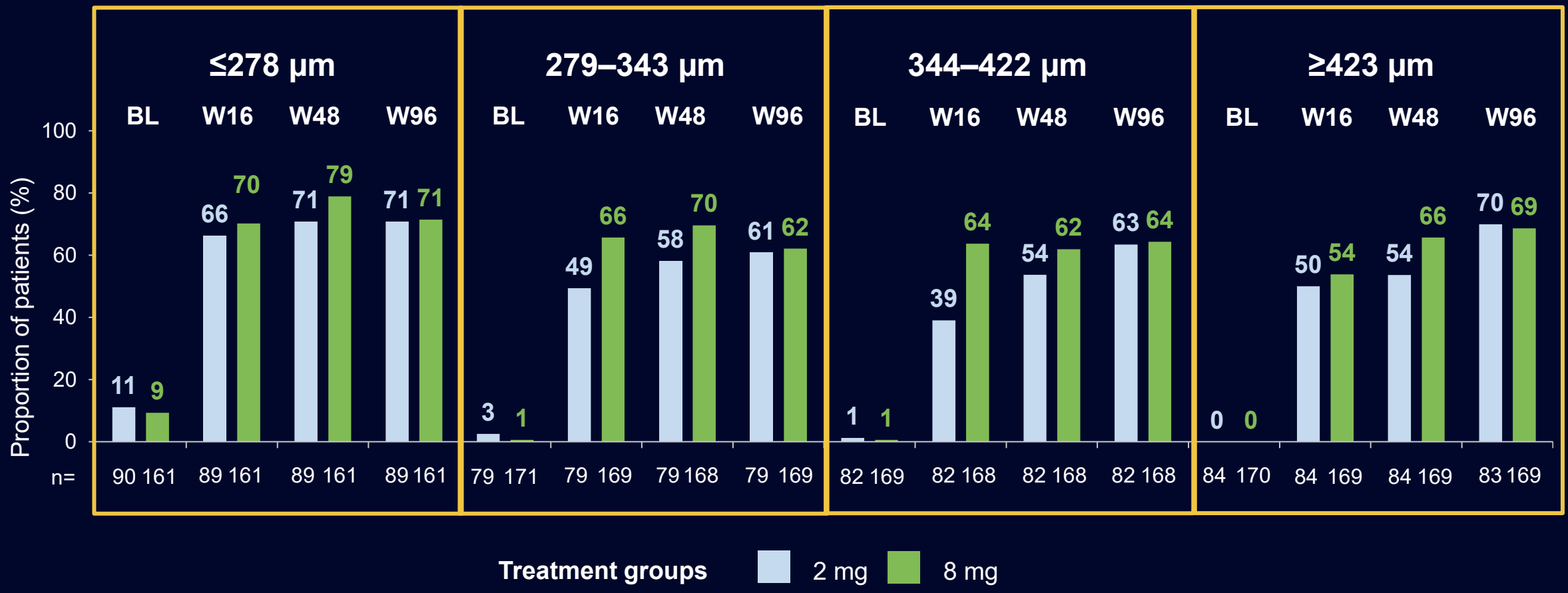

- Fluid control was maintained from Week 16 to Week 96 for all baseline CRT subgroups
- Regardless of baseline CRT, the proportion of patients without retinal fluid was comparable with aflibercept 2 mg versus 8 mg with fewer injections at Week 96

FAS, LOCF prior to ICE was used to impute missing data.

