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Extension

Aflibercept 8 mg in Diabetic Macular Edema: 156-Week Results From the PHOTON Extension Study

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on behalf of the PHOTON extension study investigators

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Disclosures

- **Sobha Sivaprasad**: Consulting fees from AbbVie, Alimera Science, Amgen, Astellas, Bayer, Biogen, Boehringer Ingelheim, Clearside Biomedical, Eyebiotech, Eyepoint Phamaceuticals, Iveric Bio/Astellas Pharma, Janssen Pharmaceuticals, Kriya Therapeutics, Nova Nordisk, Ocular Therapeutix, OcuTerra, Optos, Ripple Therapeutics, Roche, Stealth Biotherapeutics, and Sanofi.
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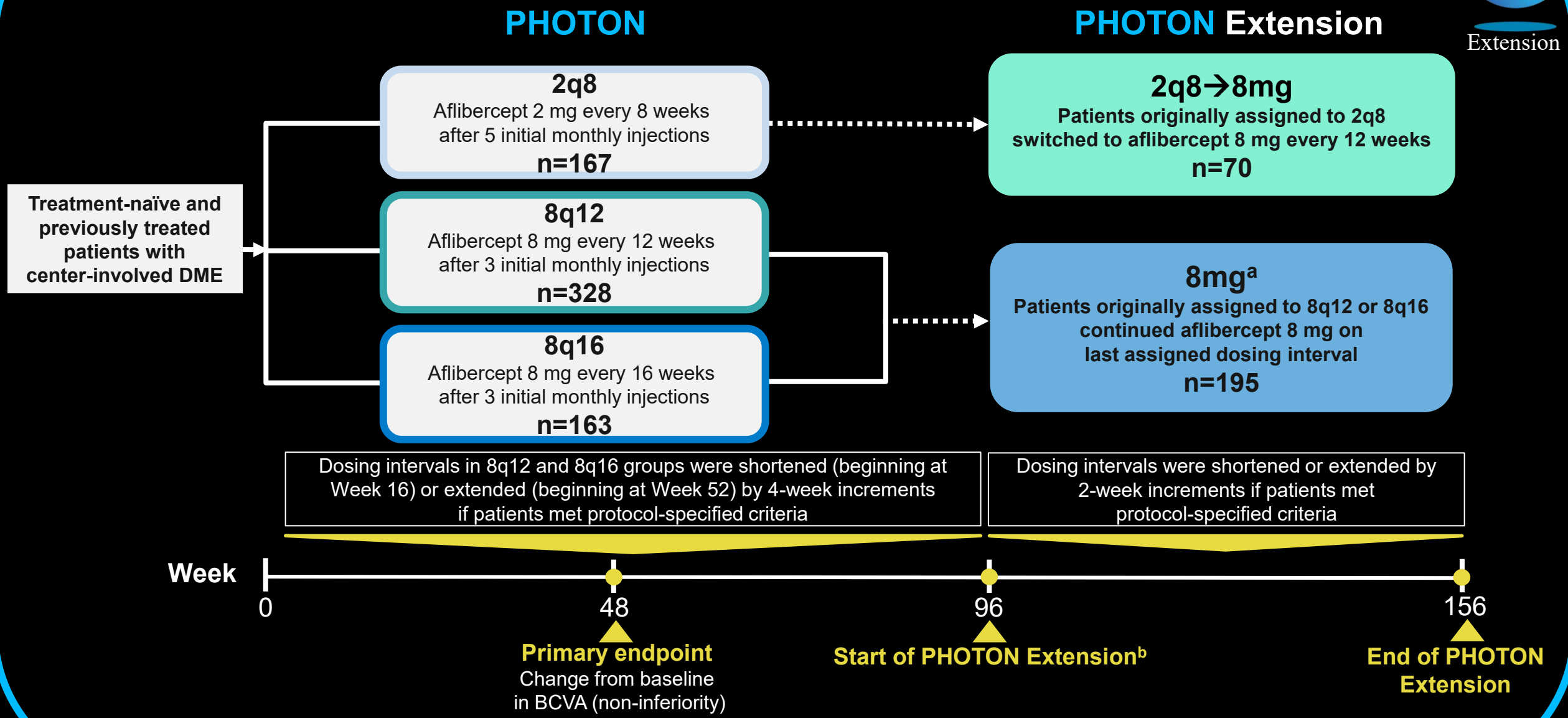
- This study includes research conducted on human patients. Institutional Review Board approval was obtained prior to initiation of the study
- Data were originally presented at the Angiogenesis, Exudation, and Degeneration 2025 Meeting, February 8, 2025

