



# **A 96-Week PULSAR Phase 3 Trial *Post-hoc* Analysis: Rapid and Sustained Fluid Control with Aflibercept 8 mg Every 12 Weeks or Longer, as Defined by Fluid-Free Status at Weeks 16, 48, and 96 Stratified by Baseline CRT and BCVA**

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# Disclosures



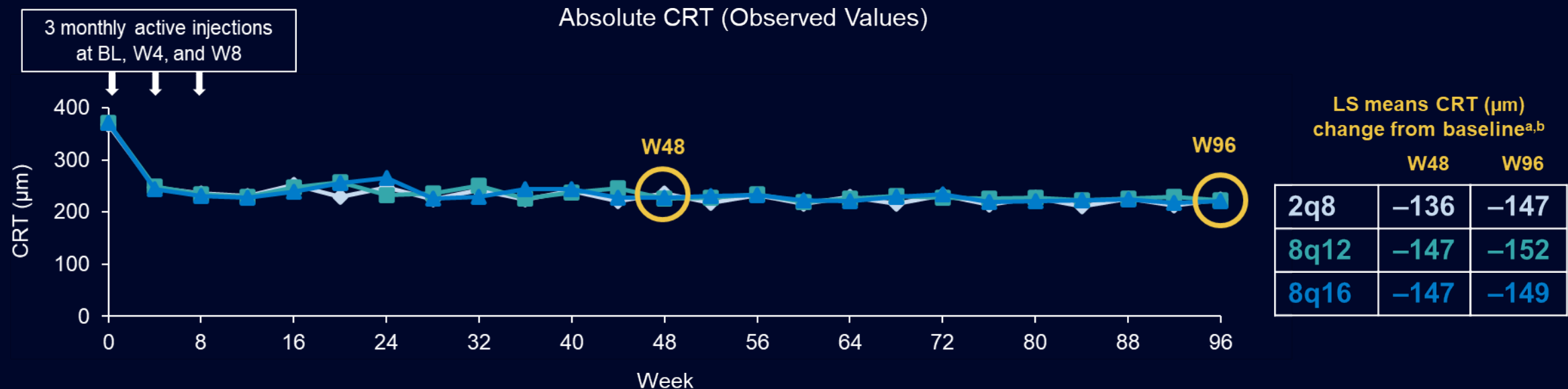
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**JFK:** Consultant for AbbVie, Apellis, Bayer, Eyepoint Pharma, Ocuphire, Roche, Théa Pharmaceuticals, and Carl Zeiss Meditec AG; and member of a data safety monitoring board or advisory board for Alexion, Novo Nordisk, and Oxular. **SS:** Receives 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



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,<sup>1</sup> with no new safety signals



FAS: 2q8 n=336; 8q12 n=335; 8q16 n=338 (at BL). <sup>a</sup>LS mean values (data post-ICE were censored); <sup>b</sup>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  $\geq 60$ ]) 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; **MRMM**, mixed model for repeated measures; **nAMD**, neovascular age-related macular degeneration; **W**, week. <sup>1</sup>Lanzetta P, et al. *Lancet*. 2024;403:1141–1152.

