BAYESIAN PRIOR ELICITATION ON THE EFFICACY OF SEVEN MEDICAL THERAPIES FOR FISTULATING PERIANAL CROHN'S DISEASE

Miles Parkes

UEG Week Berlin 2025 | Presentation

IBD

October 6, 2025

First Bayesian prior elicitation exercise for perianal Crohn's disease establishes consensus efficacy estimates for seven licensed medical therapies, with oral upadacitinib and subcutaneous infliximab showing highest probability for efficacy alongside intravenous infliximab.

KEY POINTS

- Consensus priors for one-year fistula remission were developed by 11 gastroenterologists and 5 statisticians for seven licensed therapies across five mechanisms of action: anti-TNF, anti-integrin, anti-IL12/23, anti-IL-23, and JAK inhibitor.
- Intravenous infliximab showed highest remission rate with prior mean 0.58 (90% CI 0.09–0.96), followed by subcutaneous infliximab at 0.53 (0.09–0.93), upadacitinib at 0.44 (0.05–0.90), adalimumab at 0.39 (0.06–0.82), risankizumab at 0.36 (0.04–0.82), ustekinumab at 0.34 (0.04–0.77), and intravenous vedolizumab at 0.24 (0.03–0.60), versus placebo at 0.22 (0.05–0.46).
- On log-odds ratio scale, oral upadacitinib and subcutaneous infliximab had the strongest priors with highest probability for likely efficacy, alongside intravenous infliximab.
- This methodology combines published literature with expert clinical experience to address the challenge that perianal Crohn's disease has high heterogeneity in treatment and placebo outcomes, making interpretation of available data difficult.
- These priors can be used to enhance clinical trial design and analysis, potentially improving treatment efficacy estimation, reducing required sample sizes, and minimising or avoiding placebo control arms in future dedicated perianal Crohn's disease trials.

VIEW THIS CONTENT ON GUTFLIX

https://gutflix.eu/search/d/8fda3c78-a814-11f0-80f5-0242ac140006

AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.