Early Insights From Real-World Use of Aflibercept 8 mg Among Eyes With Diabetic Macular Edema Switching From Other Anti-VEGF Agents

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- **Edoardo Midena**: No conflicts

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Inclusion Criteria and Attrition

Inclusion criteria	Number of eyes: IRIS	Number of eyes: Vestrum
Eyes with ≥1 diagnosis of DME at the index date[a] receiving aflibercept 8 mg and no other anti-VEGF agent or other treatments[b]	30,266	7845
Adult patients (aged ≥18 years) with no diagnosis of nAMD or RVO during the 12 months prior to/at the index date	28,854	7372
Eyes treated with anti-VEGF therapy or other treatments[b] during the 12 months prior to the index date	24,808	7026
≥1 visit ≥6 months prior to the index date	23,436	6166
For patients with both eyes eligible for inclusion, 1 eye was randomly selected per patient	17,938	4017
Eyes that were switched from an anti-VEGF agent to aflibercept 8 mg during the indexing period[c]	10,092	3706
Eyes that were consistently treated pre-switch[d]	3963	2162
Eyes with an average injection interval of 4-8 weeks before switching and ≥1 post-initial dosing phase injection of aflibercept 8 mg	2280	653

Criteria in green boxes apply to injection interval analyses. [a]Index date was date of first aflibercept 8-mg injection. [b]Other treatments included intravitreal steroids and laser therapy. [c]Indexing period was between August 18, 2023, and June 30, 2024, for the IRIS cohort, or between August 18, 2023, and July 31, 2024, for the Vestrum cohort. [d]Treated with an anti-VEGF agent for ≥6 months and an average injection interval of ≤8 weeks for the most recent anti-VEGF agent. IRIS, Intelligent Research in Sight; nAMD, neovascular age-related macular degeneration; RVO, retinal vein occlusion.

Outcomes

- Injection intervals were evaluated for eyes that were consistently treated with anti-VEGF (defined as ≥6 months of treatment with an average injection interval of ≤8 weeks for the most recent anti-VEGF agent) and ≥1 post-initial dosing phase injection
- The last observed injection interval in the pre-switch phase (during 12 months prior to the index date) and after the initial dosing phase (defined as the first 3 injections or 90 days, whichever occurred first) were assessed, stratified by mean injection interval before switching (4-<6 or ≥6-8 weeks)

Patient Characteristics at the Index Date

	IRIS (n=10,092)	Vestrum (n=3706)
Age, mean (SD), years	66.5 (10.5)	66.3 (10.9)
Males, n (%)	5576 (55)	2033 (55)
Race/ethnicity, n (%)		
Hispanic or Latino	866 (10)	NA
White	5548 (62)	NA
Black or African American	1025 (12)	NA
Asian or Pacific Islander	276 (3)	NA
Other	1174 (13)	NA
Bilateral disease, n (%)	9264 (92)	3210 (87)
Fellow eye treated with aflibercept 8 mg at the index date, n (%)	3671 (36)	1064 (29)
VA, mean (SD), ETDRS letters	65.5 (18.2)	70 (10.7)

ETDRS, Early Treatment of Diabetic Retinopathy Study; NA, not available (due to limitation of the Vestrum database); SD, standard deviation.