PHOTON Extension Study Design



[a]Patients who were randomized to the 8q12 or 8q16 groups at the beginning of the PHOTON study and continued treatment with aflibercept 8 mg through the PHOTON extension study.
[b]Optional extension phase was added while the pivotal study was ongoing; therefore, not all patients were able to enroll due to time constraints.
BCVA, best-corrected visual acuity; DME, diabetic macular edema.

Mean BCVA Through Week 156

All Patients in PHOTON Extension

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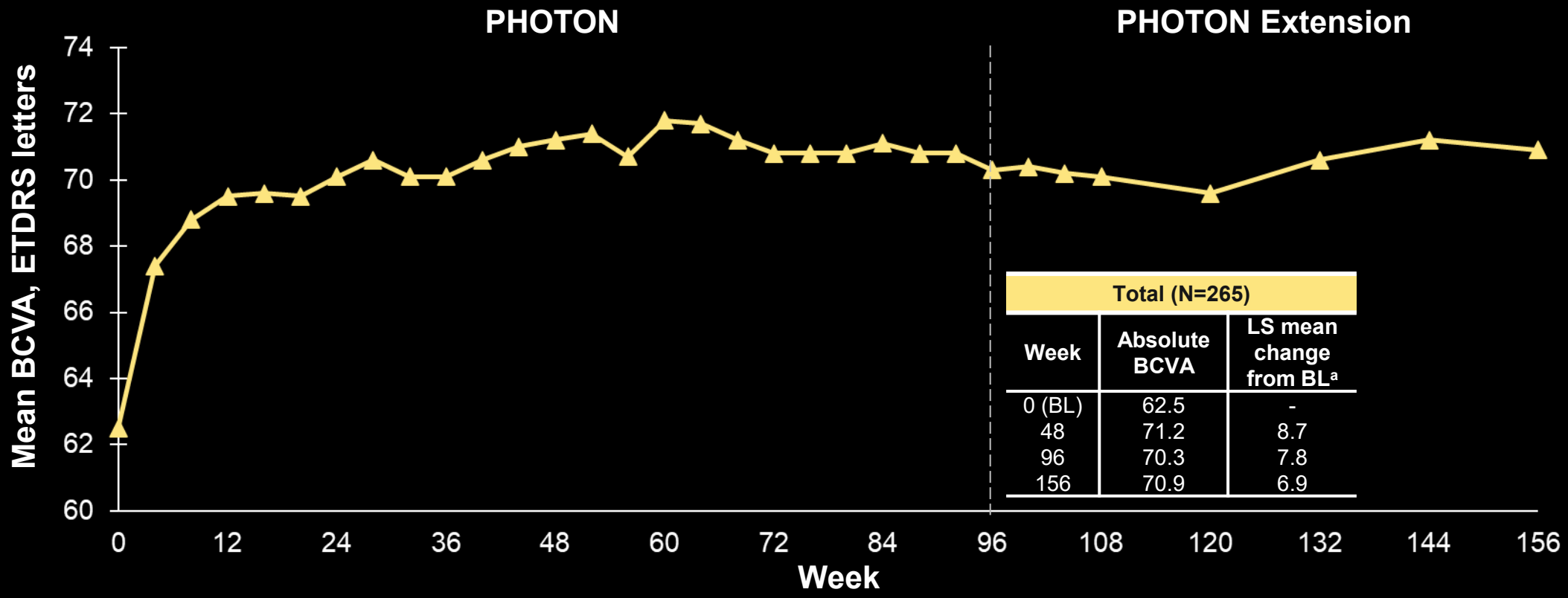

Total (N=265)		
Week	Absolute BCVA	LS mean change from BL[a]
0 (BL)	62.5	-
48	71.2	8.7
96	70.3	7.8
156	70.9	6.9

eFAS, observed cases.

