

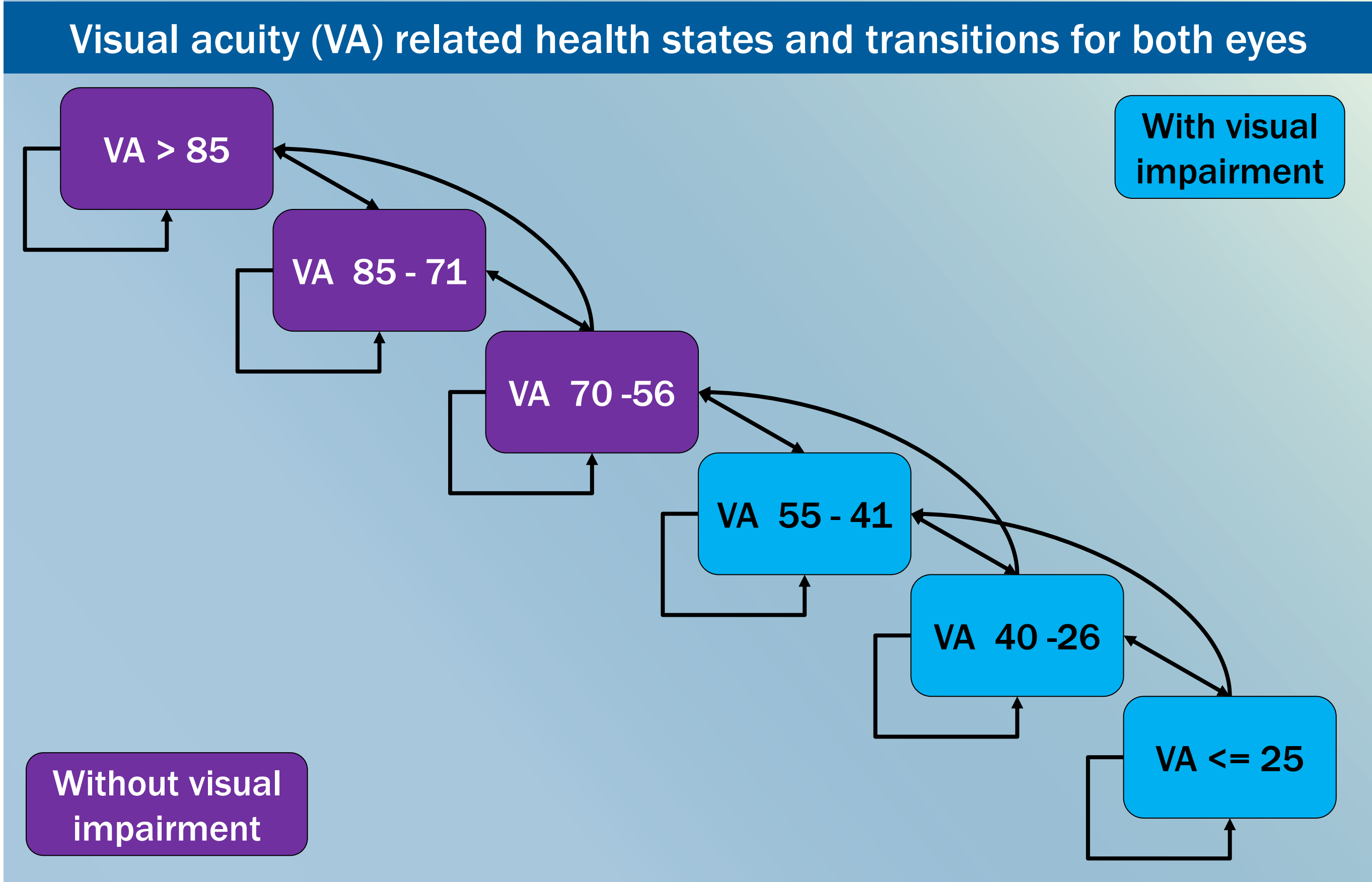
# Cost-Effectiveness of Faricimab Vs. Aflibercept 8 mg in Patients with Diabetic Macular Oedema (DMO) in the UK

