



Intraocular Pressure Outcomes with Intravitreal Aflibercept 8 mg and 2 mg in Patients with Neovascular Age-related Macular Degeneration Through Week 96 of the PULSAR Trial

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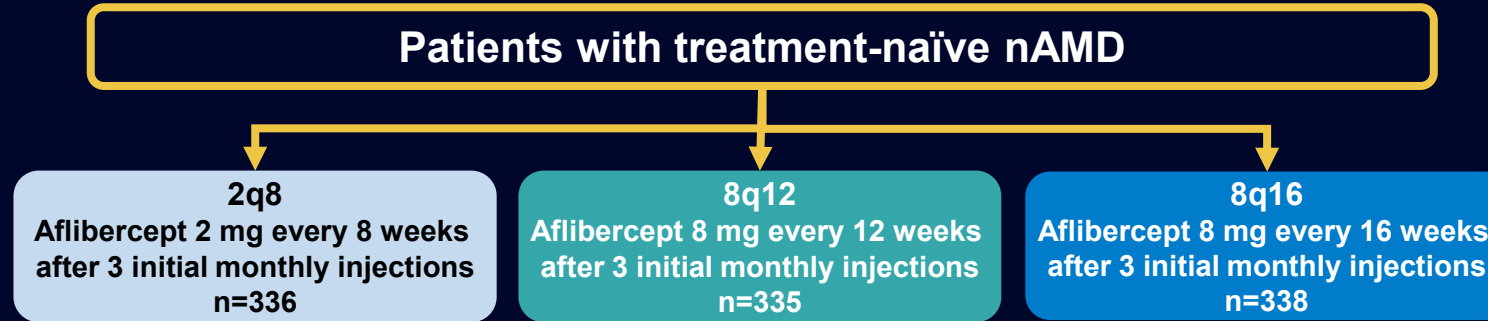
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Disclosures



- **Paolo Lanzetta:** Consultant: Aerie, Allergan, Apellis, Bausch & Lomb, Bayer, Biogen, Boehringer Ingelheim, Genentech, I-Care, Novartis, Ocular Therapeutix, Outlook Therapeutics, and Roche
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PULSAR: Multicenter, Randomized, Double-masked 96-week Study



	Injection volume	Mean (SD) number of active injections of aflibercept 8 mg or 2 mg through Week 96 ^a
2q8	50 µL	11.9 (2.4)
8q12	70 µL	9.2 (1.9)
8q16		7.8 (2.0)

This post hoc analysis evaluated the potential effect of the higher injection volume of aflibercept 8 mg versus 2 mg on IOP outcomes for study eyes in patients with nAMD through to 96 weeks

Safety analysis set.

2q8, aflibercept 2 mg every 8 weeks; 8q12, aflibercept 8 mg every 12 weeks; 8q16, aflibercept 8 mg every 16 weeks; IOP, intraocular pressure; nAMD, neovascular age-related macular degeneration.

Pre- and Post-injection IOP Assessment

Pre-injection IOP assessment (bilaterally)



Measured at active and
sham injection visits



Post-injection IOP assessment (study eye only)



Measured at active and
sham injection visits



IOP was measured ~30 to
60 minutes after administration
(study eye only)

Symptoms indicative of a **higher
IOP increase prior to 30 minutes
post-injection**