[a]LS mean values were generated using MMRM, with baseline BCVA measurement as a covariate, treatment group, visit and the stratification variables (geographic region [Japan vs rest of the world]; baseline CRT [<400 µm vs ≥400 µm], prior treatment for DME (per EDC) [yes vs. no]) as fixed factors, and terms for the interaction between baseline and visit and the interaction between treatment and visit.

BL, baseline; CI, confidence interval; LS, least square; MMRM, mixed model for repeated measurements.

Mean BCVA[a] Through Week 156

2q8→8mg and 8mg[b] Patients

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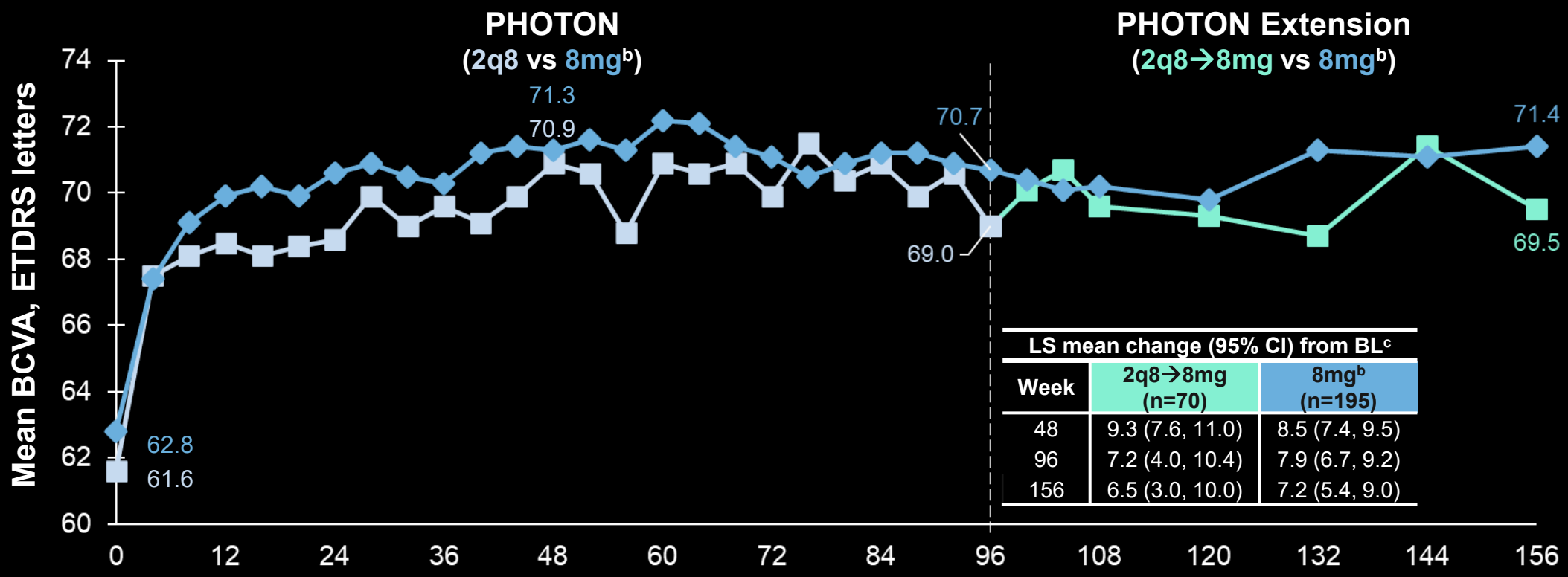


LS mean change (95% CI) from BL[c]		
Week	2q8→8mg (n=70)	8mg[b] (n=195)
48	9.3 (7.6, 11.0)	8.5 (7.4, 9.5)
96	7.2 (4.0, 10.4)	7.9 (6.7, 9.2)
156	6.5 (3.0, 10.0)	7.2 (5.4, 9.0)

Mean number of injections from baseline to Week 96[d]

2q8: 13.8

8mg[b]: 8.9

Mean number of injections from Week 96 to Week 156[d]

