Figure 2. IGA 0/1 Absolute Response Rate Estimates (Baseline-Risk Adjusted RE model)

Figure 3. Odds Ratios for IGA 0/1 Relative to Lebrikizumab (Baseline-Risk Adjusted RE model)

Figure 4. EASI-50, EASI-75, and EASI-90 Absolute Response Rate Estimates (Baseline-Risk Adjusted RE model)

Figure 5. Pruritus NRS Score at 4 Weeks and 16 After Treatment (Baseline-Risk Adjusted RE model)

**RESULTS**

**NMA Results**

- The NMA analyzed 22 phase II and III randomized clinical trials of targeted systemic therapies which used the approved dosing schemes (Figure 1)

**METHODS**

**Study Design**

- The NMA was based on the results of a systematic literature review and included randomized clinical trials of targeted systemic therapies (monotherapy-only, published between 2011 and 2020 before any treatment switch) for AD. 
- The exact itch scale used in the clinical trials varied. However, the one endpoint for the comparison in the NMA they have been pooled together into a single NRS ≥4.
- The NMA focused on a short treatment period of 16 weeks.

**Background**

- Atopic dermatitis (AD) is a chronic inflammatory skin disease affecting 2–7% of adults globally, with 30% experiencing moderate-to-severe disease.
- Treatments for moderate to severe AD include biologics (e.g., dupilumab, tralokinumab, and lebrikizumab) and Janus kinase (JAK) inhibitors (e.g., abrocitinib, upadacitinib, and baricitinib).
- The efficacy of many treatments has not been compared in head-to-head trials.

**Objective**

- To evaluate the relative efficacy between lebrikizumab, an emerging biologic, and approved targeted systemic AD treatments using a network meta-analysis (NMA)

**Discussion**

- The NMA found that lebrikizumab 250mg Q2W had higher Pruritus NRS response rates among all biologics.
- Lebrikizumab 250mg Q2W had more favorable Pruritus NRS response rates compared to JAK inhibitors baricitinib 2mg QD and abrocitinib 100mg QD.

**Conclusion**

- This 16-week NMA shows that lebrikizumab had a similar response rate to dupilumab, the most widely used targeted systemic therapy for AD, and, if approved, may represent a valuable treatment option for moderate-to-severe AD.

**Abbreviations**

- AD: atopic dermatitis
- CI: credible interval
- EASI: Eczema Area and Severity Index
- IGA: Investigator’s Global Assessment
- NNT: number needed to treat
- NRS: Numeric Rating Scale
- NMA: network meta-analysis
- PICO: phase II, III, and IV clinical trials

**References**


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