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## Introduction

- Faricimab is a bispecific antibody targeting ANG-2 and VEGF for the treatment of diabetic macular oedema (DMO).
- In the YOSEMITE and RHINE trials (2-year long Phase III trials),<sup>1</sup> patients treated with faricimab in a Treat & Extend (T&E) regime required less frequent treatments compared to aflibercept given every eight weeks (Q8W) and achieved similar vision gains.
- Recently, aflibercept 8 mg Q12W and Q16W has been investigated in the PHOTON trial showing non-inferior vision outcomes vs aflibercept 2 mg Q8W.<sup>2</sup>
- This research aims to assess the cost-effectiveness of faricimab T&E vs. aflibercept 8 mg.

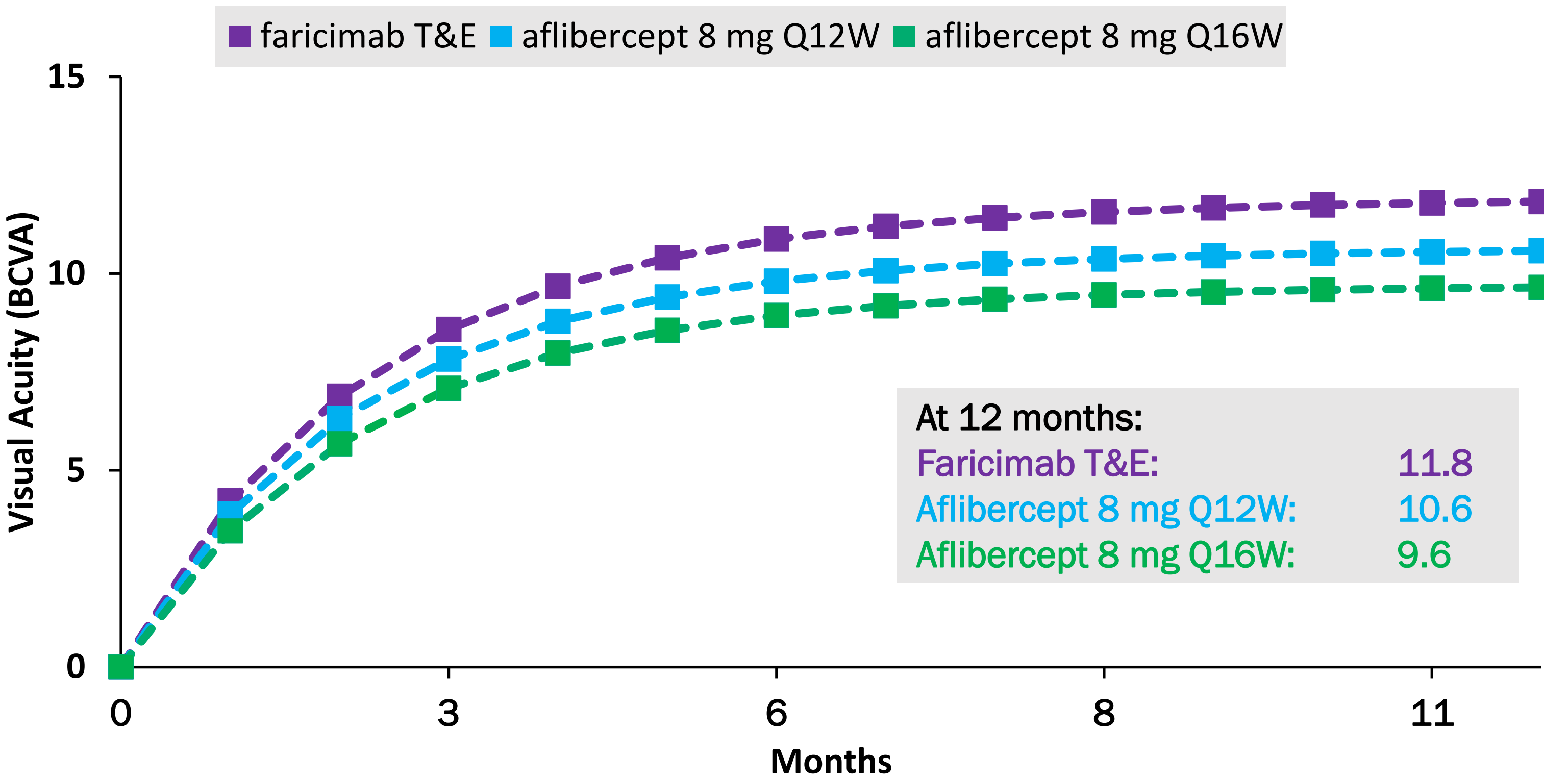


