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Aflibercept 8 mg Monotherapy Results in Regression of Polypoidal Lesions That is Maintained Over 96 Weeks in Patients With PCV in the PULSAR Phase 3 Trial

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Disclosures



- Rufino Silva: Consulting fees from Bayer and Roche; member of advisory board for Alimera, Bayer, Novartis, Roche, and Théa
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- Study disclosures: This study includes research conducted on human patients, and Institutional Review Board approval was obtained prior to study initiation
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PULSAR: Subgroup Analysis in Patients With PCV



- PULSAR: 2-year multicenter, randomized, double-masked study (NCT04423718)
 - PULSAR was conducted across 223 sites in 27 countries
 - ICGA was optional and conducted in 296 patients^a in 13 countries; data from 139 patients with ICGA-confirmed PCV are reported here

Patients with treatment-naïve nAMD, randomly assigned at baseline

2q8
Aflibercept 2 mg every 8 weeks^b
n=336
ICGA-confirmed PCV: n=54

8q12
Aflibercept 8 mg every 12 weeks^b
n=335
ICGA-confirmed PCV: n=44

8q16
Aflibercept 8 mg every 16 weeksbox n=338
ICGA-confirmed PCV: n=41

- Primary endpoint: Mean change in BCVA from baseline at Week 48 (4-letter non-inferiority vs 2q8)
 - In Year 1, only dosing interval shortening was allowed
 - In Year 2, dosing interval shortening AND extension were allowed

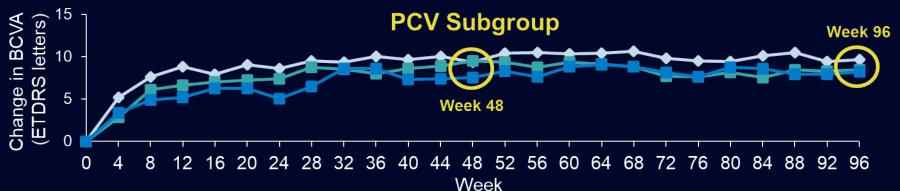
Comparable BCVA Gains Observed Through Week 96 With Aflibercept 8 mg and 2 mg



+7.1

+5.5

+5.4



	BL	Week 48	Week 96
2q8 (n=54)	57.6	+9.3	+9.6
8q12 (n=44)	56.3	+9.5	+8.4
8q16 (n=41)	60.1	+7.5	+8.2

Overall Population

Week 48 Week 96 2q8 (n=336) 58.9 +7.5 8a12 (n=335) 59.9 +6.1 8q16 (n=338) 60.0 +5.9

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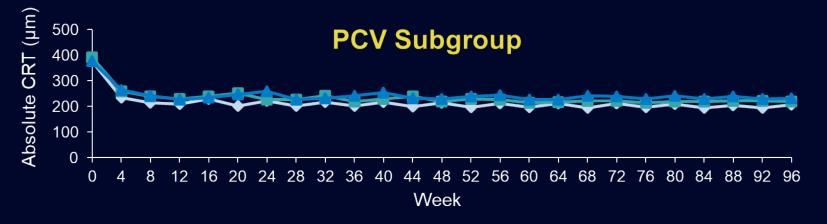
Change in BCVA (ETDRS letters)

PCV subgroup	Mean ± SD change from BL to Week 96 (LOCF)	Two-sided 95% CI	Overall population	Mean ± SD change from BL to Week 96 (LOCF)	Two-sided 95% Cl
2q8	+9.6 ± 12.1	6.3, 12.9	2q8	+7.1 ± 13.0	5.7, 8.5
8q12	+8.4 ± 12.8	4.5, 12.3	8q12	+5.5 ± 14.9	3.9, 7.1
8q16	+8.2 ± 9.0	5.4, 11.1	8q16	+5.4 ± 13.3	4.0, 6.8

FAS, LOCF (last available observed value prior to ICE was used to impute missing data; ICE were handled according to sensitivity estimand strategy for continuous endpoints, as described). N values are number of patients with BCVA assessments at baseline. BL, baseline; CI, confidence interval; ETDRS, Early Treatment Diabetic Retinopathy Study; FAS, full analysis set; ICE, intercurrent event; LOCF, last observation carried forward: SD, standard deviation

Comparable CRT Improvements Observed Through Week 96 With Aflibercept 8 mg and 2 mg