- IOP measured sooner
- Managed at investigator's
discretion

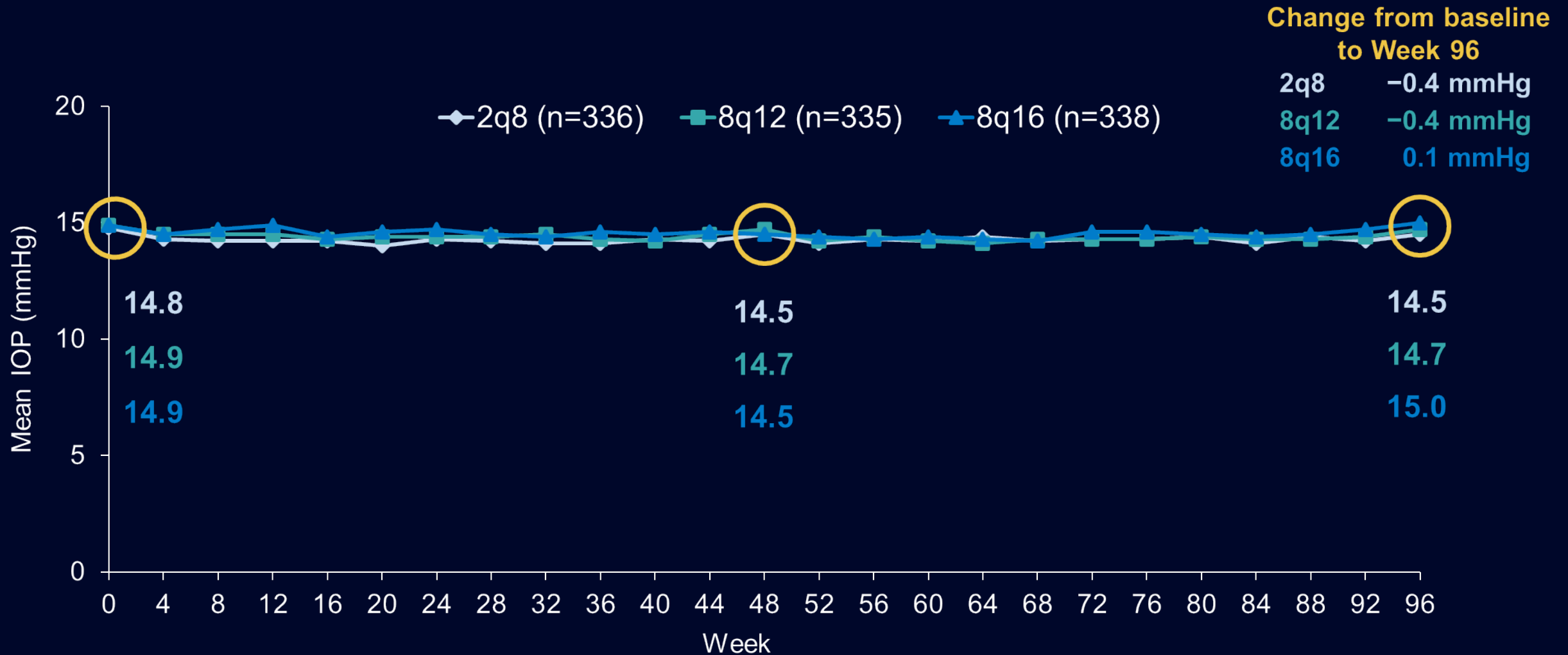
Reported post-injection IOP was
the last measurement recorded
before the patient left the
study site^a

The same method of measurement was used in each patient throughout the study
(e.g., Goldmann applanation tonometry, rebound tonometry Icare, or Tono-pen™)

Patients with uncontrolled glaucoma (defined as IOP >25 mmHg despite treatment with antiglaucoma medication) in the study eye at screening or baseline were excluded from the study.

^aAny clinically meaningful injection-related increase in IOP was documented as an adverse event at the discretion of the investigator in a masked fashion.

Mean Pre-injection IOP Values in Study Eyes Were Similar Through Week 96



Safety analysis set through Week 96.
 Study eyes in the safety analysis set in 2q8, 8q12, and 8q16, received a mean of 11.9, 9.2, and 7.8 injections, respectively, through Week 96.

Pre-injection IOP in the Study Eye Through Week 96



	2q8	8q12	8q16	All 8 mg
Safety analysis set, n	336	335	338	673
Pre-injection IOP ≥ 25 mmHg, n (%) ^a	6 (1.8)	9 (2.7)	7 (2.1)	16 (2.4)
Pre-injection IOP ≥ 35 mmHg, n (%) ^a	1 (0.3)	1 (0.3)	0	1 (0.1)