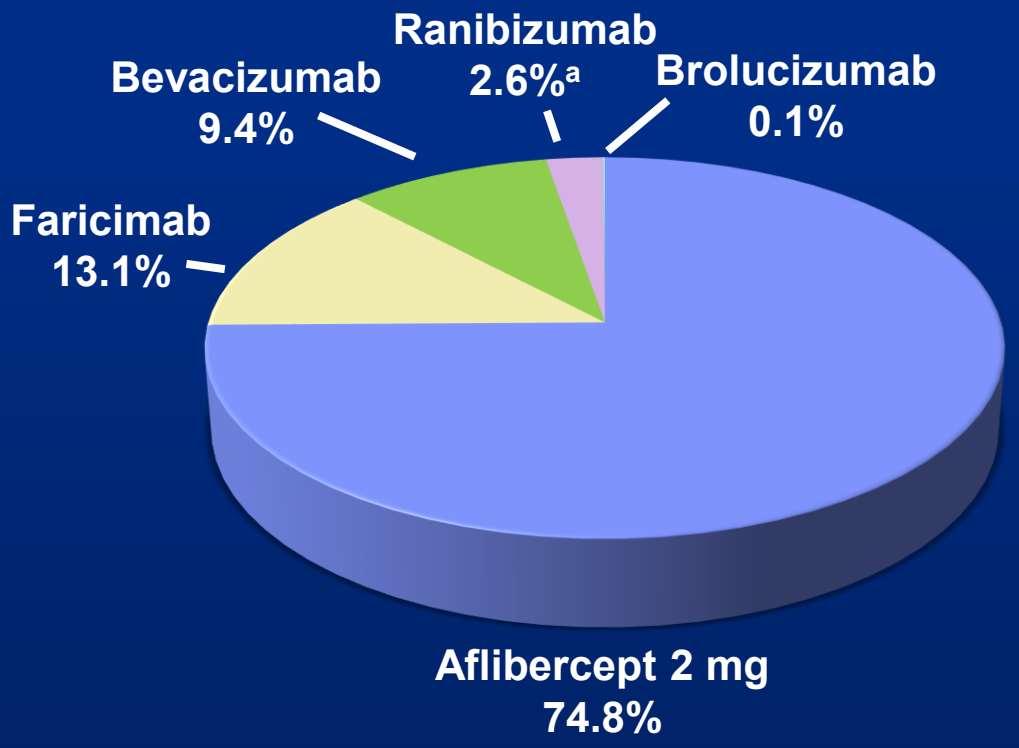
Treatment Patterns During Follow-Up

	IRIS (n=10,092)	Vestrum (n=3706)
Duration of post-switch follow-up, days		
Mean (SD)	167 (109)	246 (110)
Median (Q1, Q3)	162 (71, 245)	252 (175, 329)
Number of aflibercept 8-mg injections during follow-up[a]		
Mean (SD)	3 (2)	3 (1)
Median (Q1, Q3)	3 (1, 4)	3 (2, 4)

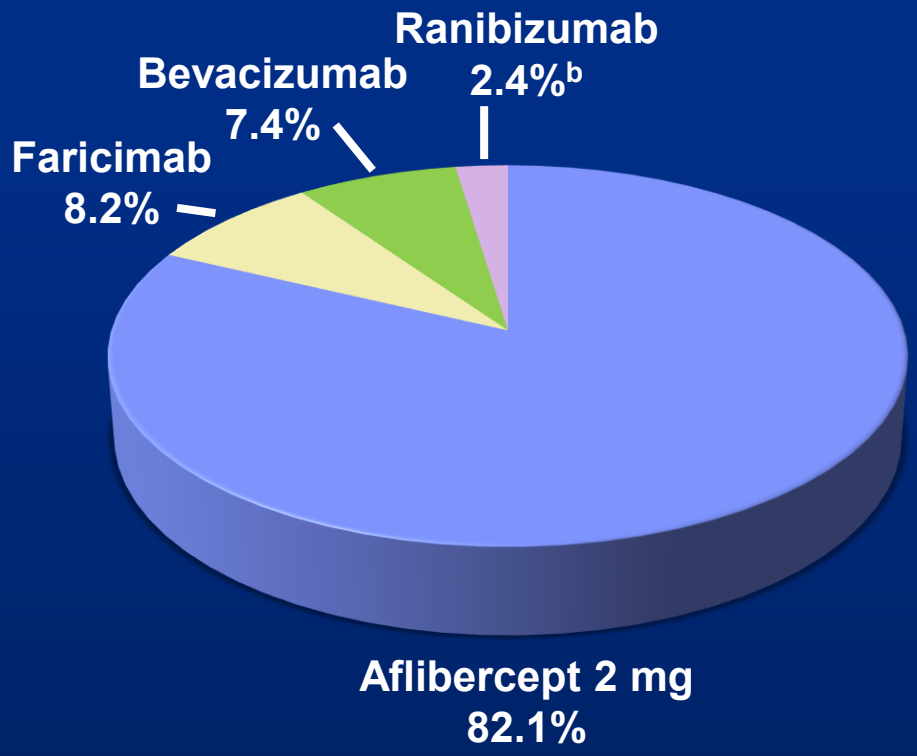
[a]Including the index date (date of the first aflibercept 8-mg injection).
Q, quartile.