Week 48 Week 96

2q8 (n=54)	216	207
8q12 (n=44)	219	219
8q16 (n=41)	230	232



Week 48 Week 96

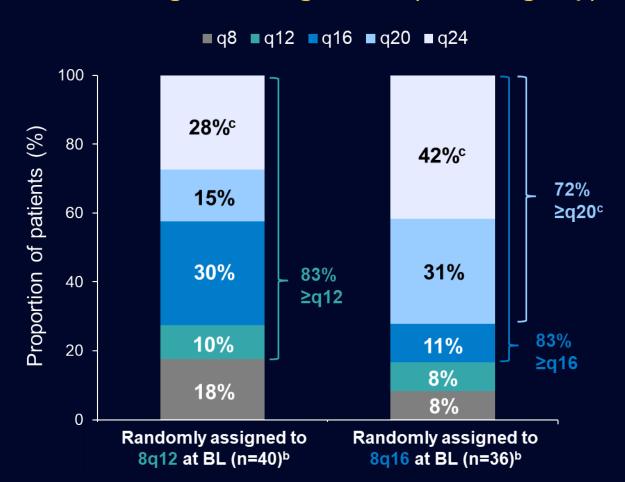
2q8 (n=335)	236	225
8q12 (n=333)	228	223
8q16 (n=334)	227	225

PCV subgroup	Mean ± SD change from BL to Week 96 (LOCF)	Two-sided 95% CI	Overall population	Mean ± SD change from BL to Week 96 (LOCF)	Two-sided 95% CI
2q8	−157 ± 140	−195, −118	2q8	−141 ± 132	−155, −126
8q12	−172 ± 139	−215 , −130	8q12	−147 ± 128	−161 , −133
8q16	−145 ± 142	-190, -100	8q16	−145 ± 135	−160 , −131

Dosing Interval Extension in Year 2^a: Most Patients With PCV Qualified for Extension



Last Assigned Dosing Interval (PCV Subgroup)



PCV	Mean number of injections					
subgroup	BL to Week 48 ^d	BL to Week 96b				
2q8	7.0	12.7				
8q12	6.1	9.7				
8q16	5.1	7.7				

The safety profiles of aflibercept 8 mg and 2 mg were comparable in the PCV subgroup; no new safety signals were observed in patients with PCV

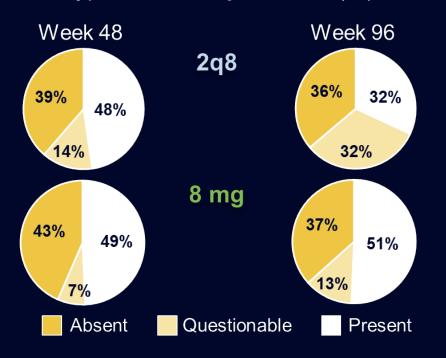
Values may not add up to 100% due to rounding. ^aDosing intervals were extended in Year 2 if patients had <5-letter loss in BCVA from Week 12 AND no fluid at the central subfield AND no new foveal hemorrhage or neovascularization. ^bPatients completing Week 96. ^cPatients assigned to a 24-week dosing interval did not have enough time to complete the interval within the 96-week study period. ^dPatients completing Week 48. q8, every 8 weeks; q12, every 12 weeks; q16, every 16 weeks; q20, every 20 weeks; q24, every 24 weeks.

Polypoidal Lesions Through Week 96



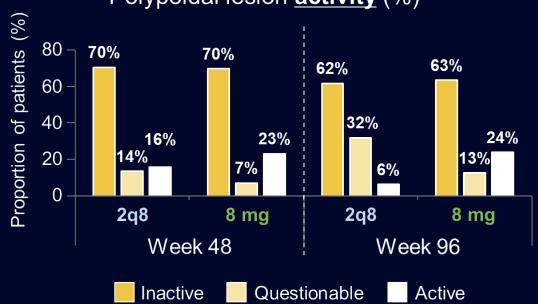
~36% of patients had no polypoidal lesions present at Week 96

Polypoidal lesion presence (%)a,b



~62% of patients had no active polypoidal lesions at Week 96

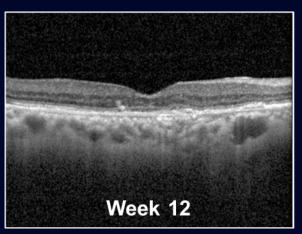
Polypoidal lesion <u>activity</u> (%)^{a,c}

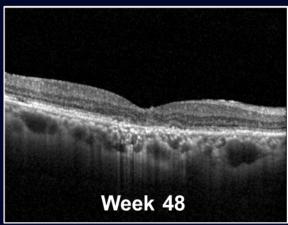


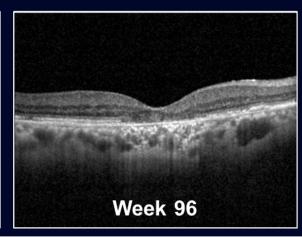
^aW96 completers only; percentages calculated based on number of completers who underwent assessment. ^bW48, n=44 (2q8) and n=69 (8 mg); at W96, n=47 (2q8) and n=71 (8 mg); patients with inactive polypoidal lesions were defined as those with no polypoidal lesions present OR patients with polypoidal lesions present but both IRF and SRF known to be absent. **IRF**, intraretinal fluid; **SRF**, subretinal fluid; **W**, week.