## Methods

- A Markov cohort model illustrated on the left based on the NICE guideline review<sup>3</sup> was developed in Excel to estimate bilateral visual acuity changes linked to quality of life, injection frequency and associated costs from a UK societal perspective.
- Visual acuity changes were informed by the faricimab trials and a network meta-analysis at year 1 for aflibercept 8 mg. Injection frequencies were informed by the respective trials. Deterministic and probabilistic sensitivity analyses were performed for costs and key model parameters.
- Time horizon was 25 years to reflect a life time horizon.
- Utility for visual acuity states was modelled using Czoski-Murray et al. (2009)<sup>4</sup> including administration and adverse event related disutilities.
- Drug prices were based on publicly available list prices in the UK (faricimab: 857 £, aflibercept 8 mg: 998 £).

## Results

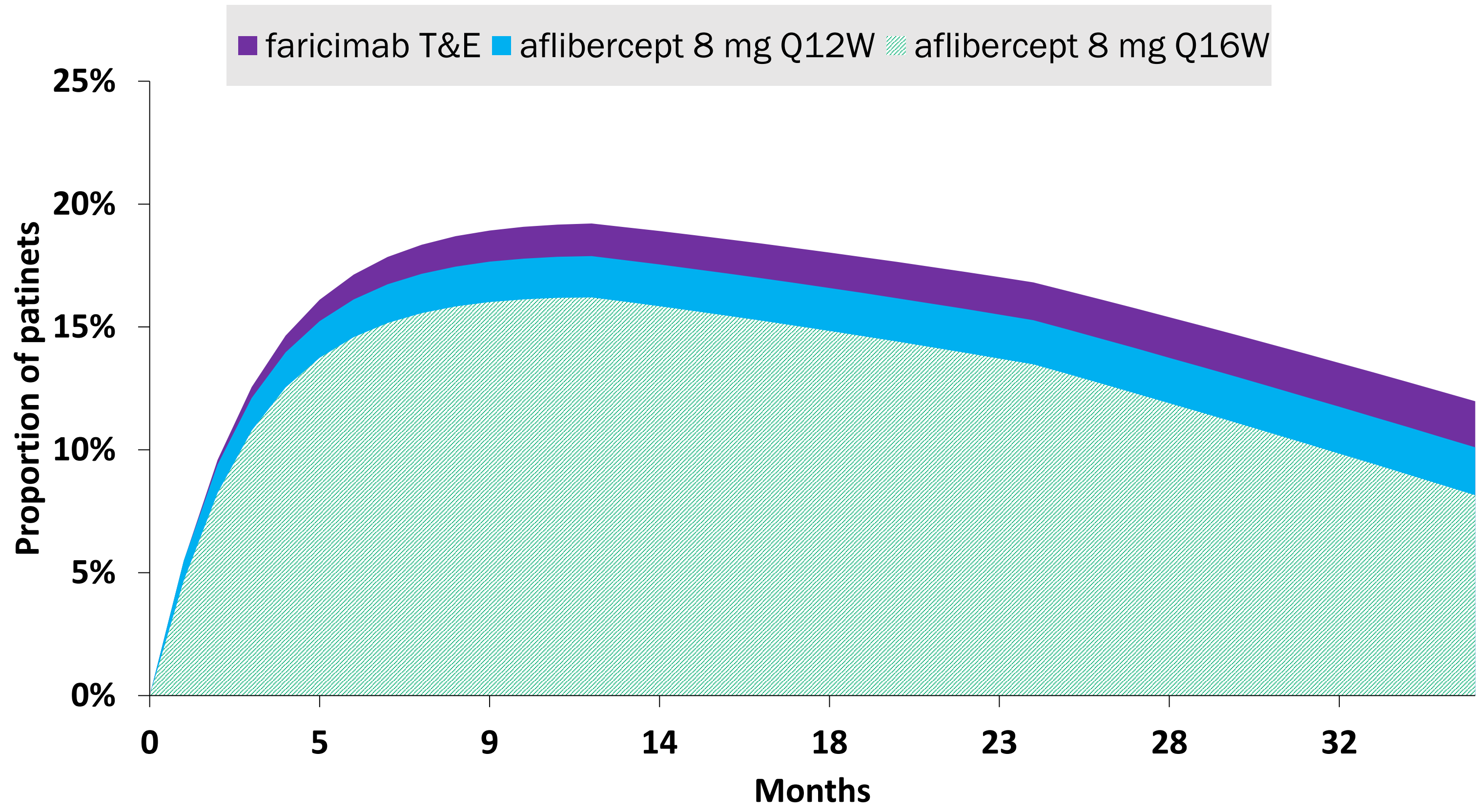
### Mean BCVA change from baseline (eyes on treatment)