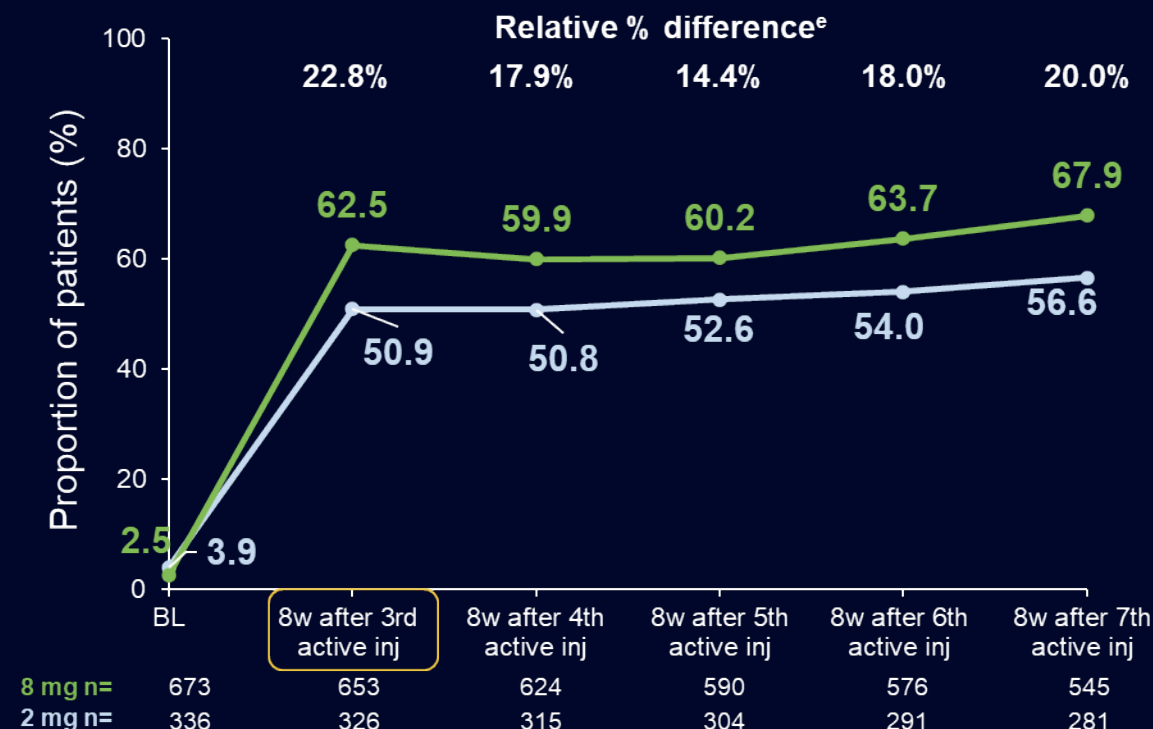
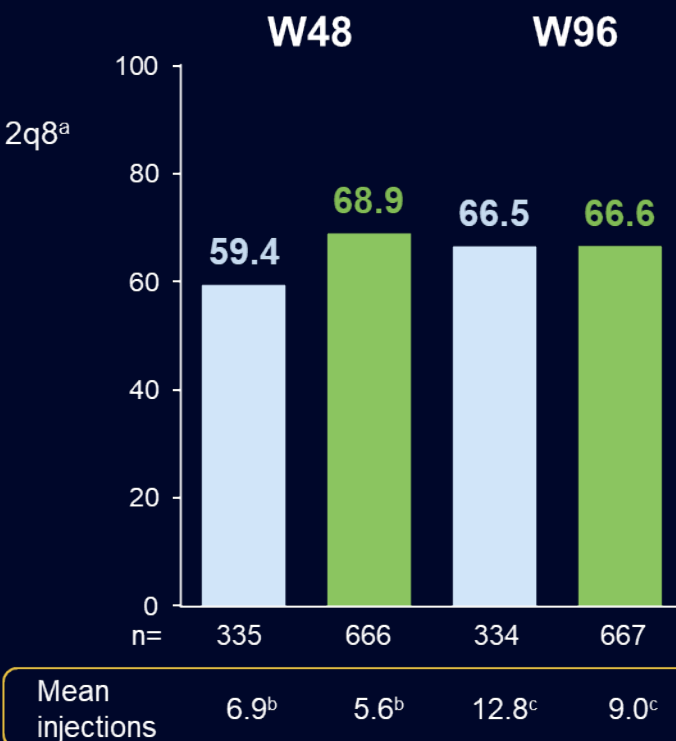
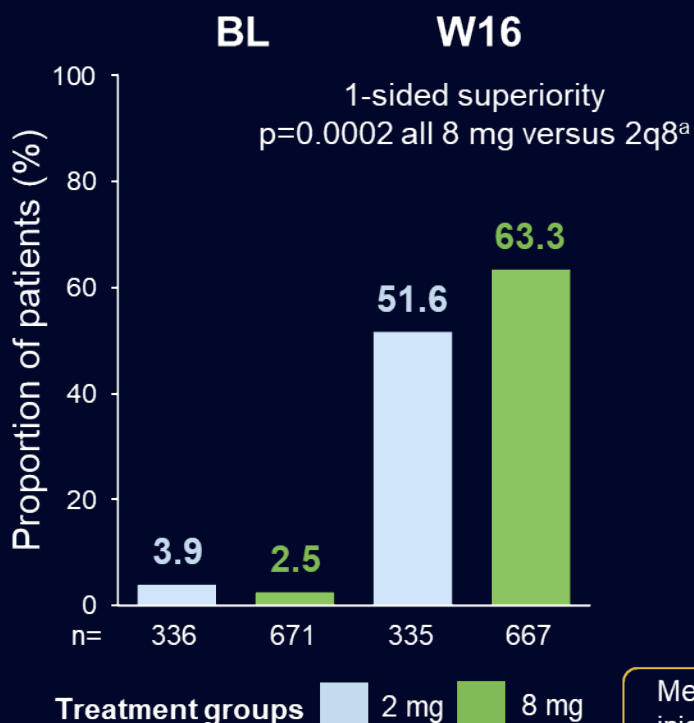
# Proportion of Patients Without Retinal Fluid in Center Subfield



