

Real World Effectiveness of Faricimab in Treatment Experienced Eyes with Macular Oedema Secondary to Retinal Vein Occlusion

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Background

Retinal vein occlusion (RVO) represents a significant global ophthalmic burden, with an estimated 28 million adults affected worldwide as of 2015¹. It is the second most common retinal vascular disease, surpassed only by diabetic retinopathy². The global prevalence for the adult population aged 30–89 is approximately 0.77%, with branch retinal vein occlusion (BRVO) being significantly more frequent than central retinal vein occlusion (CRVO)^{1,2}.

The primary driver of vision loss is secondary cytoïd macular oedema (CMO), which affects up to 85% of those with CRVO and approximately 75% of those with BRVO^{3,4}. Intravitreal anti-vascular endothelial growth factor (anti-VEGF) agents have become the gold standard of care, demonstrating high effectiveness in improving visual acuity by reducing vascular permeability⁵.

Faricimab, a bispecific antibody targeting VEGF-A and angiopoietin-2, introduces a novel dual-mechanism therapy. The landmark studies (BALATON and COMINO)⁶ reported faricimab efficacy and safety predominantly in treatment naïve patients, but outcomes following switch from other anti-VEGF therapies are lacking. This study evaluated patients who were switched to faricimab who had previously shown a partial response to other anti-VEGF injections for CMO secondary to RVO.

Methods

A prospective audit was conducted on consecutive treatment-experienced patients who transitioned to faricimab therapy between September 2024 and January 2025. To be eligible for inclusion, patients required a minimum follow-up period of 40 weeks post-switch.

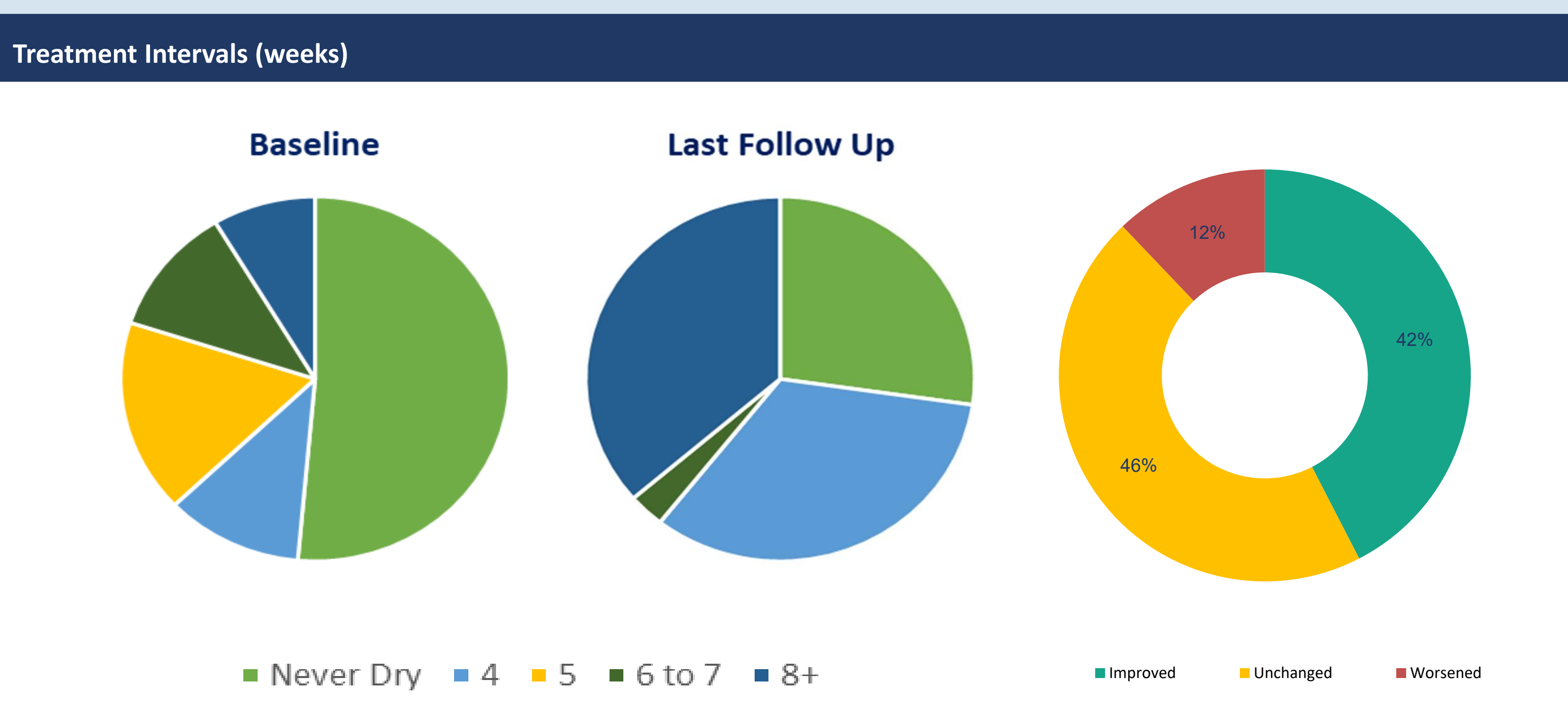
Following the switch to faricimab, all patients underwent a loading phase consistent with the posology at the time of initiation, consisting of four monthly loading doses followed by an initial 8-week treatment extension. The primary clinical outcomes evaluated were changes in best-corrected visual acuity (BCVA), central subfield thickness (CST) measured in micrometers (µm) and the presence of intraretinal fluid (IRF) on optical coherence tomography (OCT). These parameters were assessed at baseline (week 0, defined as the point of switching), at week 20 and at the final recorded follow-up visit.