Anti-VEGF Agent Used Before Switching to Aflibercept 8 mg

IRIS (n=10,092)



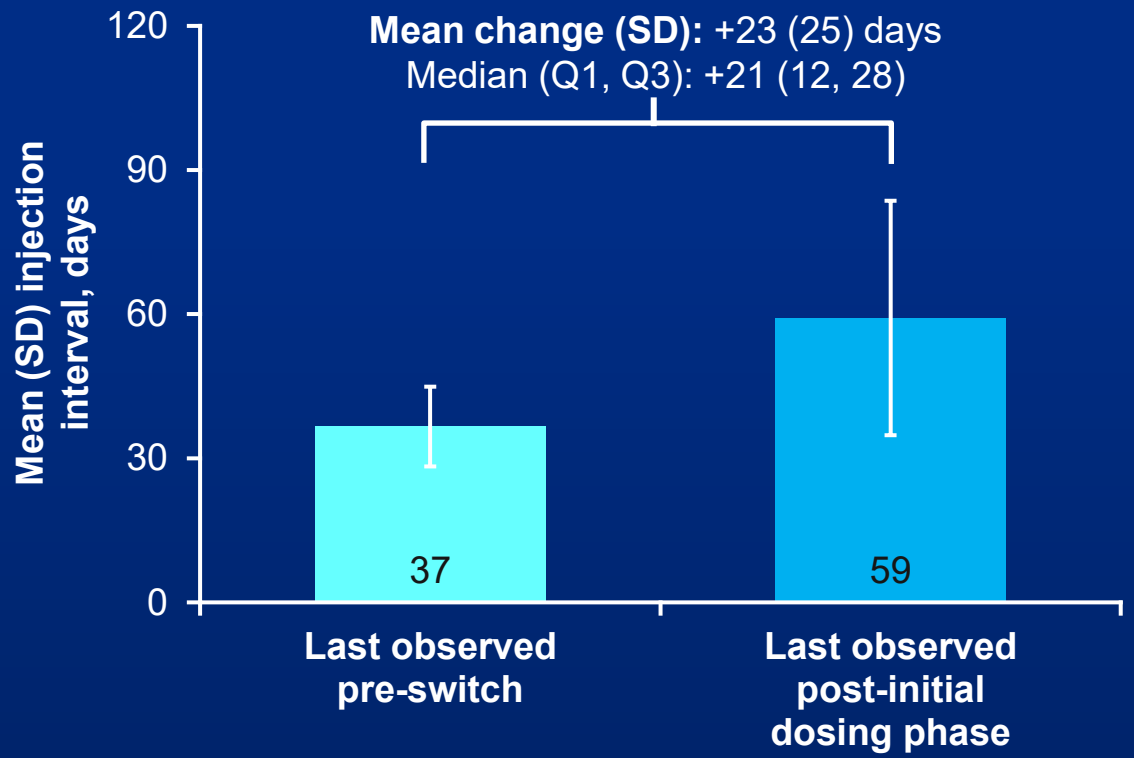
Vestrum (n=3706)



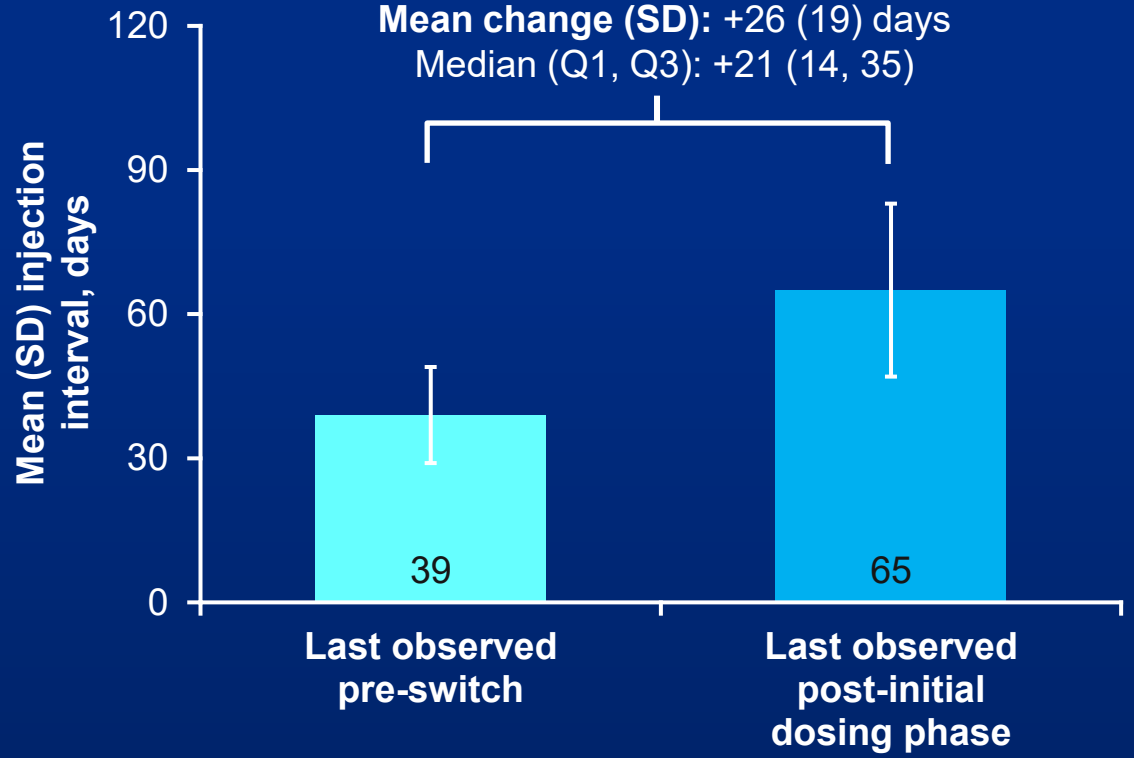
Data represent the proportion of eyes receiving each anti-VEGF agent. Values may not add up to 100% due to rounding.
[a]Ranibizumab comprised ranibizumab-eqrn (1.4%), ranibizumab (1.1%), and ranibizumab-nuna (0.1%) in the IRIS cohort.
[b]Ranibizumab comprised ranibizumab-eqrn (1.8%), ranibizumab (0.5%), and ranibizumab-nuna (0.1%) in the Vestrum cohort.