Proportion of Patients Without Fluid in the Center Subfield at Weeks 16, 48, and 96 Stratified by Baseline BCVA

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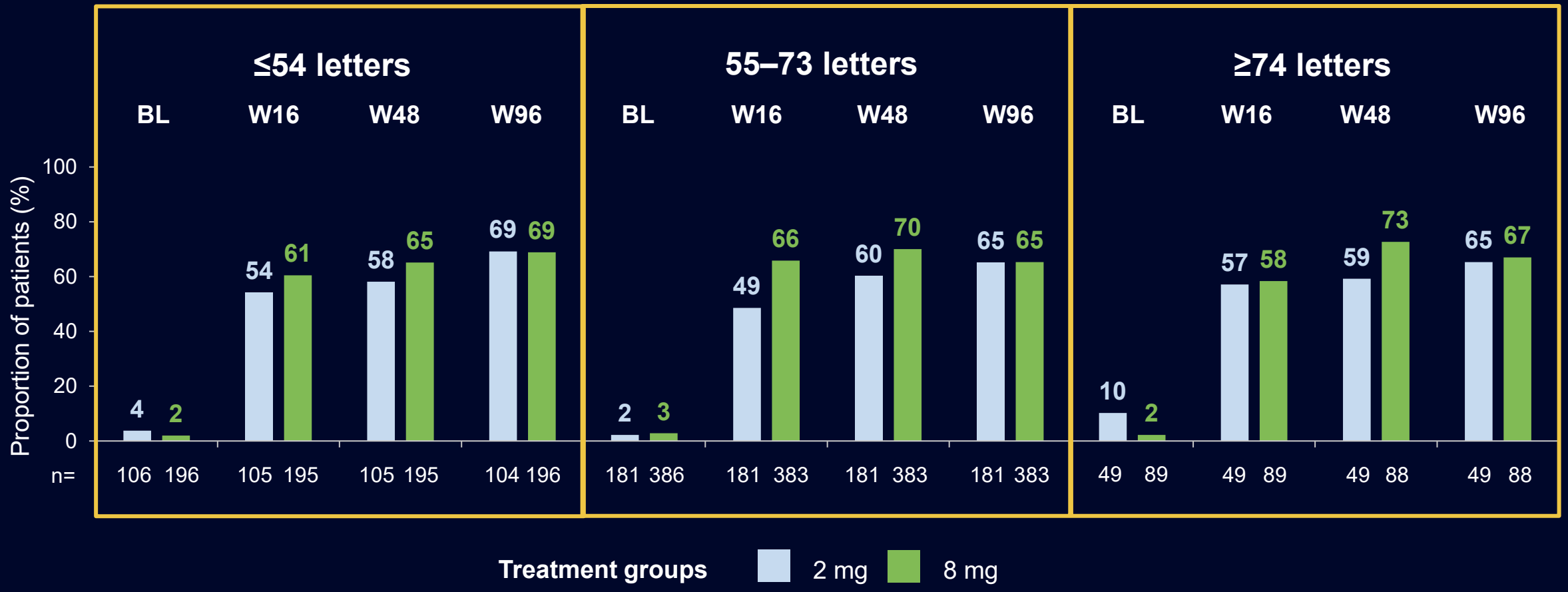

- Fluid control was maintained from Week 16 to Week 96 for all baseline BCVA subgroups
- Regardless of baseline BCVA, the proportion of patients without retinal fluid was comparable with aflibercept 2 mg versus 8 mg with fewer injections at Week 96

FAS, LOCF prior to ICE was used to impute missing data.

