Technology Guidance

Anti-vascular endothelial growth factors

for treating diabetic macular oedema and age-related macular degeneration

Technology Guidance from the MOH Drug Advisory Committee

Guidance Recommendations

The Ministry of Health's Drug Advisory Committee has recommended:

- ✓ Aflibercept 2 mg/0.05 mL prefilled syringe and vial; and
- ✓ Faricimab 6 mg/0.05 mL vial

for treating adults with visual impairment due to:

- diabetic macular oedema; and
- neovascular (wet) age-related macular degeneration.

Funding status

Aflibercept 2 mg/0.05 mL prefilled syringe and vial are recommended for inclusion on the Medication Assistance Fund (MAF) for the abovementioned indications from 1 November 2025.

Faricimab 6 mg/0.05 mL vial is recommended for inclusion on the MAF for the abovementioned indications from 1 March 2024.

MAF assistance **does not** apply to other formulation(s) or strengths(s) of aflibercept and faricimab for treating diabetic macular oedema or neovascular age-related macular degeneration.

Updated: 16 September 2025

Technology evaluation

1.1. At the June 2023 meeting, the MOH Drug Advisory Committee ("the Committee") considered the evidence presented for the technology evaluation of anti-vascular endothelial growth factors (anti-VEGFs) for treating diabetic macular oedema (DMO) and neovascular age-related macular degeneration (nAMD). The Agency for Care Effectiveness (ACE) conducted the evaluation in consultation with clinical experts from public healthcare institutions and patient experts from local patient and voluntary organisations. Published clinical and economic evidence for aflibercept and faricimab was considered in line with their registered indications.

1.2. The evidence was used to inform the Committee's deliberations around four core decision-making criteria:

- Clinical need of patients and nature of the condition;
- Clinical effectiveness and safety of the technology;
- Cost-effectiveness (value for money) – the incremental benefit and cost of the technology compared to existing alternatives; and
- Estimated annual technology cost and the number of patients likely to benefit from the technology.

1.3. Additional factors, including social and value judgments, may also inform the Committee's funding considerations.

Clinical need

2.1. In local practice, intravitreal anti-VEGF injections represent the preferred treatment option for treating DMO and nAMD, in line with international clinical practice guidelines. While ranibizumab and bevacizumab are already subsidised for treating DMO and nAMD, the Committee acknowledged that there was a clinical need for more affordable choices, as patients may require multiple trials of different anti-VEGF agents.

2.2. The Committee considered testimonials from local patient experts about their lived experiences with nAMD and noted that no patients with DMO provided inputs. The Committee heard that nAMD affected the patients' colour perception and they required assistance from family members to perform daily activities. The Committee acknowledged that the patient experts were receiving intravitreal ranibizumab injection for their condition and considered that it worked well in improving sight, was easy and convenient to receive, and generally well-tolerated. Although the patients were not familiar with aflibercept or faricimab, if they needed to choose a new treatment, they hoped it would be able to restore their sight, prevent loss of vision and be affordable.

Clinical effectiveness and safety

3.1. Diabetic macular oedema

The Committee reviewed the published clinical evidence from two phase III, double-blind randomised controlled trials (RCTs) comparing faricimab with aflibercept for treating DMO (YOSEMITE & RHINE). Faricimab was non-inferior to aflibercept in mean best corrected visual acuity (BCVA) improvement from baseline at one year, based on the pre-specified non-inferiority margin of 4 Early Treatment Diabetic Retinopathy Study (ETDRS) letters, which had been previously accepted by PBAC and CADTH for this indication. There was also no statistically significant difference between aflibercept and faricimab in terms of the proportion of patients who achieved BCVA improvement of at least 15 ETDRS letters at one year. Faricimab and aflibercept were generally similar in terms of safety profile.

3.2. The Committee heard that faricimab was associated with a statistically significant gain of 3.6 ETDRS letters at week 24 compared with ranibizumab based on a phase II, double-blind RCT (BOULEVARD). However, given that the treatment difference did not meet the minimal clinically important difference (MCID) of 10 to 15 ETDRS letters which was previously accepted by the Committee, this difference was not considered to be clinically significant. In terms of safety, the incidence of ocular and systemic adverse events was comparable across both treatment arms.

3.3. The Committee recalled that it previously considered that there were no clinically meaningful differences in efficacy and safety between aflibercept and ranibizumab, based on results of a head-to-head RCT (Protocol T). The Committee also noted that there was no new data from this trial and no new head-to-head trial comparing aflibercept with ranibizumab for treating DMO.