Injection Interval Extension of ~3-4 Weeks After Switching to Aflibercept 8 mg in Eyes With an Average Pre-Switch Injection Interval of 4 to <6 Weeks[a]

IRIS (n=959)



Vestrum (n=224)



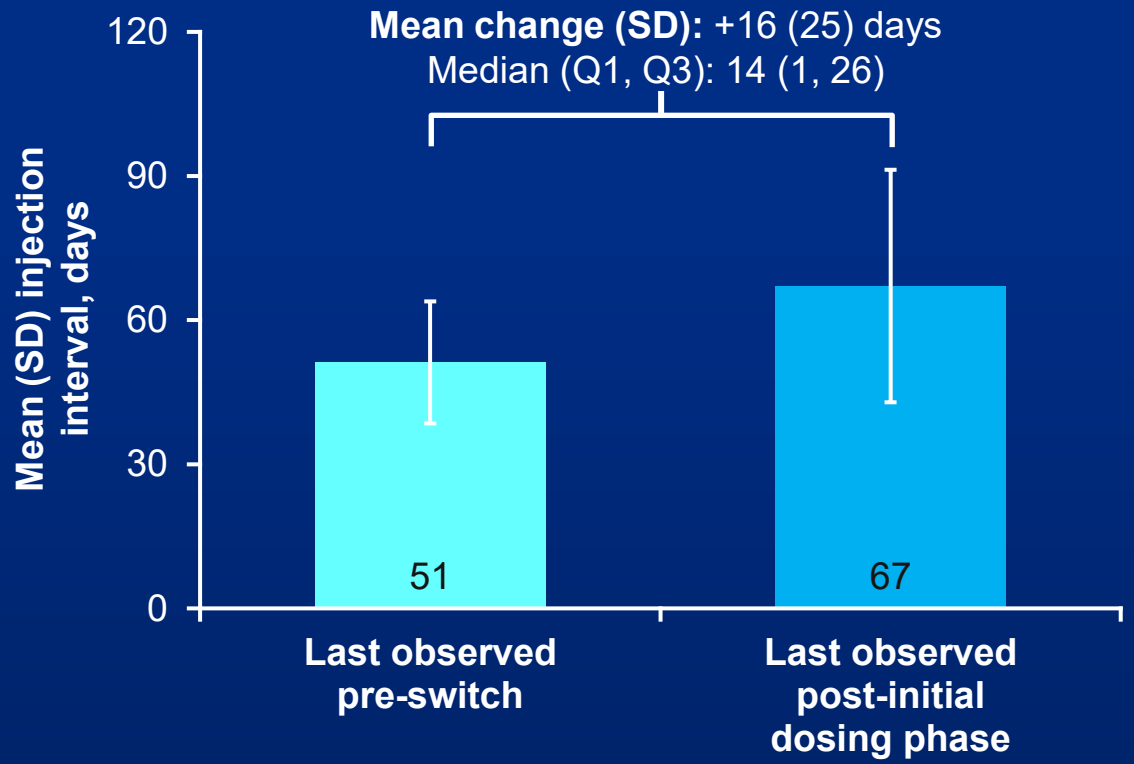
Median (Q1, Q3) injection interval, days:	Last observed pre-switch	Last observed post-initial dosing phase
IRIS (n=959)	35 (29, 42)	56 (49, 63)
Vestrum (n=224)	35 (31, 42)	62 (56, 70)

