A Randomized Phase 3 Study, SINUS3, Evaluating the Efficacy and Safety of Dupilumab in Patients With Severe Chronic Rhinosinusitis With Nasal Polyps

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ABSTRACT

The objective of this study was to evaluate the efficacy and safety of dupilumab in patients with severe chronic rhinosinusitis with nasal polyps (CRSwNP) who are not candidates for endoscopic sinus surgery (ESS) and who have previously failed long-term systemic corticosteroids (SCS) and/or previous ESS.

METHODS

A double-blind, placebo-controlled, parallel-group study is shown in Table 2. Patients were randomized to receive dupilumab (Arm A, n = 50; Arm B, n = 48) or placebo (Arm C, n = 48) every 4 weeks for 52 weeks.

RESULTS

Dupilumab treatment (300 mg q2w and 300 mg q2w–q4w) vs placebo significantly improved NPS and NC score in the ITT population, over the 52-week treatment period. For SNOT-22 score, differences >8.9 are considered clinically relevant.

CONCLUSIONS

In patients with severe uncontrolled CRSwNP, dupilumab treatment arms A+B were superior to placebo at all time points, in terms of nasal polyp size, sinus opacification, and total score on the rhinosinusitis outcome measure.

Key secondary endpoints

- Dupilumab reduced sinus opacification, measured by LMK-CT score, from baseline at Weeks 24 and 52. (Figure 2A, Table 2).
- Dupilumab significantly reduced nasal polyp size (measured by NPS) and patient-reported severity of rhinosinusitis at Week 24. (Figure 2B, Table 2).
- Dupilumab significantly reduced rhinorrhea (measured by NC score), from baseline at Weeks 24 and 52. (Figure 2C, Table 2).

Statistical methods

- All efficacy analyses were compared between dupilumab treatment Arms A+B pooled (first 24 weeks only for Arm B) and Arm C placebo (intent-to-treat population).
- The follow-up assessments were repeated at each treatment cycle and weeks 24 and 52.
- Changes from baseline to Week 24 were compared using a least-square (LS) mean difference (LS mean diff.) with 95% confidence intervals (CI).

Safetyp

- Dupilumab treatment was generally well tolerated, with a safety profile similar to placebo.
- The incidence of injection-site reactions was higher in the dupilumab treatment groups, but was no different in the placebo groups.

Disclosures


References


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