2q8→8mg: 4.4

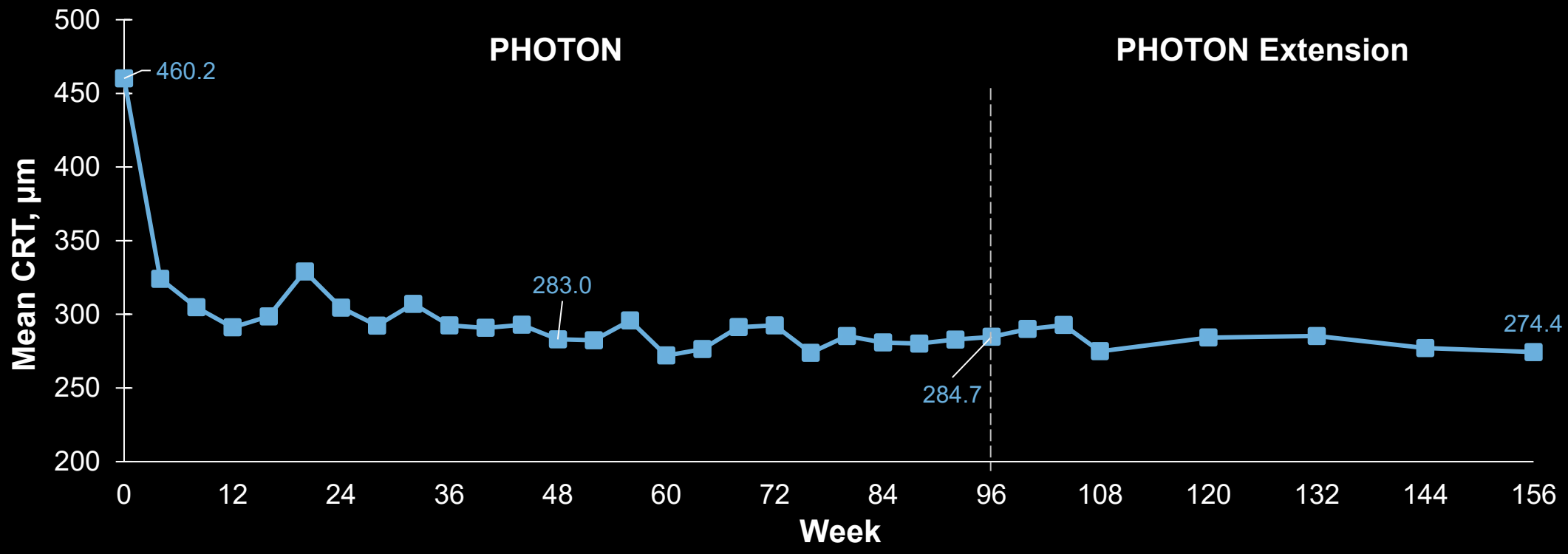
8mg[b]: 3.3

[a]eFAS, observed cases. [b]Patients who were randomized to the 8q12 or 8q16 groups at the beginning of the PHOTON study and continued treatment with aflibercept 8 mg through the PHOTON extension study. [c]LS mean values were generated using MMRM and a weighting scheme based on observed margins, with baseline BCVA measurement as a covariate, treatment group, visit and the stratification variables (geographic region [Japan vs rest of the world]; baseline CRT [<400 µm vs ≥400 µm], prior treatment for DME (per EDC) [yes vs. no]) as fixed factors, and terms for the interaction between baseline and visit and the interaction between treatment and visit. [d]eFAS.

BL, baseline; CI, confidence interval; CRT, central retinal thickness; EDC, electronic data capture; eFAS, PHOTON extension full analysis set; ETDRS, Early Treatment Diabetic Retinopathy Study; LS, least squares; MMRM, mixed model for repeated measurements.