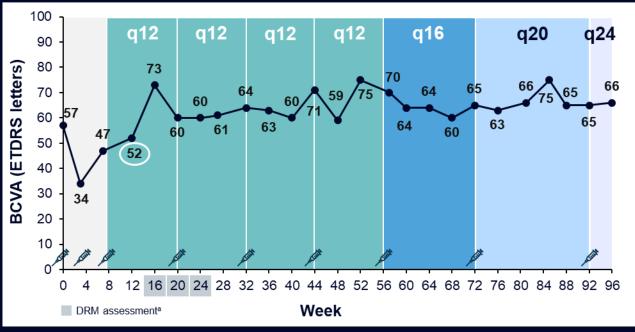
PCV Case Study 1

Age (years)74GenderMaleRaceAsianTreatment arm8q12Baseline BCVA (ETDRS letters)57Baseline CRT (μm)360





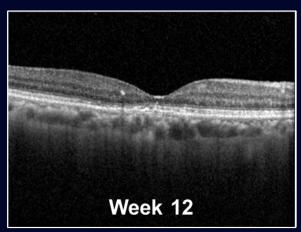


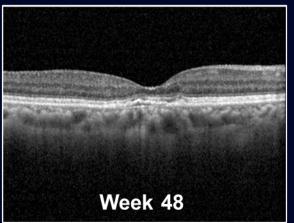


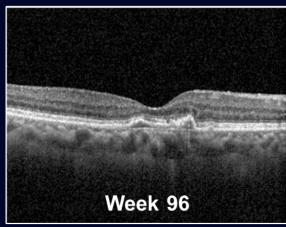


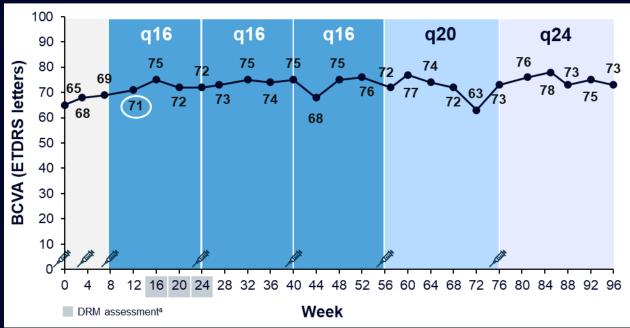
PCV Case Study 2

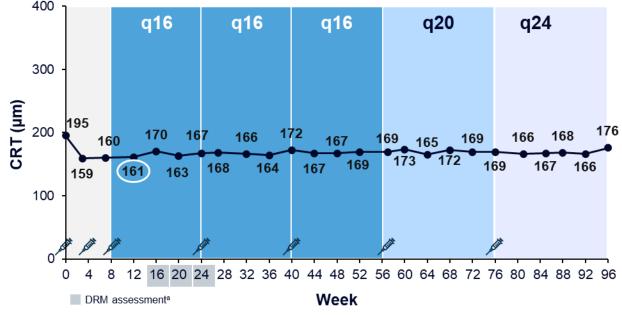
Age (years)61GenderFemaleRaceAsianTreatment arm8q16Baseline BCVA (ETDRS letters)65Baseline CRT (μm)195











Conclusions: Aflibercept 8 mg Monotherapy in PCV



Aflibercept 8 mg monotherapy^a maintained efficacy in PCV over 2 years

- Efficacy was maintained with aflibercept 8 mg monotherapy^a in patients with PCV over 2 years
 - Mean change in BCVA and CRT was comparable among the 2q8, 8q12, and 8q16 treatment arms
- Aflibercept 8 mg markedly reduced the proportion of patients with <u>any</u> polypoidal lesions or <u>active</u> polypoidal lesions through 96 weeks

Extended durability

At Week 96, 72% of patients with PCV in the 8q16 treatment arm qualified for an extended dosing interval of ≥20 weeks, suggesting extended durability of aflibercept 8 mg compared with aflibercept 2 mg

Comparable safety profile for aflibercept 8 mg versus 2 mg

 The safety profiles of aflibercept 8 mg and 2 mg were comparable in the PCV subgroup; no new safety signals were observed in patients with PCV

^aWithout active rescue photodynamic therapy.