Values on the bars indicate the mean injection interval in days.

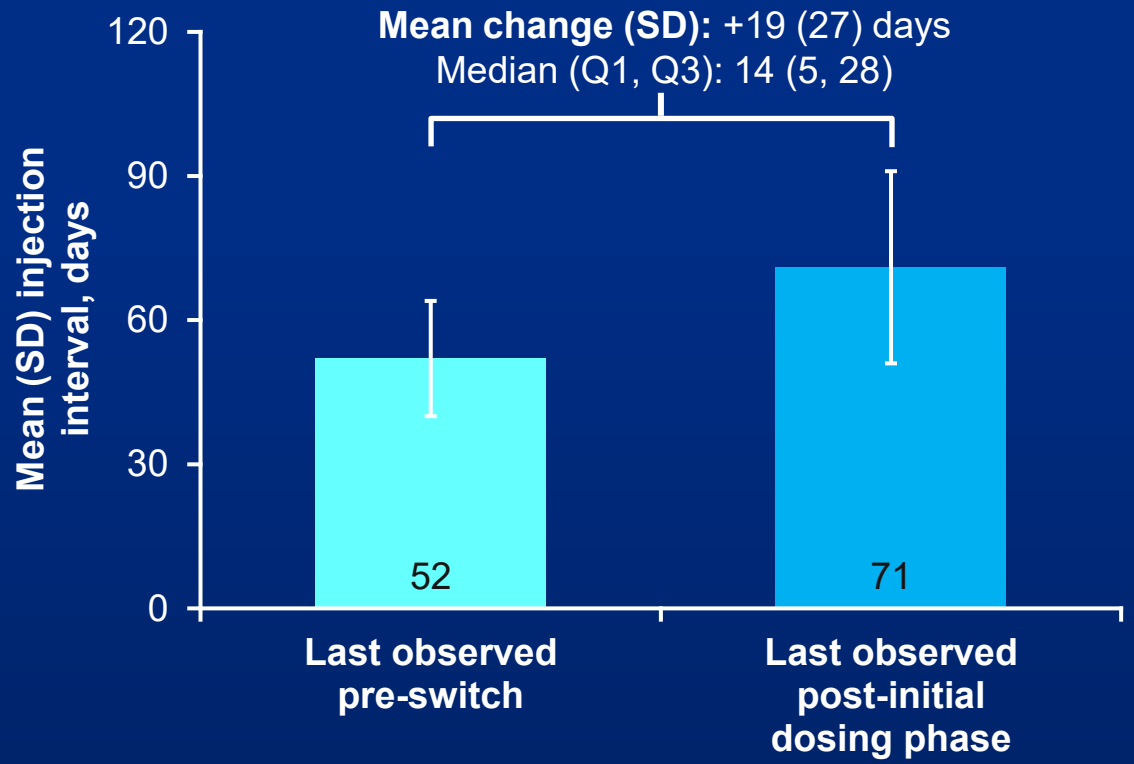
[a]Among eyes that were consistently treated: ≥6 months of treatment prior to switch with an average pre-switch injection interval of 4-<6 weeks and ≥1 post-initial dosing phase aflibercept 8-mg injection.