Mean CRT Through Week 156

8mg[a] Patients

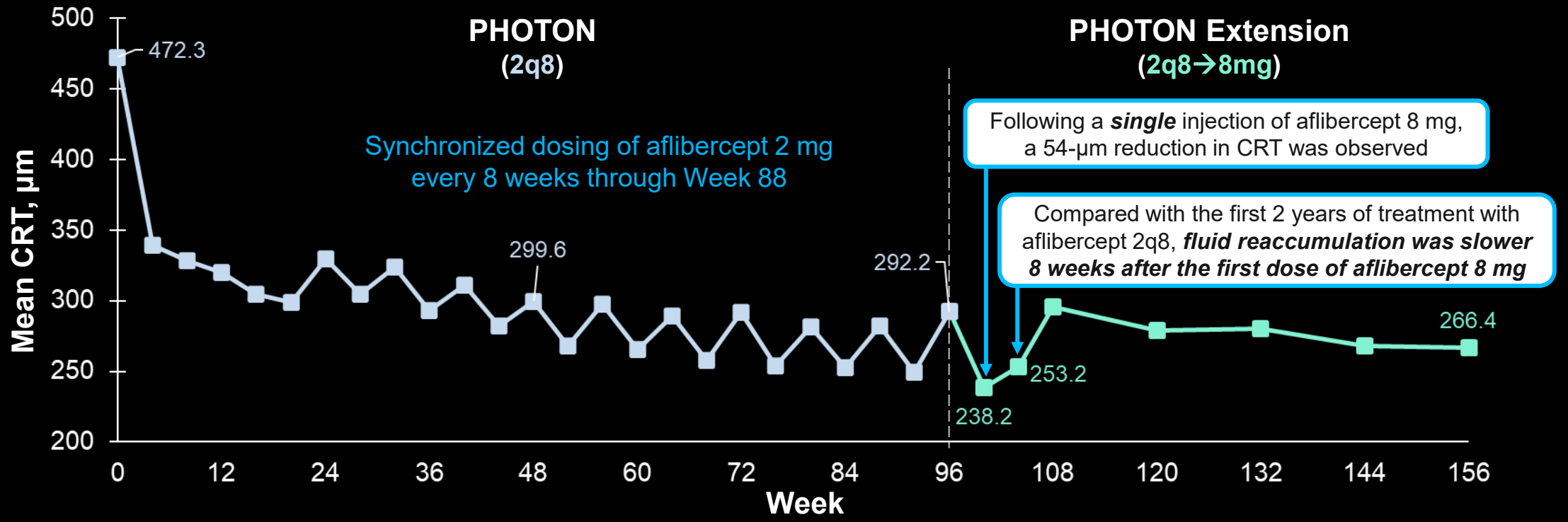


	LS mean change (95% CI) from baseline (µm)		
	Week 48	Week 96	Week 156
8mg[a] (n=195)	-180.6 (-193.5, -167.7)	-178.4 (-194.2, -162.6)	-192.4 (-208.7, -176.1)

[a]Patients who were randomized to the 8q12 or 8q16 groups at the beginning of the PHOTON study and continued treatment with aflibercept 8 mg through the PHOTON extension study.
LS mean values were generated using MMRM and a weighting scheme based on observed margins, with baseline CRT measurement as a covariate, treatment group, visit and the stratification variables (geographic region [Japan vs rest of the world]; baseline CRT [<400 µm vs ≥400 µm], prior treatment for DME (per EDC) [yes vs. no]) as fixed factors, and terms for the interaction between baseline and visit and the interaction between treatment and visit.
eFAS, observed cases.

Mean CRT Through Week 156

2q8→8mg Patients



	LS mean change (95% CI) from baseline (µm)		
	Week 48	Week 96	Week 156
2q8→8mg (n=70)	-161.7 (-187.8, -135.6)	-169.7 (-221.8, -117.6)	-197.4 (-220.4, -174.5)

Numerically greater reduction in CRT was observed at Week 156 after switching to aflibercept 8 mg compared with aflibercept 2q8

eFAS, observed cases. LS mean values were generated using MMRM and a weighting scheme based on observed margins, with baseline CRT measurement as a covariate, treatment group, visit and the stratification variables (geographic region [Japan vs rest of the world]; baseline CRT [<400 µm vs ≥400 µm], prior treatment for DME (per EDC) [yes vs. no]) as fixed factors, and terms for the interaction between baseline and visit and the interaction between treatment and visit.