### Summary:

After one year of treatment, when patients are modelled using differences in transitions, patients on **faricimab T&E** gain between **1 – 2 letters** more.

### Patients without visual impairment (change from baseline)



### Summary:

Throughout the main treatment phase (till month 24) and when reaching the rest of life phase (months 24+), more patients on **faricimab T&E** reach and maintain visual acuity levels **without impairment** (>55 letters).

## Conclusions



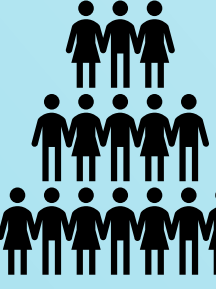
Faricimab offers an innovative option enabling patients to retain their vision and independence for longer and contribute to society.



Faricimab T&E is associated with an ICER vs. both aflibercept 8 mg regimens of less than £20,000 per QALY gained (Q12W: 4.5k, Q16W: 18.3k) which is within the typically acceptable threshold by NICE.



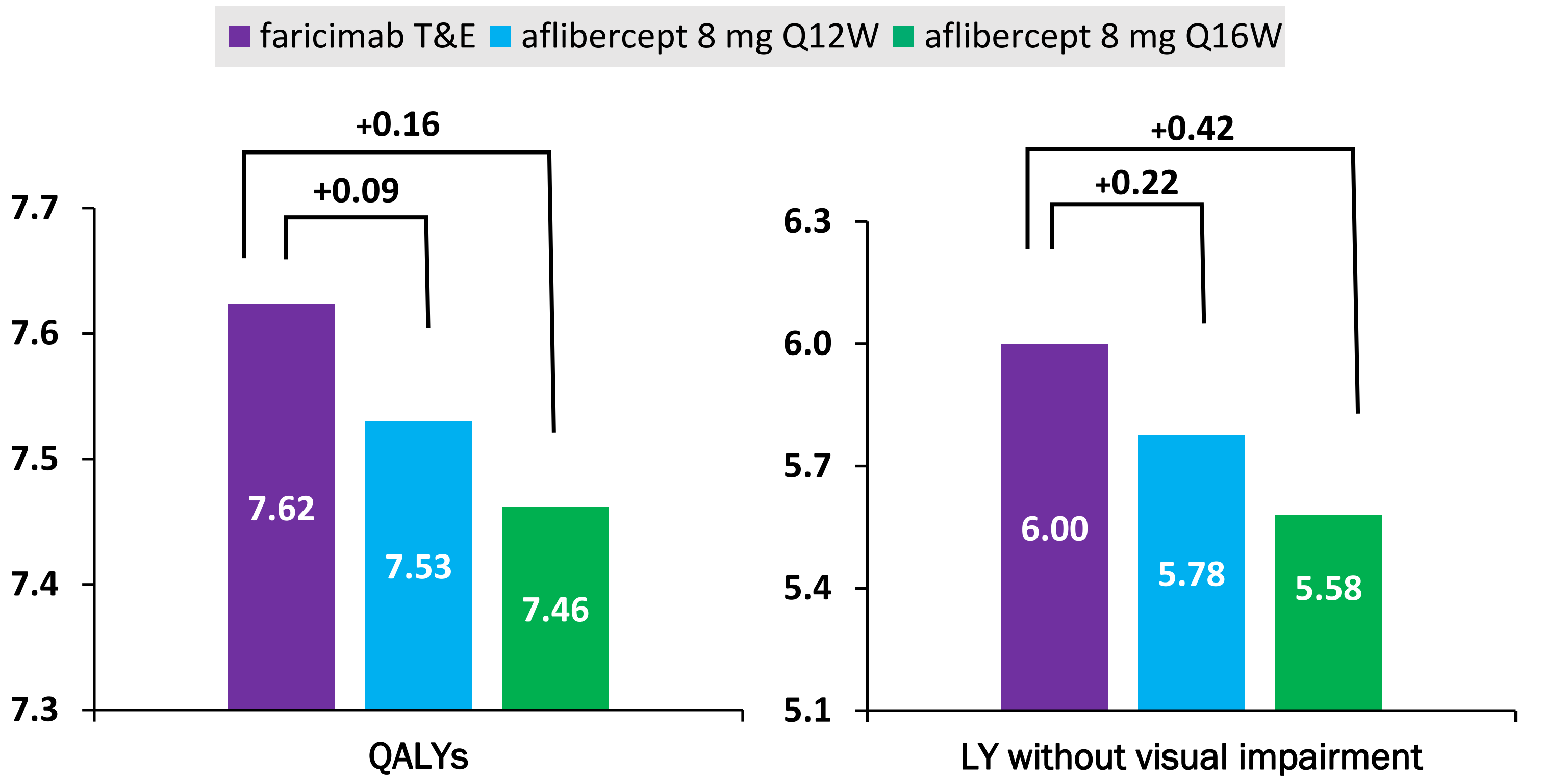
Sensitivity analyses for key model parameters and probabilistic analysis were consistent with the base case.



The results also indicate, that societal costs such as informal care or costs of visual impairment, represent a substantial economic burden across treatment options and should be considered when evaluating novel therapeutic options.

