Faricimab for Diabetic Macular Oedema, Real World experience

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Background

- Faricimab (Vabysmo) is a combined-mechanism medication with simultaneous and independent binding on both vascular endothelial growth factor A (VEGF-A) and angiopoietin-2 (Ang-2).
- Faricimab is approved for the treatment of diabetic macular oedema and neovascular (wet) age-related macular degeneration (nAMD) by the FDA on January 2022 (Food and Drug Administration, USA).
- The early adoption of faricimabin the UK provides an opportunity to study faricimab treatment patterns and effectiveness in the real-world context

Aim:

To assess the 18 months outcome, from Nov 22 to April 24, of intravitreal faricimab in diabetic macular oedema (DMO) treatment (TTT) naïve and TTT resistant patients (who didn't respond to other anti VEGF).

Methods:

Retrospective study of 2 groups of patients who had their TTT in Ysybty Cwm Rhondda, South Wales

Group 1, 50 eyes of 38 DMO patients who had IVF injections with no previous anti VEGF (TTT naïve). They had 4 injections of Faricimab 6.0 mg, 1 injection every 4 weeks then extend according to the response.

Group 2, who are the previously treated patients, we had 68 eyes of 44 patients who did not respond to other anti VEFG and switched to IVF treat and extend from the beginning.

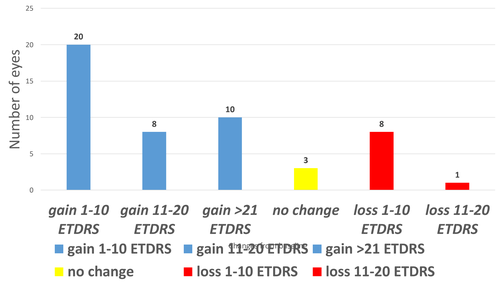
Inclusion Criteria (for group 1 only):

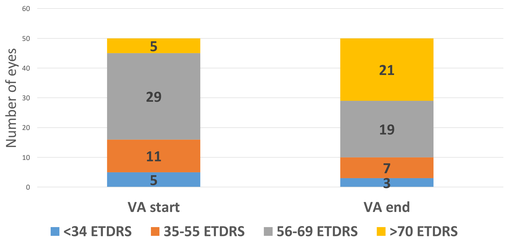
1. Patients> 18 years old
2. Centre involving DMO
3. CMT >320µ except 1
4. Visual acuity >20 ETDRS letters HBA1C <100

Results:

Baseline	Group 1	Group 2
VA	Range= 20-80 ETDRS except 1 CF Average=56.6 ETDRS	Range= 14-92 ETDRS Average=60.45 ETDRS
OCT	Range= 269-651µ Average=417.42µ	Range= 211-820µAverage=392.86µ
HBA1C	Range= 37-97 Average= 65.54	Range=38-118 Average= 65.82

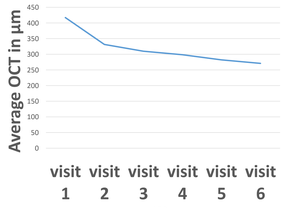
Group 1: 58 eyes Functional Outcome:



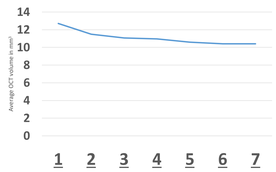


42% OF GROUP 1 EYES HAD VA > 70 ETDRS AT THE END OF THE STUDY COMPARED TO 10% AT THE BEGINNING

Group 1: Anatomical outcome OCT changes

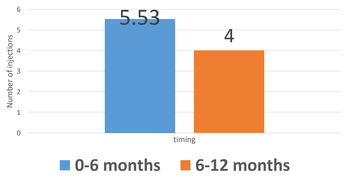


OCT volume changes



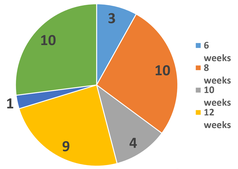
Average reduction in CRT was -123.1 µ. The overall population OCT reduced from 417.42µ at the start of the ttt to 270.5µ at the end of the study.

Number of injection in 0-6 months versus 6-12 months



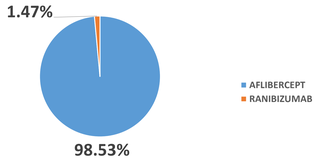
DECREASE IN NUMBER OF INJECTIONS IN THE 2ND 6 MONTHS COMPARED TO THE 1ST 6 MONTHS

Group 1 TTT interval

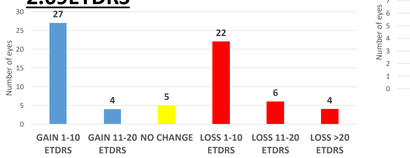


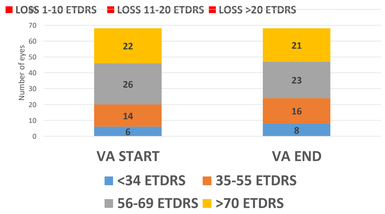
20% extended to 8 weeks, 18% extended to 12 and 20% to 16 weeks

GROUP 2: 68 eyes
PREVIOUS ANTI-VEGF



Group 2: 68 eyes Functional outcome Va changes - 2.69ETDRS





Number of eyes with VA>70 ETDRS remained stable at the end of the study compared to baseline(32.35% at baseline compared to 30.88% at end)

Group 2: Anatomical outcome:

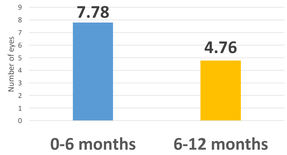
OCT changes:-54.23µm



OCT volume changes

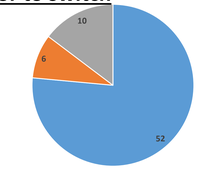


Number of injection in 0-6 months versus 6-12 months

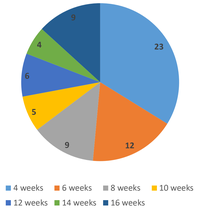


Decrease in number of injections in the 2nd 6 months compared to the 1st 6 months

Group 2 TTT interval prior to switch



Group 2 TTT interval after switch



Complications

	Group 1	Group 2
Potentially infectious Endophthalmitis (PIE)	0	1 (1.47%)
Vitreous Haemorrhage (VH)	1 (2%)	1 (1.47%)
Intraocular inflammation (IOI)	0	0

Conclusion

We concluded that for treatment naïve patients Faricimab has good anatomical and functional improvement for treatment naïve and switched patients with diabetic macular oedema. Also, it can decrease the treatment burden and work load by spacing the periods of follow up.

Over 21 months, visual acuity (VA) improved by approximately 9.04 ETDRS in treatment-naïve eyes but the mean changes in visual acuity was -2.67 ETDRS in patients previously treated with other antiVEGF . Percentage of eyes with VA ≥ 70 ETDRS letters increased from baseline (10.0%) to 21 months (42.0%) in treatment-naïve eyes and remained stable in previously treated eyes.

Fewer injections were received on average during the second 6 months of faricimab compared with the first 6 months of treatment in both groups and this is inconcurence with FARWIDE DME study.

Rates of intraocular inflammation (IOI) and potentially infectious endophthalmitis (PIE) were low in both groups.

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