Majority of Patients in the 8mg and 2q8→8mg Groups Achieved Extended Dosing Intervals at Week 156

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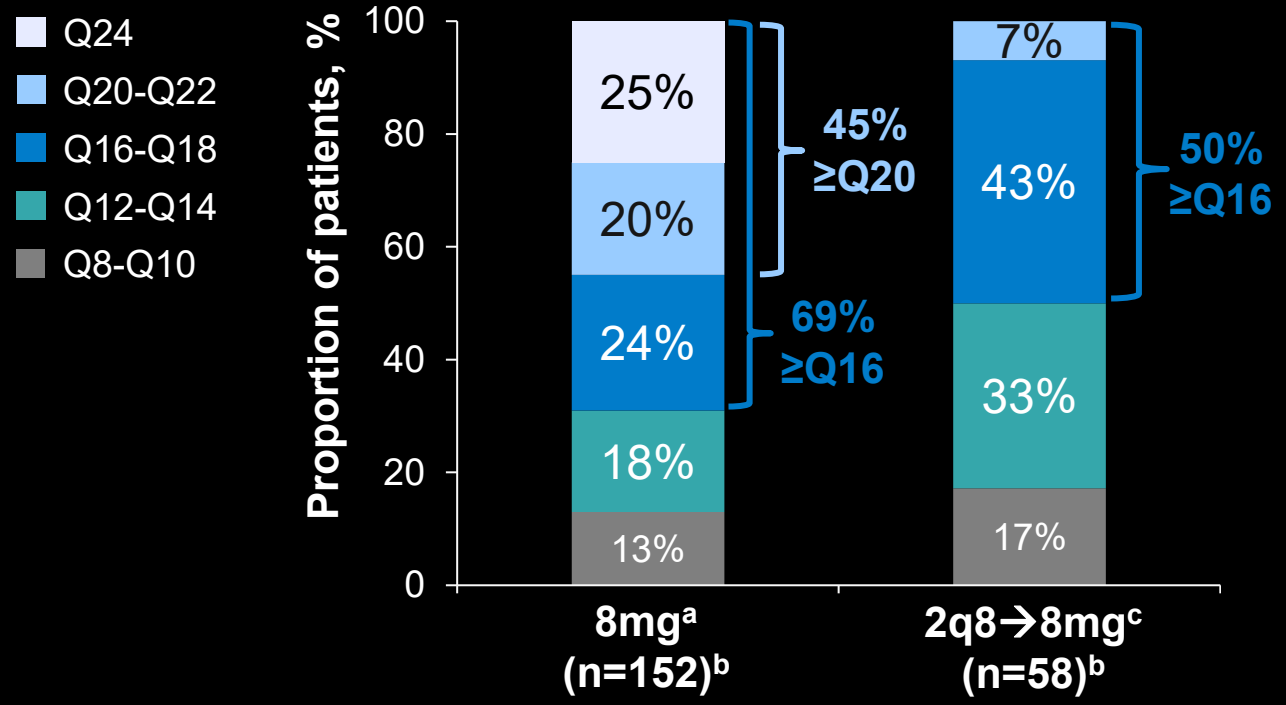
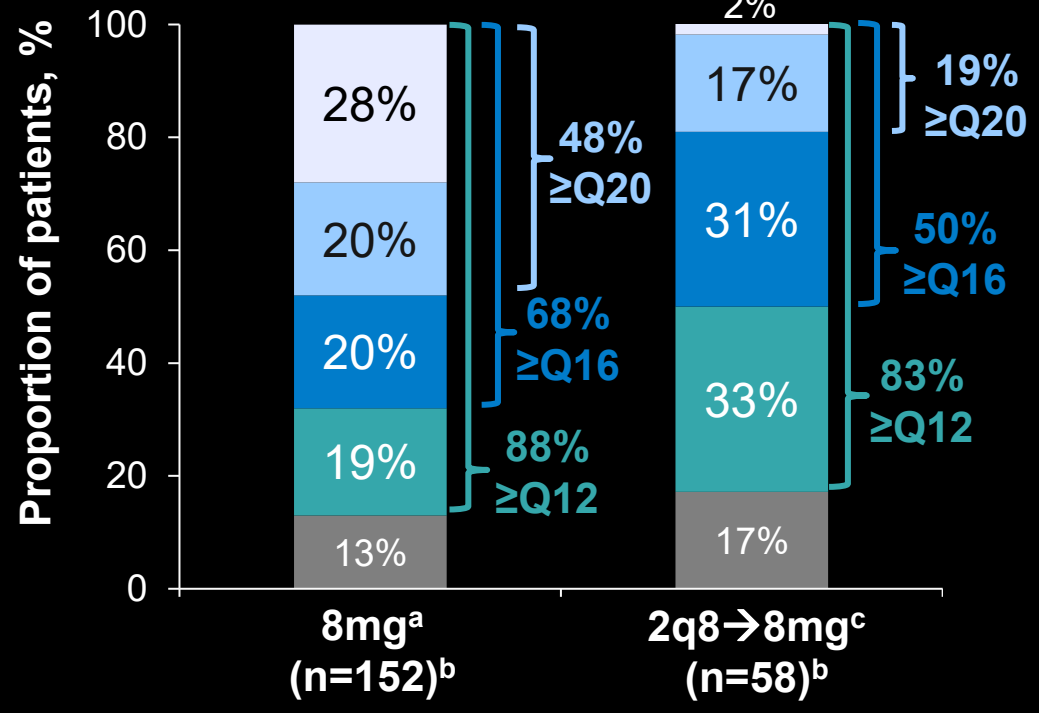
Last Completed Dosing Interval