## Results

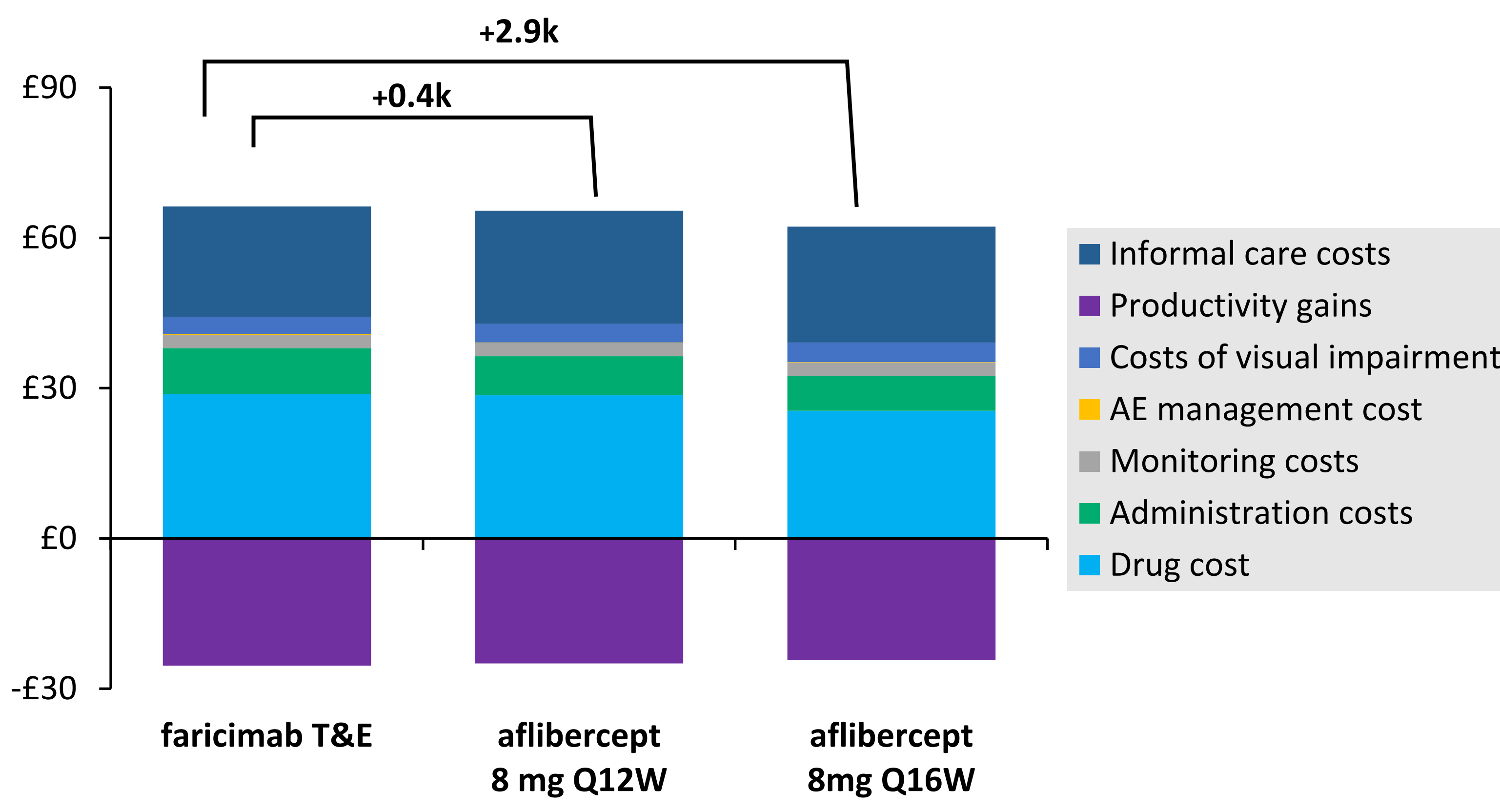
### Summary of clinical effectiveness



### Summary:

Over a lifetime, patients on **faricimab T&E** gain almost **half a year without visual impairment** and 0.16 QALYs vs. Q16W and 0.09 QALYs vs. Q12W.

### Summary of lifetime costs (in thousand GBP)



### Summary:

Total costs of **faricimab T&E** are comparable vs. Q12W and slightly higher vs. Q16W. Higher drug and administration costs for faricimab are partially compensated by lower costs of visual impairment and societal gains.

## References

1. 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; Wykoff, Charles CAberg, Thomas et al.; The Lancet, Volume 399, Issue 10326, 741 – 755; DOI: 10.1016/S0140-6736(22)00018-6.  
2. Intravitreal aflibercept 8 mg in diabetic macular oedema (PHOTON): 48-week results from a randomised, double-masked, non-inferiority, phase 2/3 trial; Brown, David M Abraham, Prema et al.; The Lancet, Volume 403, Issue 10432, 1153 – 1163; DOI: 10.1016/S0140-6736(23)02577-1.

3. NICE guideline [NG82], Published: 23 January 2018, Appendix J: Health Economics.  
4. Czoski-Murray et al.; Valuing condition-specific health states using simulation contact lenses. Value Health. 2009 Jul-Aug;12(5):793-9. DOI: 10.1111/j.1524-4733.2009.00527.x.

## Financial Disclosures

All authors are employees of F. Hoffmann-La Roche Limited