Injection Interval Extension of ~2-3 Weeks After Switching to Aflibercept 8 mg in Eyes With an Average Pre-Switch Injection Interval of ≥6 to 8 Weeks[a]

IRIS (n=1321)



Vestrum (n=429)

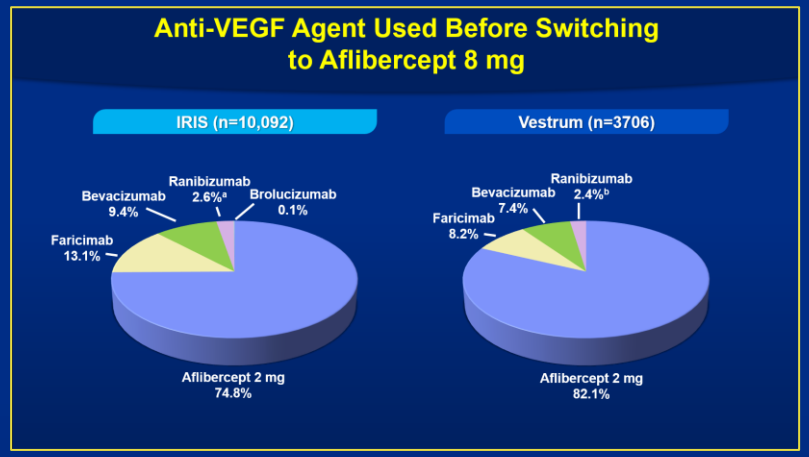


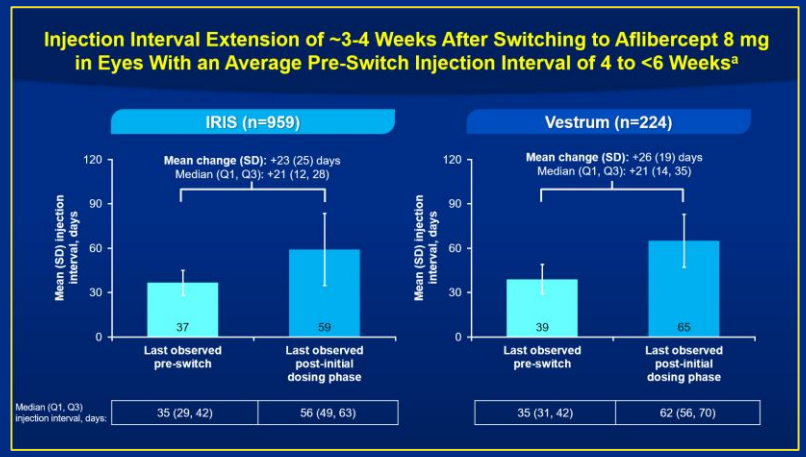
Median (Q1, Q3) injection interval, days:	Last observed pre-switch	Last observed post-initial dosing phase
IRIS	49 (42, 56)	63 (56, 77)
Vestrum	49 (42, 56)	63 (56, 84)

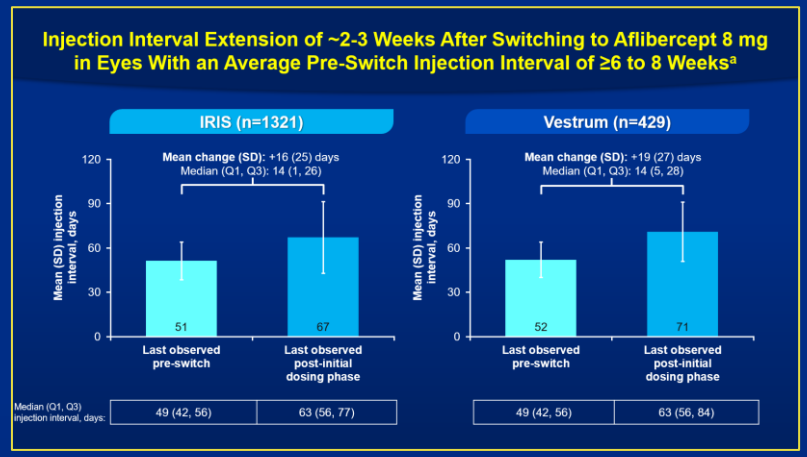
Values on the bars indicate the mean injection interval in days.

[a]Among eyes that were consistently treated: ≥6 months of treatment prior to switch with an average pre-switch injection interval of ≥6-8 weeks and ≥1 post-initial dosing phase aflibercept 8-mg injection.

Conclusions







- Most eyes were consistently treated with aflibercept 2 mg prior to initiating aflibercept 8-mg treatment
- Eyes switching to aflibercept 8 mg after consistent treatment with a previous anti-VEGF agent had an average injection interval extension of:
  - Approximately 3-4 weeks for eyes with an average pre-switch injection interval of 4-<6 weeks
  - Approximately 2-3 weeks for eyes with an average pre-switch injection interval of ≥6-8 weeks
- Additional analyses with longer-term follow-up are ongoing to assess real-world durability and outcomes of aflibercept 8 mg in previously treated patients with DME