Last Assigned Dosing Interval



88% and 83% of patients in the 8mg and 2q8→8mg group, respectively, had a *last assigned dosing interval* of ≥12 weeks at Week 156

[a]Patients who were randomized to the 8q12 or 8q16 groups at the beginning of the PHOTON study and continued treatment with aflibercept 8 mg through the PHOTON extension study.
[b]eFAS, patients completing Week 156.
[c]Per protocol and E-DRM, patients in the 2q8→8mg group could have achieved a last completed dosing interval of Q18 and a last assigned dosing interval of Q20 weeks by Week 156. Several patients were assigned a dosing interval that was longer than planned per E-DRM and actual dates of injections received due to late visits.Values may not add up to 100% due to rounding.
E-DRM, PHOTON extension dosing regimen modification.

Ocular and Non-ocular Safety Through Week 156[a]

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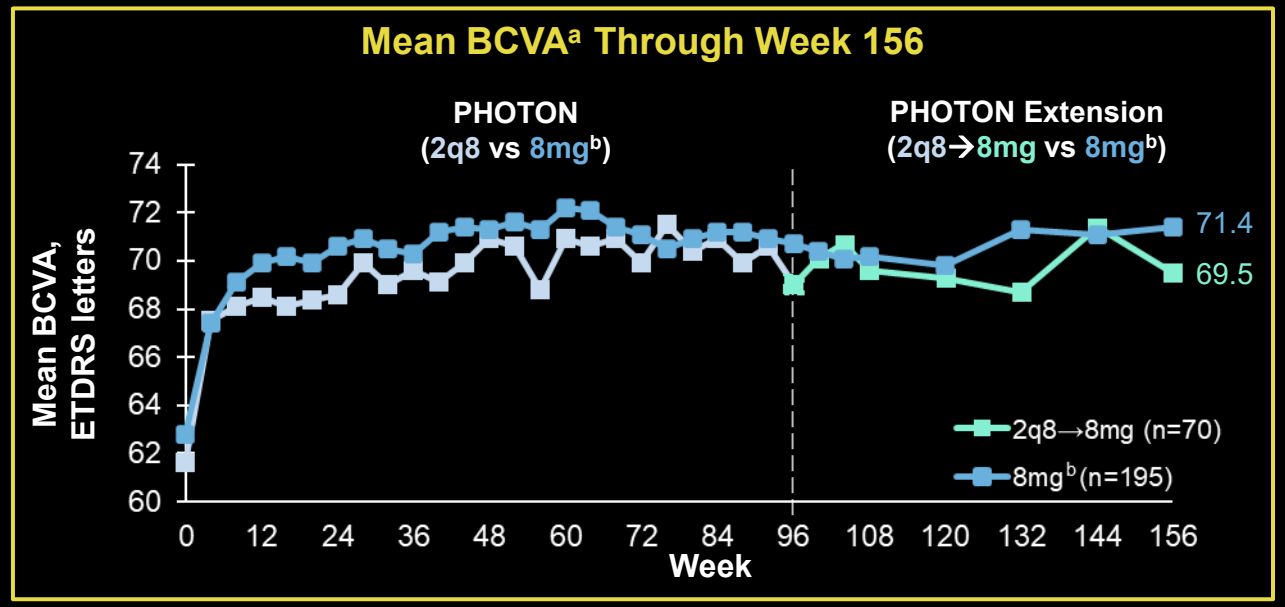
	2q8→8mg	8mg[b]	Total
N (eSAF)	70	195	265
Ocular AEs, n (%)[c]	37 (52.9)	108 (55.4)	145 (54.7)
Ocular SAEs, n (%)[c]	3 (4.3)	4 (2.1)	7 (2.6)
Intraocular inflammation, n (%)[c]	1 (1.4)	3 (1.5)	4 (1.5)
Iritis	0	2 (1.0)	2 (0.8)
Iridocyclitis	1 (1.4)	0	1 (0.4)
Uveitis	1 (1.4)	0	1 (0.4)
Endophthalmitis	0	1 (0.5)	1 (0.4)
Non-ocular SAEs, n (%)[c]	24 (34.3)	58 (29.7)	82 (30.9)
APTC events, n (%)[c]	5 (7.1)	14 (7.2)	19 (7.2)
Deaths, n (%)[d]	2 (2.9)	10 (5.1)	12 (4.5)

