The Real-World Cost-effectiveness of Faricimab Versus Existing And Future Biosimilars in Patients With Neovascular Age-Related Macular Degeneration in the UK

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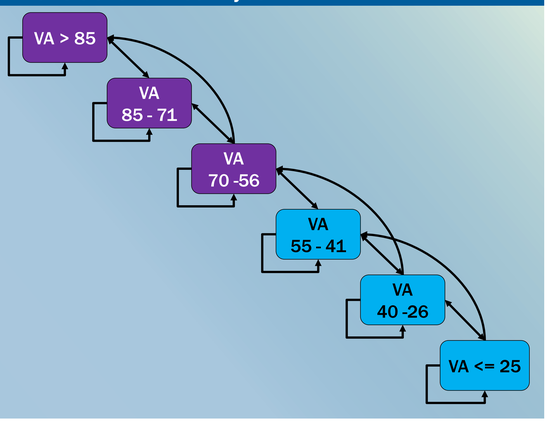
Introduction

- Faricimab is a dual pathway inhibitor of Ang-2 and VEGF-A for the treatment of neovascular age-related macular degeneration (nAMD).
- Comparable vision gains were observed in the TENAYA and LUCERNE trials for patients treated up to every four months with faricimab when compared with bimonthly aflibercept 2 mg.[1]
- Since its approval by the MHRA in 2022, faricimab has been rapidly adopted into clinical practice and an extensive body of real-world evidence has been generated. [2,3] This research aims to assess the cost-effectiveness of faricimab in a real-world setting in the UK versus existing and future biosimilars for ranibizumab and aflibercept 2 mg.

Visual Acuity (VA) Related Health States and Transitions for Both Eyes

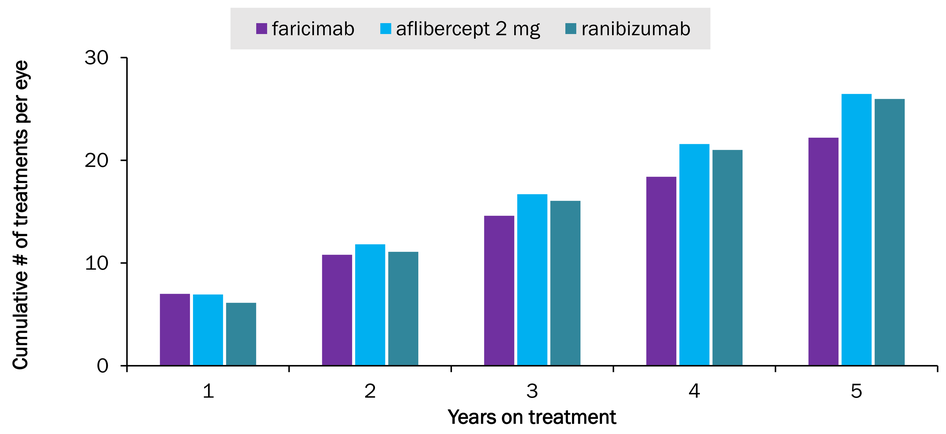


Methods

- A Markov cohort model was developed to estimate bilateral visual acuity changes linked to quality of life, injection frequency, and associated costs from a UK societal perspective (see above, described in more detail see Bührer et al (2024).[4]
- Visual acuity for patients on treatment for all therapies was informed by clinical trial data for faricimab. Real-world injection frequencies were determined using UK-based electronic medical record data.[5] Treatment persistence was based on real-world treatment patterns in the UK.[6] No adjustments for population differences were applied.
- Drug prices were based on publicly available list prices in the UK applying confidential NHS discounts for faricimab. Biosimilar costs were informed by a range of likely discount rates applied to current list prices for originator products.
- Time horizon was 25 years to reflect a lifetime horizon. Furthermore, deterministic sensitivity analyses were conducted for costs and key model parameters.

