

Budesonide prolonged-release tablet

for treating mild to moderate active ulcerative colitis

Technology Guidance from the MOH Drug Advisory Committee

Guidance recommendations

The Ministry of Health's Drug Advisory Committee has not recommended listing budesonide prolonged-release 9 mg tablet on the Medication Assistance Fund (MAF) for treating mild to moderate active ulcerative colitis because of uncertain comparative effectiveness and unfavourable cost effectiveness compared to alternative treatment options.

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Factors considered to inform the recommendations for subsidy

Technology evaluation

- 1.1 The MOH Drug Advisory Committee (“the Committee”) considered the evidence presented for the technology evaluation of budesonide prolonged-release 9 mg tablet for induction of remission in patients with mild to moderate active ulcerative colitis. The Agency for Care Effectiveness conducted the evaluation in consultation with clinical experts from public healthcare institutions. Published clinical evidence for budesonide prolonged-release tablet was considered in line with the registered indication.
- 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 subsidy considerations.

Clinical need

- 2.1 The Committee acknowledged that local clinical practice for treating mild to moderate active ulcerative colitis is largely in line with international clinical practice guidelines, which recommend oral and/or rectal 5-aminosalicylates (5-ASAs) first-line for induction of remission, and prolonged-release budesonide or oral prednisolone as second-line treatment for patients who are intolerant of, or non-responsive to optimised 5-ASA treatment.
- 2.2 The Committee noted that 5-ASAs and oral prednisolone are currently listed on the MOH List of Subsidised Drugs and that use of prolonged-release budesonide is predominantly reserved for patients who are unsuitable for systemic corticosteroids.

Clinical effectiveness and safety

- 3.1 The Committee acknowledged that there was no head-to-head comparative evidence for prolonged-release budesonide and oral prednisolone in patients with ulcerative colitis who are intolerant of, or non-responsive to 5-ASAs. While placebo-controlled studies were available for both treatments, indirect treatment comparisons could not be conducted due to substantial heterogeneity in the populations and outcome definitions used across the studies.
- 3.2 The Committee reviewed the CONTRIBUTE trial, which was the only study available that assessed prolonged-release budesonide in patients intolerant of, or non-responsive to 5-ASA treatment. Results suggested that prolonged-release budesonide led to a modest improvement compared to placebo (13.0% vs 7.5%, $p=0.049$) in achieving combined clinical and endoscopic remission (defined as UCDAI score ≤ 1 , rectal bleeding score of 0 and stool frequency score of 0, mucosal appearance score of 0). Prolonged-release budesonide was also statistically significantly better than placebo in achieving endoscopic remission and improving histological healing rates. However, the Committee noted that there were no significant differences between prolonged-release budesonide and placebo with regards to clinical remission, clinical improvement, and health-related quality of life (IBD-QoL scores).
- 3.3 The Committee considered that prolonged-release budesonide was generally well-tolerated when given with an oral 5-ASA, and that the majority of adverse events observed in the study were mild or moderate in severity. However, they also noted a lack of evidence to inform the long-term comparative safety of prolonged-release budesonide versus prednisolone, but considered that prolonged-release budesonide may have fewer glucocorticoid related adverse effects and a more favourable safety profile due to its low systemic absorption properties.

Cost effectiveness

- 4.1 No local or overseas economic evaluations of prolonged-release budesonide were available from reference HTA agencies or published journals. The Committee noted that at the price offered by the manufacturer as part of their value-based pricing (VBP) proposal, the cost of prolonged-release budesonide for an 8-week course of treatment was significantly higher compared to oral prednisolone. In the absence of sufficient evidence to demonstrate that prolonged-release budesonide offers significant clinical improvements over oral prednisolone to justify its higher

cost, the Committee concluded that it was unlikely that it would be cost-effective at the proposed price in the local context.

Estimated annual technology cost

- 5.1 The Committee noted that the annual cost impact was estimated to less than SG\$500,000 in the first year of listing prolonged-release budesonide on the MAF.

Recommendation

- 6.1 Based on available evidence, the Committee recommended not listing budesonide prolonged-release 9 mg tablet on the MAF for treating mild to moderate active ulcerative colitis because of uncertain comparative effectiveness and unfavourable cost effectiveness compared with alternative treatment options.

About the Agency

The Agency for Care Effectiveness (ACE) is the national health technology assessment agency in Singapore residing within the Ministry of Health. It conducts evaluations to inform the subsidy of treatments, and produces guidance on the appropriate use of treatments for public hospitals and institutions in Singapore. The guidance is based on the evidence available to the Committee as at 7 October 2019. This guidance is not, and should not be regarded as, a substitute for professional or medical advice. Please seek the advice of a qualified healthcare professional about any medical condition. The responsibility for making decisions appropriate to the circumstances of the individual patient remains with the healthcare professional.

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