3.4. Based on the available clinical evidence, the Committee agreed that aflibercept, faricimab and ranibizumab were comparable in efficacy and safety for treating DMO.

3.5. Neovascular age-related macular degeneration

The Committee reviewed the evidence from two phase III, double-blind RCTs (TENAYA & LUCERNE) comparing faricimab with aflibercept for treating nAMD. Faricimab was non-inferior to aflibercept in terms of mean BCVA improvement from baseline at week 48, based on the pre-specified non-inferiority margin of 4 ETDRS letters, which had been previously accepted by PBAC and CADTH for this indication. There was also no statistically significant difference between aflibercept and faricimab in terms of proportion of patients who achieved BCVA improvement of at least 15 ETDRS letters at week 48. In terms of safety, the incidence of ocular and systemic adverse events was comparable across treatment arms.

3.6. The Committee also heard that two phase II, double-blind RCTs showed that there were no significant differences between faricimab and ranibizumab in terms of mean BCVA improvement from baseline at weeks 36 (AVENUE), 40 and 52 (STAIRWAY). There was also no significant difference between faricimab and ranibizumab in the proportion of patients who achieved BCVA improvement of at least 15 ETDRS letters in the AVENUE trial. Safety profiles reported for faricimab and ranibizumab were similar in both trials.

3.7. The Committee recalled that it previously considered aflibercept to be non-inferior in efficacy and safety to ranibizumab, based on results of two head-to-head RCTs (VIEW 1 & 2). The Committee also noted that results from one new phase III RCT (RIVAL) comparing aflibercept and ranibizumab for treating nAMD reported results which were consistent with the VIEW 1 & 2 trials.

3.8. Based on the available clinical evidence, the Committee agreed that aflibercept, faricimab and ranibizumab were comparable in efficacy and safety for treating nAMD.

Cost effectiveness

4.1. The Committee agreed that a cost-minimisation approach was appropriate to assess the cost-effectiveness of aflibercept and faricimab, in view of their comparable efficacy and safety for treating DMO and nAMD. The Committee noted that various scenario analyses were conducted to account for uncertainties in frequency of treatment administration.

4.2. Based on results of the CMA, the Committee agreed that faricimab was the more cost-effective option, and the proposal was adequate to manage the uncertainty of the overall budget impact. The Committee also heard that the proposed price of faricimab was comparable to that in overseas reference jurisdictions and considered faricimab to be an acceptable use of healthcare resources.

Estimated annual technology cost

5.1. The Committee noted that the annual cost impact to the public healthcare system was estimated to be between SG$1 million and SG$3 million in the first year of listing faricimab on the MAF.

Additional considerations

6.1. The Committee also noted that the affordability of anti-VEGF treatments was expected to improve further over time with biosimilar ranibizumab entry.

Recommendations (June 2023)

7.1. Based on available evidence, the Committee recommended faricimab 6 mg/0.05 mL vial to be listed on the MAF for treating DMO and nAMD, and not subsidising aflibercept due to unacceptable cost-effectiveness compared with faricimab based on the company's proposal.

Updated recommendations (March 2025)

8.1 Following a negative recommendation for aflibercept at the June 2023 meeting, the company of aflibercept submitted a revised proposal for subsidy reconsideration. The Committee noted that based on the revised proposal from the company, the CMA showed that aflibercept was considered cost effective compared with faricimab for treating DMO and nAMD.

8.2 Hence, the Committee recommended aflibercept 2 mg/0.05 mL prefilled syringe and vial to be listed on the MAF for treating DMO and nAMD. Faricimab 6 mg/0.05 mL vial remains listed on the MAF for treating DMO and nAMD.

VERSION HISTORY

Guidance on anti-vascular endothelial growth factors for treating diabetic macular oedema and age-related macular degeneration

This Version History is provided to track any updates or changes to the guidance following the first publication date. It is not part of the guidance.

1. **Publication of guidance**

   Date of Publication 2 Jan 2024

2. **Guidance updated to include aflibercept 2 mg/0.05 mL prefilled syringe and vial on the Medication Assistance Fund**

   Date of Publication 16 Sep 2025

Agency for Care Effectiveness - ACE Agency for Care Effectiveness (ACE)

About the Agency

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As the national HTA agency, ACE conducts evaluations to inform government funding decisions for treatments, diagnostic tests and vaccines, and produces guidance for public hospitals and institutions in Singapore.

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