**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

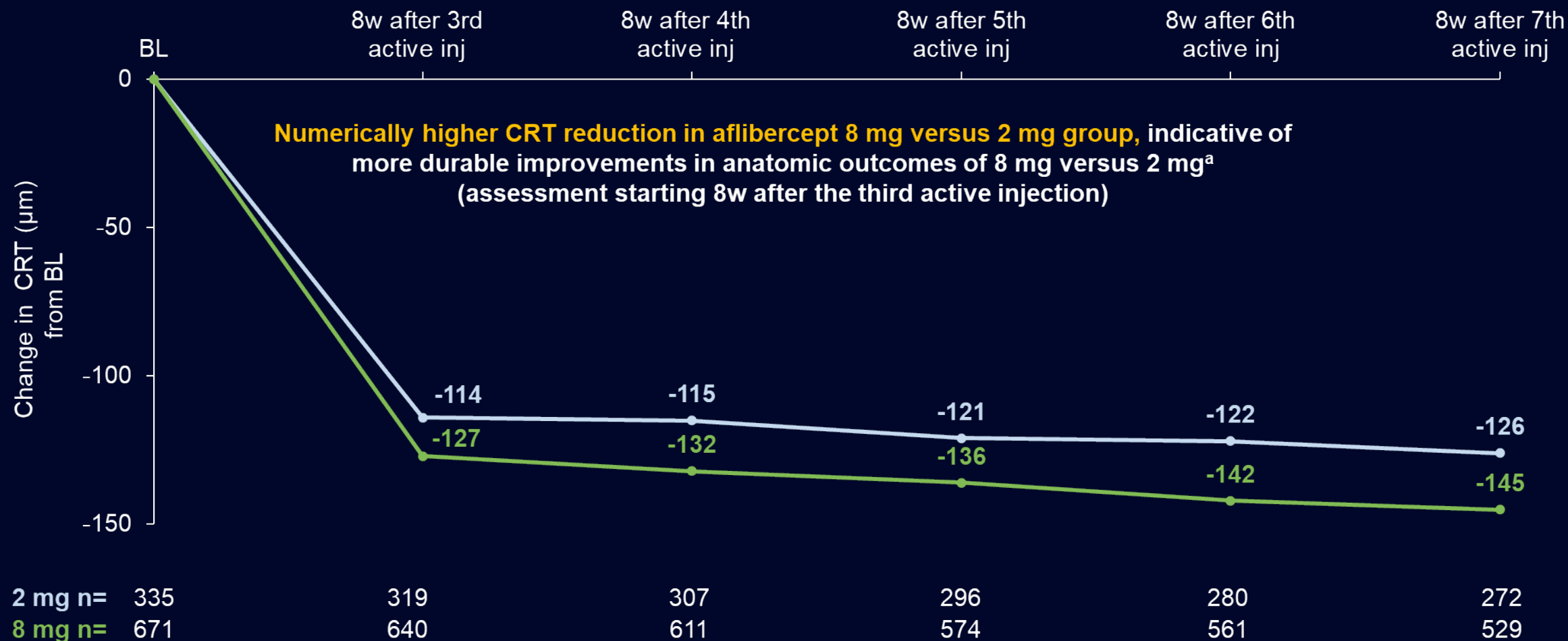
**Matched timepoints<sup>d</sup>:**  
**14–23% higher fluid resolution with 8 mg versus 2 mg<sup>e</sup>**  
when fluid was assessed 8w after each active injection<sup>f</sup>  
(assessment starting 8w after the third active injection)



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. <sup>a</sup>P-value: 1-sided CMH; weighting scheme adjusted by geographic region and BL BCVA (<60 vs ≥60); <sup>b</sup>Patients completing Week 48; <sup>c</sup>Patients completing Week 96; <sup>d</sup>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; <sup>e</sup>Difference between absolute percentages in the 8 mg and 2 mg group divided by the percentages in the 2 mg group; <sup>f</sup>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.



