



PSORIASIS

## SYSTEMATIC REVIEW AND META-ANALYSIS OF ANTI-INTERLEUKIN-17 IN PSORIASIS AND PSORIATIC ARTHRITIS

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Background: since their introduction, IL 17-inhibitors have raised the bar of therapeutic outcomes in Psoriasis, proving to be very effective and determining a substantial gain in patients' quality of life (QoL).

Objective: to evaluate the effectiveness and safety of anti-IL17 (Ixekizumab, Secukinumab and Brodalumab) in patients with psoriasis and psoriatic arthritis compared to placebo; to explore the presence of any differences between themselves and to investigate the presence of predictors of response to treatment.

Materials and Methods: 26 phase 2 and 3 RCTs comparing anti-IL 17 drugs to placebo were selected. A total population of 13512 patients with Psoriasis and/or Psoriatic Arthritis has been evaluated for primary effectiveness outcomes (PASI 90 and 100, ACR 50 and 70) and primary safety outcome (discontinuation for any AE and Candida infections) at three different time-points. We also considered secondary effectiveness outcomes consisting in clinical and QoL scores and secondary safety outcomes such as SAE, Malignancy, Skin Tumors, Infections, MACE, IBD. A meta-regression was even performed to identify the presence of predictors of response to anti-IL 17.

Results: All efficacy data showed better and long-lasting results compared to placebo. Brodalumab was superior to Secukinumab in achieving PASI 90 but not PASI 100 in induction period. PsA and previous use of iTNF $\alpha$  were negative predictors of skin response (PASI 90) to anti-IL 17 treatments, while younger age and male sex appeared to be positive predictors. No differences were found in safety outcomes compared to placebo, neither compared to the three drugs themselves.

Conclusions: All types of anti-IL 17 showed a good efficacy and safety profile compared to





placebo. Our findings are in line with the known today literature, about the better clinical response in iTNF $\alpha$ -naïve. We also need more studies to confirm our long-term results.