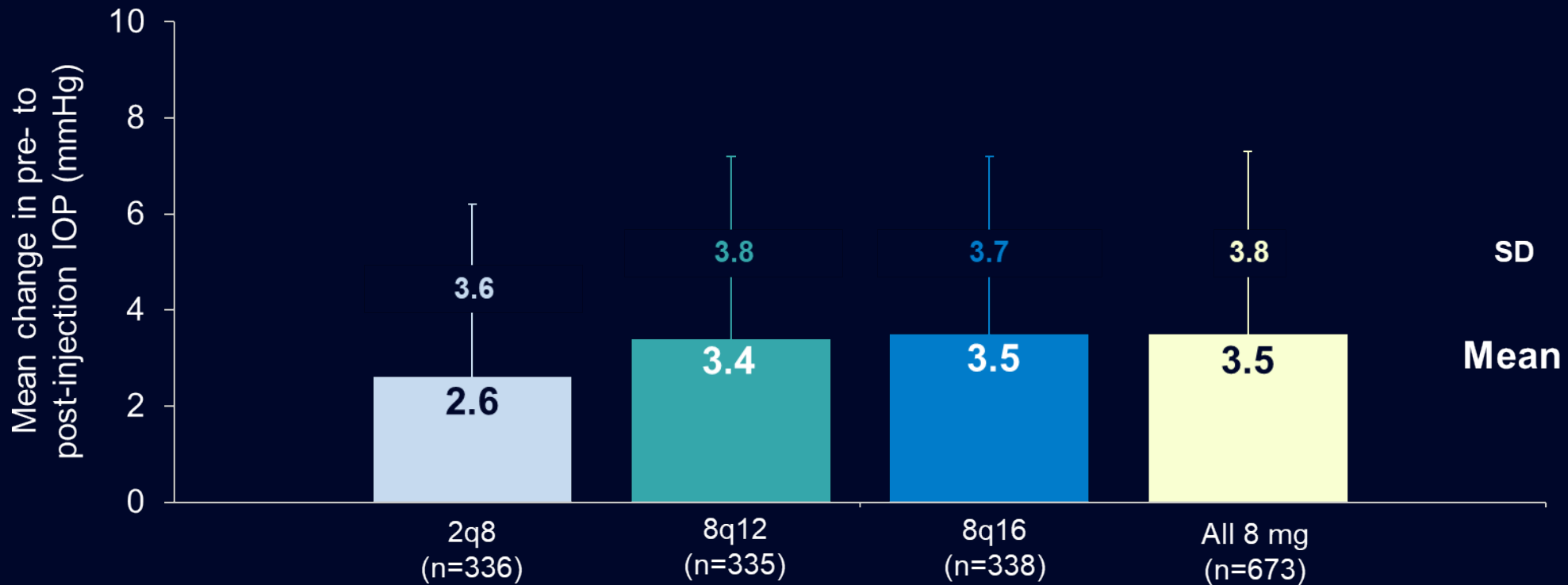
Proportion of patients with pre-injection IOP ≥ 25 or ≥ 35 mmHg at any visit through Week 96 was comparable across the treatment groups

^aAt any visit.

Mean Change in Pre- to Post-injection IOP in Study Eyes at Active Dosing Visits Through Week 96



Mean (SD) number of active injections ^a	11.9 (2.4)	9.2 (1.9)	7.8 (2.0)	8.5 (2.1)
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The difference in mean change in pre- to post-injection IOP was <1 mmHg between treatment groups, no clinically relevant differences were observed

Post-injection IOP in the Study Eye Through Week 96



	2q8	8q12	8q16	All 8 mg
Safety analysis set, n	336	335	338	673
Post-injection IOP ≥ 35 mmHg, n (%) ^a	1 (0.3)	2 (0.6)	1 (0.3)	3 (0.4)

The proportion of patients with IOP ≥ 35 mmHg post-injection at any visit through Week 96 was comparable across the treatment groups

Paracentesis or anterior chamber puncture in the study eye through Week 96^b

	2q8	8q12	8q16	All 8 mg
Patients requiring paracentesis or anterior chamber puncture/n (%)	0/336 (0)	1/335 (0.3)	0/338 (0)	1/673 (0.1)
Number of events requiring paracentesis or anterior chamber puncture/number of active study eye injections (%)	0/4007 (0)	2/3090 (<0.1)	0/2621 (0)	2/5711 (<0.1)

^aAt any visit. ^bSafety analysis set.

IOP-related TEAEs Through Week 96



	2q8	8q12	8q16	All 8 mg
Safety analysis set, n	336	335	338	673
Patients with IOP increase or glaucoma, n (%)	13 (3.9)	16 (4.8)	17 (5.0)	33 (4.9)
Angle closure glaucoma	1 (0.3)	1 (0.3)	1 (0.3)	2 (0.3)
Glaucoma	1 (0.3)	1 (0.3)	3 (0.9)	4 (0.6)
Intraocular pressure increased	10 (3.0)	12 (3.6)	11 (3.3)	23 (3.4)
Ocular hypertension	1 (0.3)	4 (1.2)	4 (1.2)	8 (1.2)
Open angle glaucoma	1 (0.3)	0	0	0

TEAEs in the study eye were as assessed by the investigators. The TEAE "IOP increase or glaucoma" was defined based on the following preferred terms: "Angle closure glaucoma", "Borderline glaucoma", "Glaucoma", "Glaucomatous optic neuropathy", "Intraocular pressure increased", "Ocular hypertension", "Open angle glaucoma", "Optic nerve cupping", and "Trabeculectomy".

TEAE, treatment-emergent adverse event.

Conclusions

Pre-injection IOP

- **Pre-injection IOP** values in study eyes were **similar across treatment groups**, and there was **no indication of sustained IOP increase** through Week 96

Pre- to post-injection IOP differences

- The difference in mean change in pre- to post-injection IOP was **<1 mmHg between treatment groups**, **no clinically relevant differences** were observed
- Only 1 patient required paracentesis for an acute rise in post-injection IOP

TEAEs

- **Rates** of “IOP increase or glaucoma”, “IOP increased”, and “Ocular hypertension” **were comparable across treatment groups**