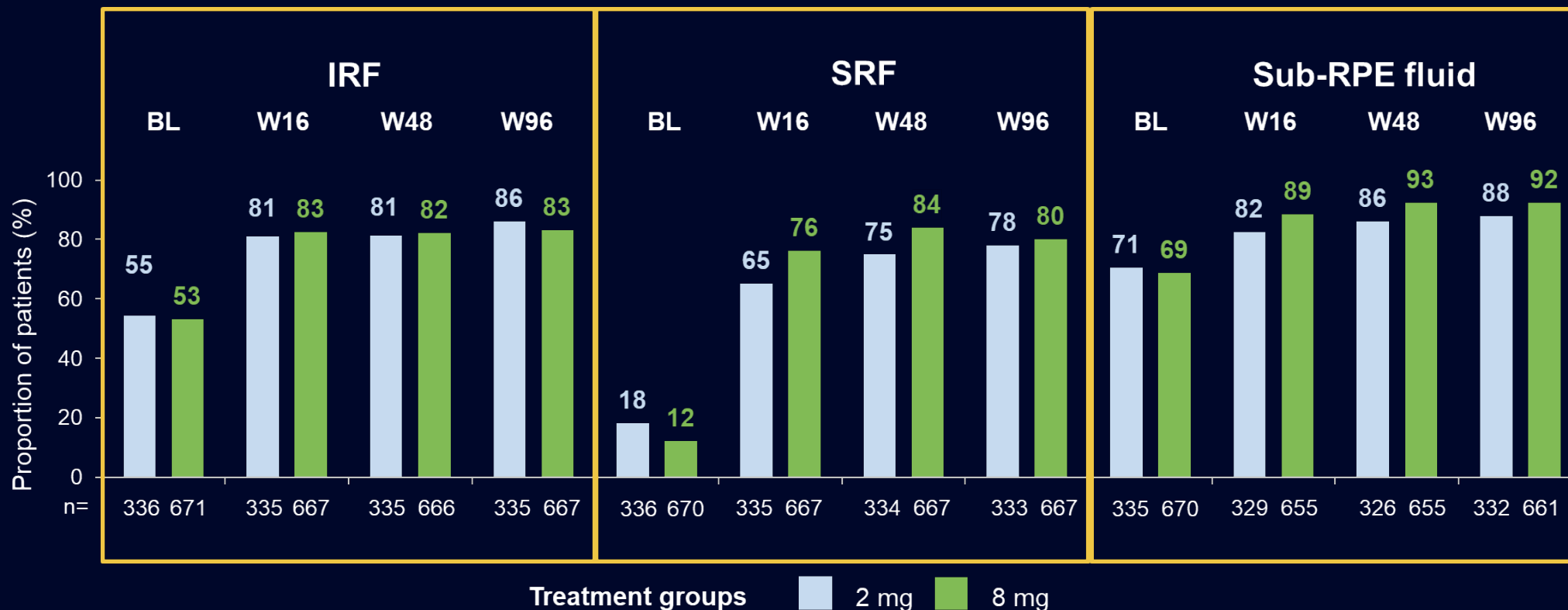
# Matched Timepoints: CRT Change from Baseline



OC, FAS. OC prior to ICE adjusted by geographic region and baseline BCVA (<60 vs  $\geq 60$ ). Visits were matched such that patients in any treatment group received the same number of active injections.

<sup>a</sup>With an interval of  $\geq 8\text{w}$  afterwards.

