

Bilateral Faricimab in Sequential Neovascular Age-Related Macular Degeneration: Outcomes Following Fellow Eye Activation in Treatment-Experienced Patients



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Introduction

In neovascular age-related macular degeneration (nAMD), approximately 20% of patients with unilateral disease develop fellow eye involvement.⁽¹⁾ When this occurs in treatment-experienced patients already on anti-VEGF therapy, a clinical dilemma emerges: whether to switch both eyes to a new agent for standardised treatment. This study evaluated outcomes when patients on prior anti-VEGF monotherapy switched to Faricimab dual-pathway inhibition following fellow eye activation, with both eyes treated according to the worse-performing eye's requirements after loading.

Primary objectives assessed anatomical efficacy (CMT reduction, dry macula achievement) in both eyes over five injections. Secondary objectives included functional outcomes (BCVA change), treatment interval extension capacity, and safety profile.

Methods

Single-centre retrospective study of 86 eyes from 43 patients with nAMD switched to Faricimab (November 2022–December 2024). Inclusion criteria: prior anti-VEGF therapy in first eye, fellow eye activation requiring treatment initiation, minimum five Faricimab injections. Treatment protocol: three monthly loading doses at 4 weekly intervals followed by treat-and-extend regimen with injection intervals of both eyes dictated by the worse-performing eye. Intervals extended by 4 weeks if both eyes dry, reduced by 2 weeks if active disease present (minimum 4-week interval). Outcomes measured at baseline and after each injection: central macular thickness (CMT), best-corrected visual acuity (logMAR), fluid status (IRF, SRF, PED, haemorrhage). Thirty-seven eyes were pseudophakic (20 treatment-exposed, 17 naïve); none underwent surgery during study period. Statistical analysis: paired t-tests for continuous variables, proportions test for categorical outcomes, significance $p < 0.05$.

Results

Loading phase:

Naïve eyes demonstrated rapid anatomical response with CMT reducing from 268 to 224 μm (–44 μm) and 72.1% achieving macular dryness by injection 3. Treatment-exposed eyes showed a more modest response with CMT reducing from 244.8 to 232 μm (–12 μm) and dry macula prevalence increasing from 53.5% to 69.8%. The difference in CMT reduction velocity was statistically significant (42 ± 60 vs 13 ± 72 μm ; $p = 0.0487$). The CMT changes over time are displayed in Graph 1.

