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**Comparison of drugs for active eosinophilic oesophagitis: systematic review and network meta-analysis - Visaggi P, Barberio B, Del Corso G, et al.**

Visaggi P, Barberio B, Del Corso G, et al. [*Comparison of drugs for active eosinophilic oesophagitis: systematic review and network meta-analysis.*](https://gut.bmj.com/content/72/11/2019) Gut 2023; 72: 2019-2030. doi: 10.1136/gutjnl-2023-329873.

Visaggi et al., conducted a meta-analysis comparing the effectiveness of different treatments for eosinophilic oesophagitis (EoE), an inflammatory condition of the oesophagus. Parameters included histological remission (to ≤6 eosinophils/high-power field [hpf] or ≤15 hpf), symptom improvement and endoscopic score improvement. Fifteen randomised control trials (RCTs) were included, with patients having to be ≥ 12 years old and treatment ≥ 6 weeks.

All treatments outperformed placebo in achieving ≤6 eosinophils/hpf, with Lirantelimab most efficacious, followed by Budesonide orally disintegrating tablets (BOT) and Benralizumab. Other treatments included Fluticasone orally disintegrating tablet (FOT), Dupilumab, Esomeprazole, Budesonide oral solution (BOS) and aerolised Fluticasone. To achieve ≤15 eosinophils/hpf, the most efficacious treatment was BOT, followed by FOT.

For controlling symptoms, only BOT and BOS were significantly more efficacious than placebo, though it was difficult to analyse some of the treatment choices in relation to this as there was a lack of extractable data.

Only BOT and BOS were significantly more efficacious than placebo for improving endoscopic scores, based on >50% improvement for the EoE Endoscopic Reference Score (EREFS). Many treatments however did not have this as a measurable endpoint in their RCTs.

None of the active treatments were more likely to lead to adverse events than placebo, with aerolised Budesonide highest for safety.

In summary, BOT was efficacious across all fields but variations in endpoints across trials precluded full analysis of all medications across all parameters. EoE specific medications were generally superior to asthma adapted ones. Further comparative trials are needed to create a therapeutic hierarchy for EoE.