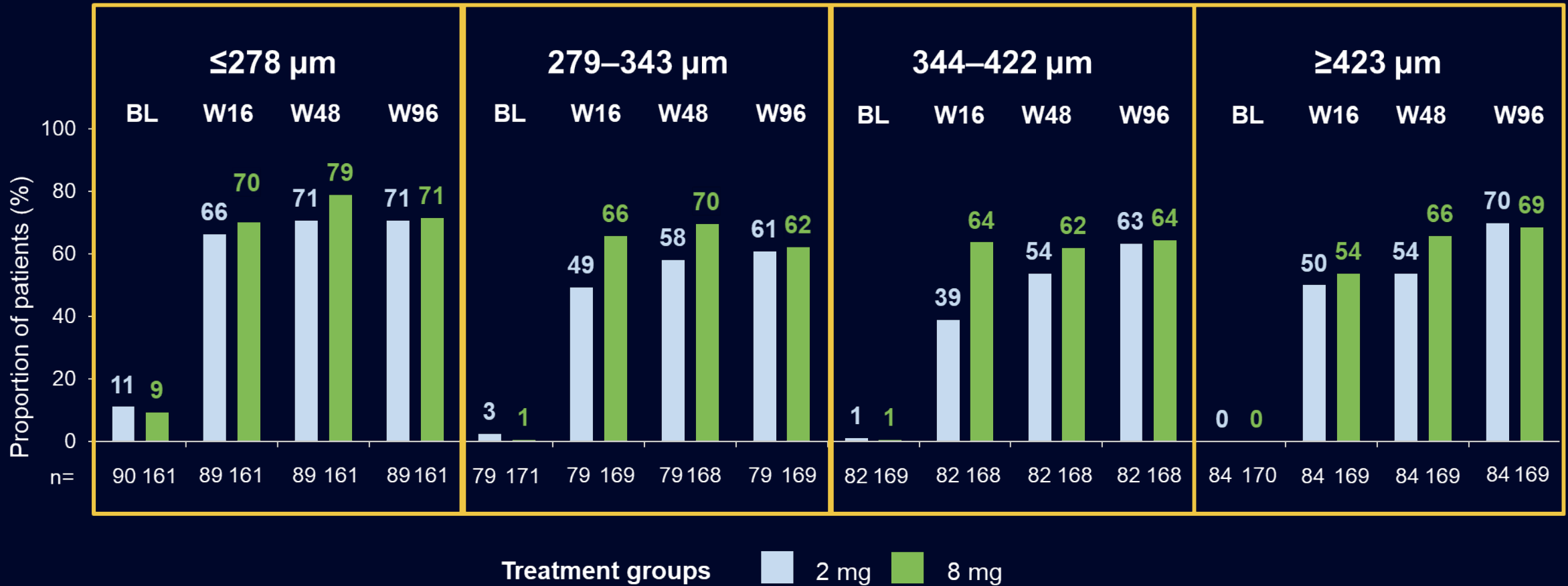
# Proportion of Patients Without IRF, SRF, and Sub-RPE Fluid in the Center Subfield At Weeks 16, 48, and 96



- Fluid control was maintained from Week 16 to Week 96 for all fluid types
- The proportion of patients without each fluid type was comparable with 2 mg vs 8 mg with fewer injections at Week 96

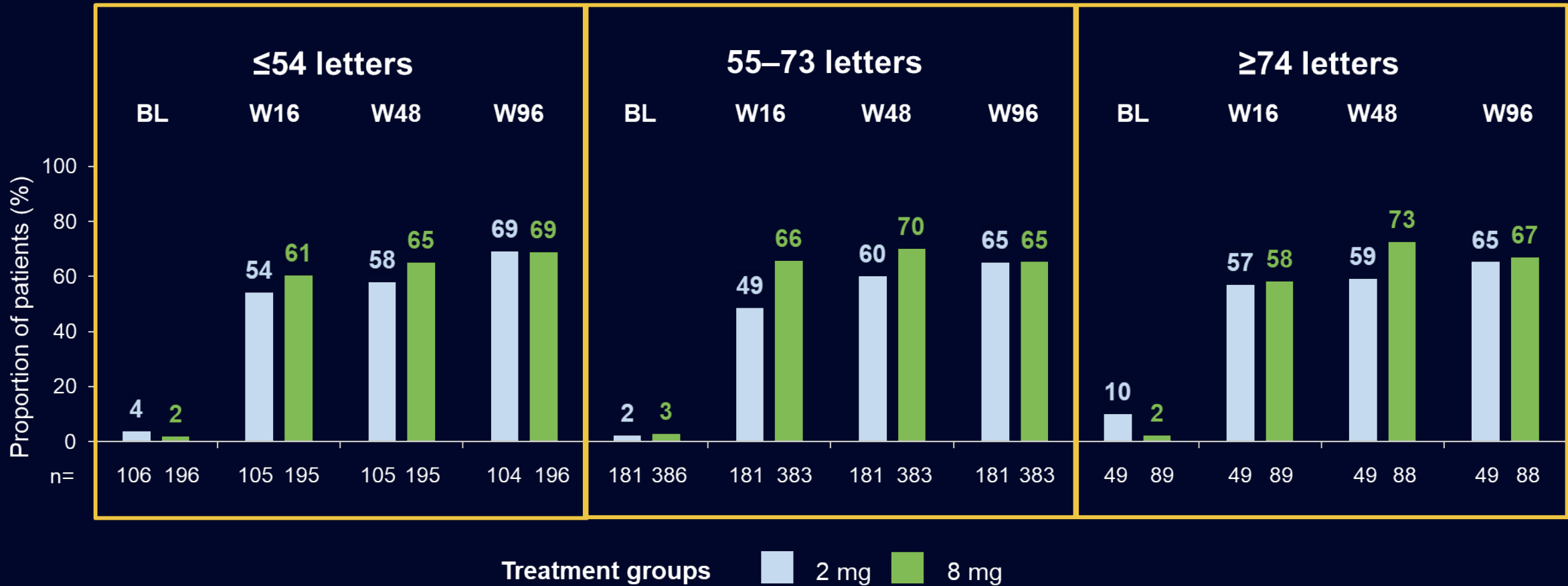
FAS, LOCF prior to ICE was used to impute missing data.  
sub-RPE, subretinal pigment epithelium.