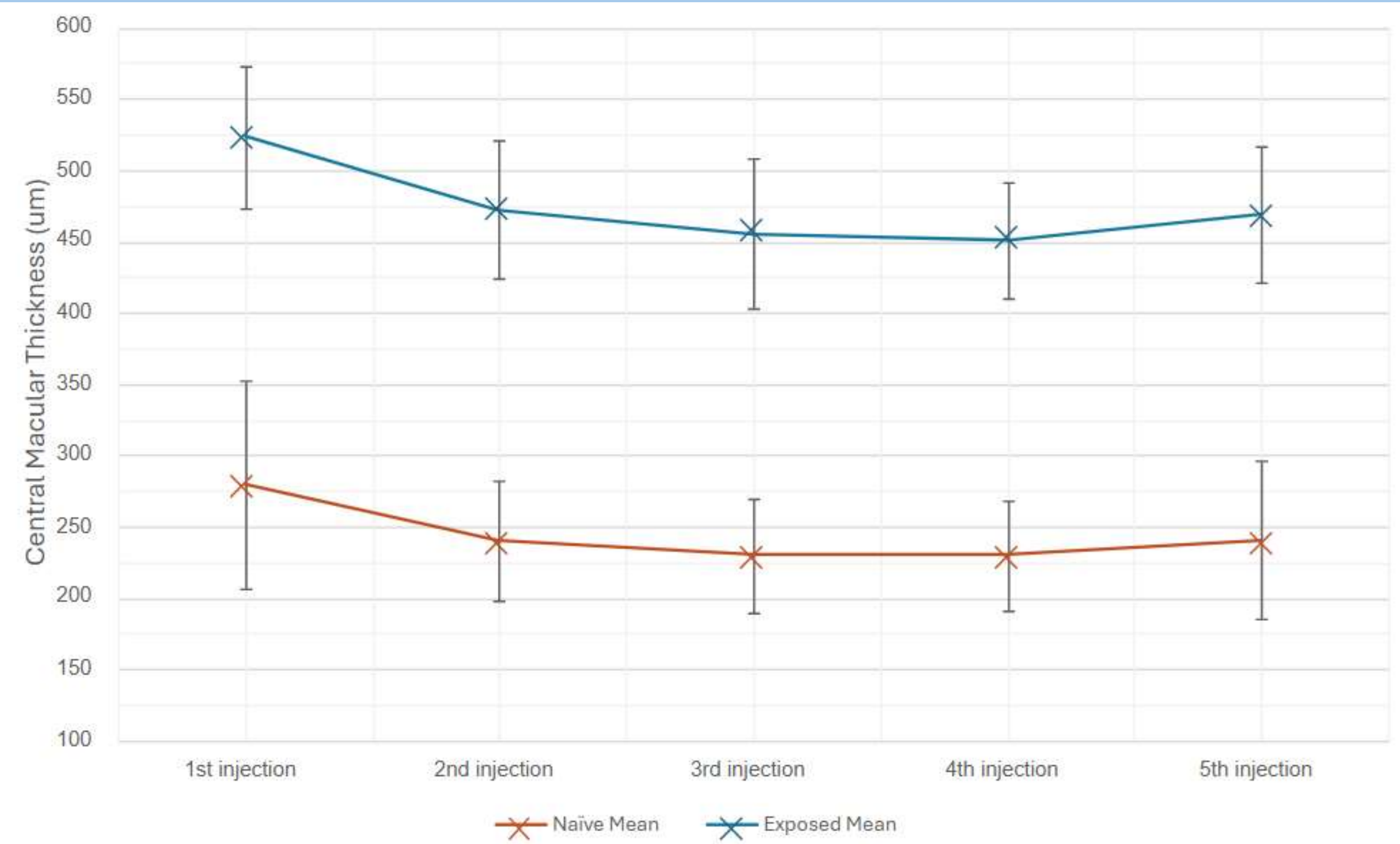
	Treatment Exposed Eye	Naïve Eye
Baseline BCVA (LogMar)	0.39 (± 0.25)	0.38 (± 0.32)
BCVA at injection 3 (LogMar)	0.37 (± 0.28)	-0.03 ($\pm 2.51^*$)
BCVA at injection 5 (LogMar)	0.45 (± 0.37)	0.34 (± 0.28)
Change in BCVA by injection 5 (LogMar)	0.06 (± 0.24)	-0.04 (± 0.26)
Change in CMT by injection 5 (μm)	-15.2	-39.3 (± 75.7)
Dry macula at baseline (n=)	23	0
Dry macula by injection 5 (n=)	24	28

*Wide standard deviation at injection 3 in naïve eyes; interpreted with caution.

Table 1 shows the BCVA at baseline, 3rd injection, and the 5th injection comparing the treatment exposed and naïve eye. It also show the change in CMT from baseline to 5th as well as the number of macula's dry at the end of the study period.

Treat and extend phase:

Treatment-exposed eyes demonstrated very little movement in proportion of the cohort who were dry by injection 5, 24/43 eyes (55.8%). Naïve eyes achieved a significantly greater proportion maintaining dryness with 28/43 eyes (65.1%) dry by injection 5. Total CMT reduction from baseline to injection 5 was –15.2 μm in exposed eyes and -39.3 ± 75.7 μm in naïve eyes. No statistically significant difference was found in final CMT ($p = 0.128$) or dry macula rates ($p = 0.825$). Disease reactivation during treat and extend was infrequent and comparable between groups (14.0% vs 11.6%; $p = 0.53$). Treatment-naïve eyes showed a functional gain of –0.04 logMAR by injection 5. Treatment-exposed eyes showed a slight decline of +0.06 logMAR, likely reflecting ongoing disease burden and longer natural history.



Graph 1 demonstrates the CMT changes of the naïve and treatment exposed group from baseline (injection 1) to 5th injection.

Conclusion

Bilateral Faricimab proved effective for the management of sequentially activating nAMD. Naïve eyes exhibited significantly faster anatomical response velocity during loading ($p = 0.049$); however, both groups converged to comparable dry macula rates and CMT stability by injection 5. There was no safety events reported including vitritis. Limitations include the retrospective single-centre design, five-injection follow-up, and absence of a comparator arm.

References

1. Fasler K, Fu DJ, Moraes G, Wagner S, Gokhale E, Kortuem K, et al. Moorfields AMD database report 2: fellow eye involvement with neovascular age-related macular degeneration. Br J Ophthalmol. 2020;104(5):684–90.