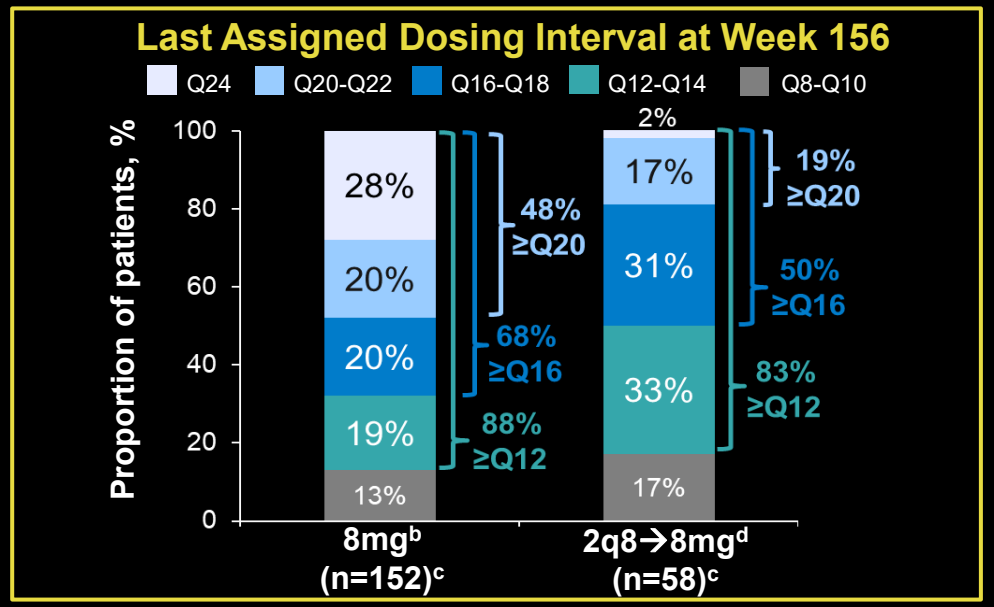
- Ocular TEAEs reported in >4% of all patients included cataract, vitreous floaters, vitreous detachment, and diabetic retinal edema
- No cases of occlusive vasculitis were reported

[a]Cumulative events from baseline through Week 156; ocular safety events were reported in the study eye. [b]Patients who were randomized to the 8q12 or 8q16 groups at the beginning of the PHOTON study and continued treatment with aflibercept 8 mg through the PHOTON extension study. [c]Treatment emergent. [d]All events.
AE, adverse event; APTC, Anti-Platelet Trialists' Collaboration; SAE, serious adverse event; eSAF, PHOTON extension safety analysis set.

PHOTON Extension: Key Week 156 Results

- Patients in the **8mg group** maintained visual and anatomic improvements achieved in the first 2 years, with the majority of patients on extended dosing intervals
  - 45% completed ≥20-week dosing intervals and 48% had a last assigned dosing interval of ≥20 weeks at Week 156
- In the **2q8→8mg group**, visual and anatomic improvements achieved with fixed 2q8 dosing were maintained with aflibercept 8 mg
  - 83% of patients achieved ≥12-week dosing intervals at Week 156
  - ***Longer duration of action with aflibercept 8 mg*** vs 2 mg was ***further supported*** by ***slower fluid reaccumulation*** following the first aflibercept 8-mg injection
- No new safety signals were reported with aflibercept 8 mg through Week 156





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