Baseline Characteristics	
Demographics	35 Patients; Mean age 73 (49–87); 63% Male / 37% Female
RVO Diagnosis	40% BRVO, 40% CRVO, 20% HRVO
Injection History	Mean 24 prior (3–84); 66% Ranibizumab, 23% Aflibercept, 11% Both
Visual Acuity (LogMAR)	0.42 (range -0.06 to 1.02)
Mean CST (µm)	351 (±106)
OCT Status	14% Dry

Results at a Glance			
Category	Baseline	Week 12	Week 20
Mean Visual Acuity (LogMAR)	0.42	—	0.42
Mean CST (µm)	351 (SD 106)	—	330 (SD 87), p > 0.05
Dry OCT (%)	14%	60%	27%

Results

- All patients completed the 4 x monthly loading doses (week 12). Two patients did not receive their final injection (week 20); one patient suffered unrelated trauma and the other had their treatment stopped due to developing intraocular inflammation (IOI).
- Mean BCVA remained unchanged at week 20 compared to baseline.
- The percentage of dry OCTs was 14% at baseline, 60% at week 12 and 27% at week 20.
- The mean CST reduced from 351 µm to 330 µm at week 20 (p > 0.05).
- The eyes (n=9) that were dry at week 20 were offered a 12-week extension to week 32, 11% remained dry at week 32.
- The proportion of patients that had never been dry reduced significantly (p<0.05). 40% of patients who had never previously dried achieved a dry OCT for the first time on faricimab.
- By the end of the study, the treatment interval worsened in 12%, remained unchanged in 45% and improved in 42% (p>0.05).
- Of those whose treatment intervals improved, 64% improved by 2-3 weeks and 36% improved by 4 weeks or more.



Conclusions

Although switching to faricimab did not improve mean BCVA or mean CST, 42% of patients were able to extend their treatment interval by 2 weeks or more. This is significant to patients and frees up clinical capacity in a stretched service.

40% of patients who had never previously been documented as 'dry' achieved a dry OCT for the first time on faricimab, indicating a trend to superior disease control.

51% of patients had never achieved a dry OCT at the point of switch, indicating high baseline disease burden. The results were therefore unsurprisingly inferior to the landmark BALATON/COMINO data, reflecting the harder-to-treat, treatment-experienced cohort.

In longer term follow up of the cohort, the proportion achieving macular drying from switching to faricimab became statistically significant. Interestingly, with longer term follow up, 4 patients who were not dry at the 20 week timepoint did achieve dryness by the end of the study. This indicates that persisting with treatment even after initial failure can be beneficial.

The one case of IOI was reported via the Yellow Card scheme. Treatment was stopped accordingly. The patient has settled and the minimal IRF has remined stable off treatment.

This is the largest and longest reported study on faricimab for CMO in treatment-experienced RVO patients^{7,8}.

Limitations of this study include, not separating patients by ischaemic status or type of RVO, not controlling for comorbidities and the investigators were not blinded.

Ongoing real-world data collection will continue to inform long-term safety and effectiveness of faricimab in this population.



Key Findings

- 40% of patients who had never previously dried achieved a dry OCT for the first time on faricimab therapy
- 42% of patients increased their treatment interval, of which; 64% extended by 2–3 weeks, 36% by 4+ weeks

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