Conclusions

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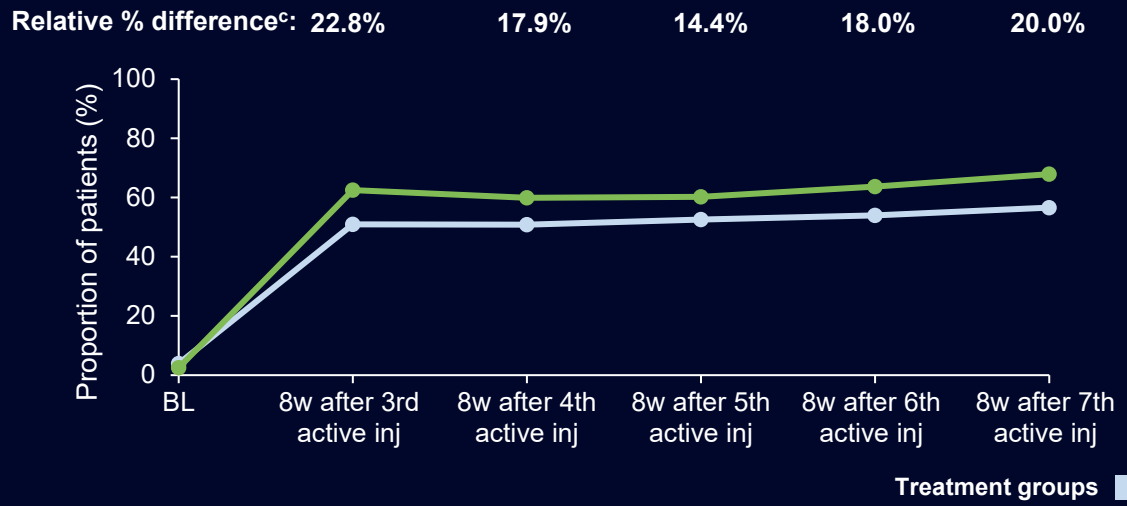
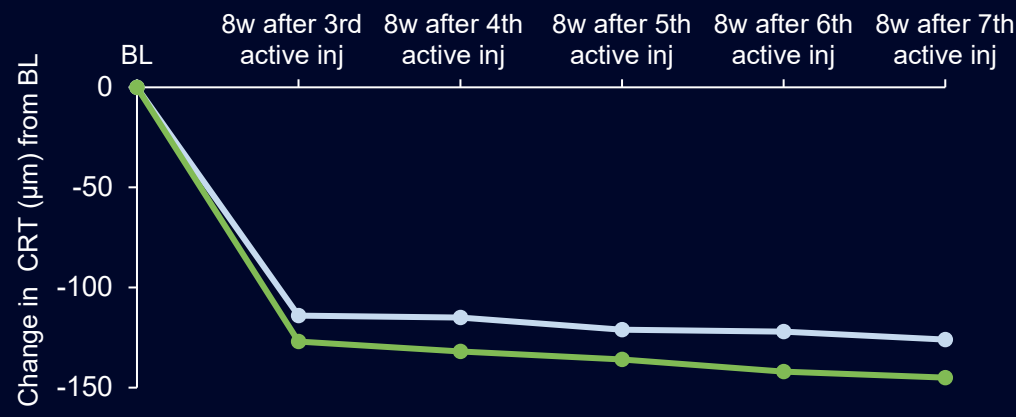
- The observed data show that **resilient fluid control** is achievable at 1 and 2 years **with fewer injections for aflibercept 8 mg versus 2 mg** in a substantial proportion of patients with treatment-naïve nAMD with extended dosing intervals[a]
- **Fluid control was maintained** from Week 16 to Week 96 for all baseline subgroups, and regardless of disease severity, the **proportion of patients without retinal fluid was comparable for aflibercept 2 mg vs 8 mg with fewer injections** through Week 96
- 14–23% **higher fluid resolution** was observed with 8 mg versus 2 mg when fluid was assessed 8 weeks after each active matched injection, starting from the third injection[b]

Matched timepoints: Proportion of patients without retinal fluid



Matched timepoints: CRT change from baseline



Treatment groups 2 mg 8 mg

OC, FAS. OC prior to ICE adjusted by geographic region and BL BCVA (<60 vs ≥60). [a]6.9 versus 5.6 injections at Week 48, and 12.8 versus 9.0 injections at W96 in the aflibercept 8 mg versus 2 mg groups, respectively; [b]Visits were matched such that patients in any treatment group received the same number of active injections. Assessment starting 8 weeks after the third active injection; [c]Difference between absolute percentages in the 8 mg and 2 mg group divided by the percentages in the 2 mg group.