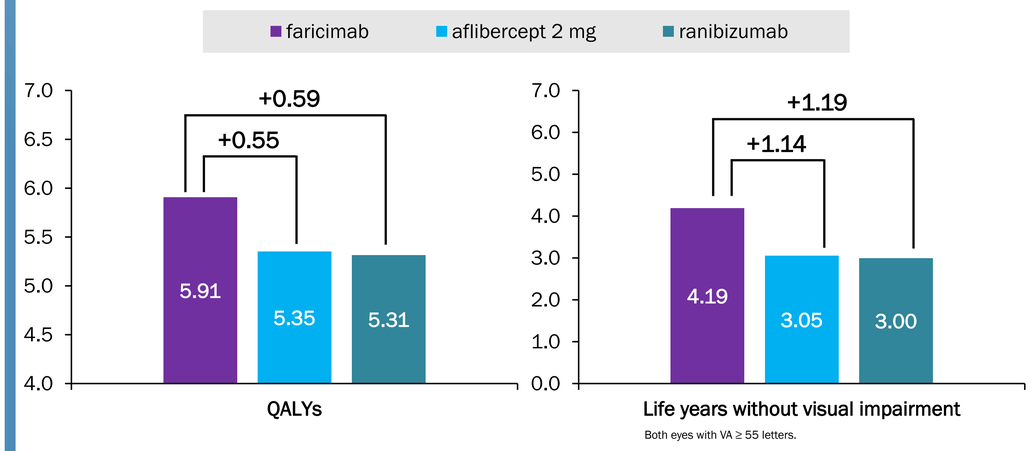
Results

1 Faricimab Real World Treatment Frequency is Associated with Lower Burden



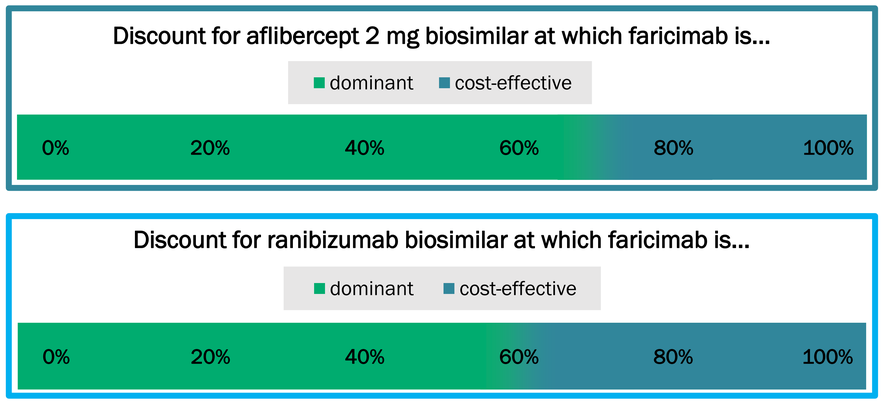
Summary:
Real world mean number of injections for patients on treatment with faricimab was lower compared to ranibizumab or aflibercept. A notable limitation is the potential influence of population differences between treatment cohorts on these findings.

2 Faricimab Real World Persistence is Associated with Preserving Vision for Longer



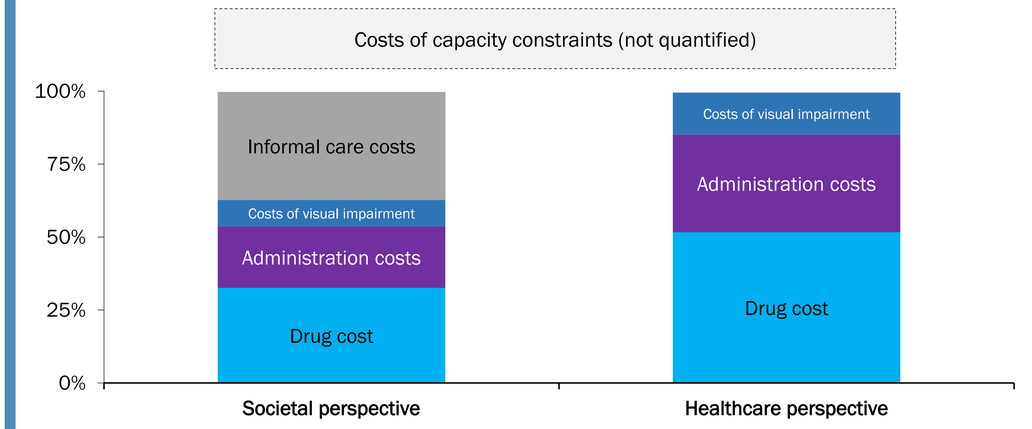
Summary:
Increasing real-world persistence for faricimab treated patients translates into preserving vision for longer and thereby increasing patients' quality of life. A notable limitation is the potential influence of population differences on these findings.

3 Faricimab Remains Cost-Effective Through a Large Range of Hypothetical Discount Levels For Biosimilars



Summary:
Driven by durability and persistence benefits, the results suggest that faricimab is cost saving or cost-effective (ICER < 20k GBP) throughout a range of likely ranibizumab and aflibercept 2 mg biosimilar discount levels.

4 Faricimab Drug Acquisition Costs are an Increasingly Diminishing Part of the Overall Cost of Care to Society



Summary:
Faricimab related drug costs represent less than one third of the overall societal costs without considering cost of capacity constraints. From a narrower healthcare perspective, drug costs represent about half of the overall costs.

Conclusions

Faricimab offers an innovative option enabling patients to extend their treatment intervals and persist on treatment for longer, thereby reducing the burden for patients and health systems and preserving eyesight.

The results suggest that faricimab might be cost-saving or cost-effective from a societal perspective compared to ranibizumab and aflibercept 2 mg biosimilars across a large range of potential discount levels.

Considering the relatively small contribution of drug acquisition costs, the results reinforce the need to consider wider healthcare and societal costs in payer discussions.

References

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3. Real-world six-month outcomes in patients switched to faricimab following partial response to anti-VEGF therapy for neovascular age-related macular degeneration and diabetic macular oedema. Borchert et al. , Eye 38, 3569–3577 (2024). https://doi.org/10.1038/s41433-024-03364-1 .
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6. Data for faricimab, ranibizumab and aflibercept are based on the UK FARWIDE study, data on file.

Financial Disclosures
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