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



- 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

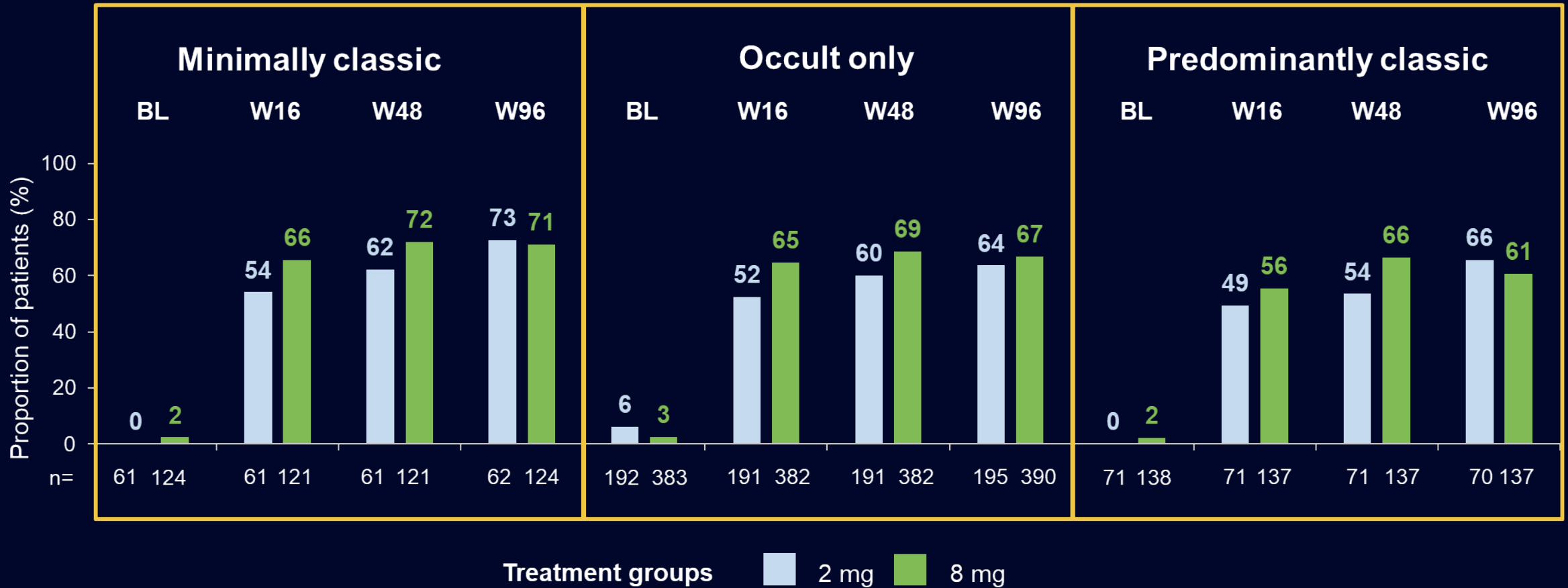
# Proportion of Patients Without Fluid in the Center Subfield at Weeks 16, 48, and 96 Stratified by Baseline BCVA



