Early real-world outcomes following intravitreal Faricimab for diabetic macular oedema (DMO) in a multi-ethnic UK cohort

A. Al-Gilgawi[1], A. Green[2], P. Ramakrishnan[1], D. Ramcharan[1], A. Ghulakhszian[1], C. Dinah[1, 3]
[1]London North West Healthcare NHS Trust, [2]West Hertfordshire Teaching Hospitals NHS Trust, [3]Institude of Brain Sciences, Imperial College London

Introduction & Methods

- Faricimab is the first bispecific agent to be approved for the management of diabetic macular oedema (DMO)
- The benefit in a real-world, multi-ethnic population is yet to be determined.
- We report early real-world outcomes in treatment-resistant and treatment-naive patients treated with Faricimab therapy for DMO in Brent, London
- Consecutive patients with centre-involving DMO were initiated on Faricimab therapy between July and December 2022
- Patient records and retinal imaging investigations were reviewed at initiation and 4 weeks after first injection. The results are presented in this interim analysis

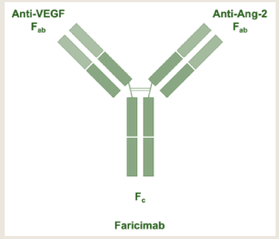


Figure 1: The faricimab molecule[1]

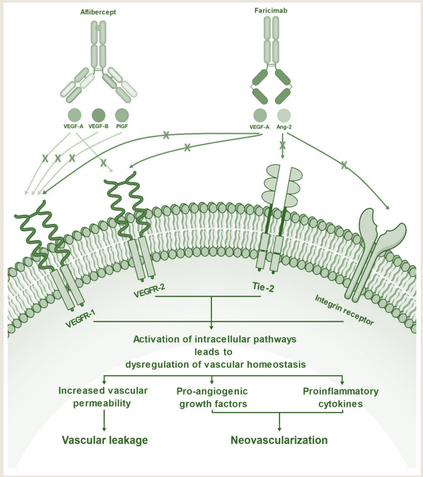


Figure 2: Diagram showing the difference between aflibercept and the dual activity of Faricimab[2]

Results

Baseline Characteristics	YOSEMITE	RHINE	OUR POPULATION
Patient Demographics			
Age (mean)	61.6	62.5	66.6
Sex (F)	41%	39%	48%
Ethnicity	White – 77% Asian – 10% Black – 7% Other – 2%	White – 79% Sian – 11% Black – 6% Other – 0%	White – 17% Asian – 43% Black – 23% Other - 17%
Ocular Demographics			
Visual acuity, ETDRS letters (VA) (mean)	62.0 (±9.9)	61.9 (±10.1)	68 (±8.0)*
Central sub-foveal thickness, µm (CSFT) (mean)	492.3 (±135.8)	466.2 (±119.4)	425.9 (±115.2)
Macular volume, µm^3 (MV) (mean)	-	-	9.85 (**±1.41**)
Treatment naïve (%)	76%	80%	60%

Table 1: Demographics of the YOSEMITE and RHINE trials, compared to the population of patients at our site, emphasising the difference in the ethnic composition[3]. *LogMAR data was converted into ETDRS letters for the purpose of comparison

	Changes 4 weeks post-injection
VA (mean)	-0.06 LogMAR (±0.09); p=0.0006
CSFT (mean)	-67.6µm (±87.9); p<0.00001
MV (mean)	-0.53µm^3 (±0.6); p<0.0001
SRF	2 eyes resolved
IRF	1 eye resolved
No cases of endophthalmitis or adverse events recorded	

Table 2: Functional and structural parameters at 4 weeks after the first faricimab injection

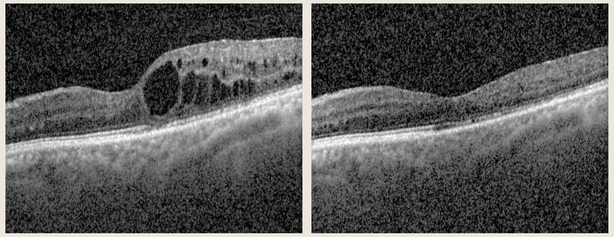


Figure 3: 72 year old south Asian gentleman, treatment naive. Best corrected visual acuity (BCVA) was 0.30LogMAR at initiation; this improved to 0.14LogMAR 4 weeks after one injection, with macula completely dry.

Conclusions

- Our population differed from the trial data in its ethnic composition
- Faricimab demonstrated early benefit in the treatment of new and refractory DMO
- No safety signals were identified in the short-term
- Longer-term studies are required to assess efficacy, durability and safety
- Early results suggest the additional blockage of ang-2 may confer benefit in the treatment of DMO

References

1. https://eyewiki.aao.org/Faricimab
2. Liberski S, Wichrowska M, Kocięcki J. Aflibercept versus Faricimab in the Treatment of Neovascular Age-Related Macular Degeneration and Diabetic Macular Edema: A Review. Int J Mol Sci. 2022 Aug 20;23(16):9424. doi: 10.3390/ijms23169424. PMID: 36012690; PMCID: PMC9409486.
3. Wykoff CC, Abreu F, Adamis AP, Basu K, Eichenbaum DA, Haskova Z, Lin H, Loewenstein A, Mohan S, Pearce IA, Sakamoto T, Schlottmann PG, Silverman D, Sun JK, Wells JA, Willis JR, Tadayoni R; YOSEMITE and RHINE Investigators. Efficacy, durability, and safety of intravitreal faricimab with extended dosing up to every 16 weeks in patients with diabetic macular oedema (YOSEMITE and RHINE): two randomised, double-masked, phase 3 trials. Lancet. 2022 Feb 19;399(10326):741-755. doi: 10.1016/S0140-6736(22)00018-6. Epub 2022 Jan 24. PMID: 35085503.