- 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



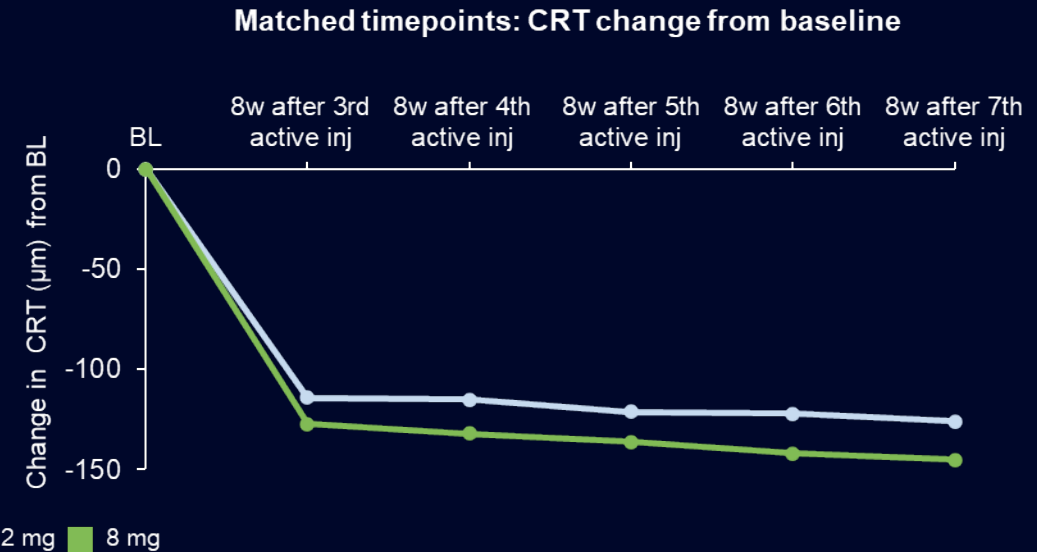
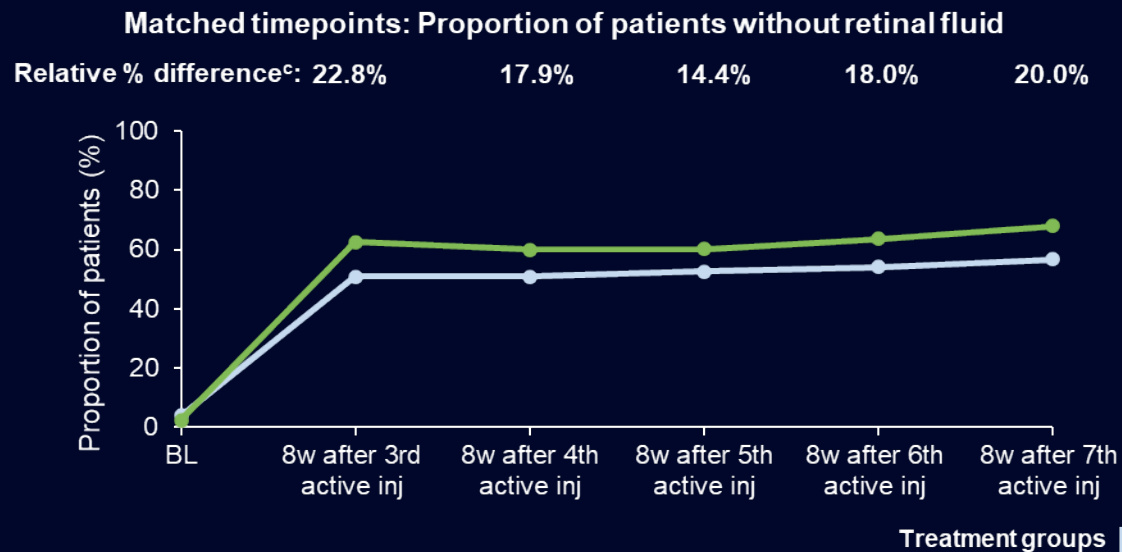
# Proportion of Patients Without Fluid in the Center Subfield at Weeks 16, 48, and 96 Stratified by Baseline CNV Type



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

# Conclusions

- 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<sup>a</sup>
- 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<sup>b</sup>



OC, FAS. OC prior to ICE adjusted by geographic region and BL BCVA (<60 vs ≥60). <sup>a</sup>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; <sup>b</sup>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; <sup>c</sup>Difference between absolute percentages in the 8 mg and 2 mg group divided by the percentages in the 2 mg group.