INDIRECT COMPARISONS OF BIOLOGICAL TREATMENTS IN PSORIATIC ARTHRITIS

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Background and importance
Psoriatic arthritis (PA) is a complex inflammatory musculoskeletal and skin disease. Nowadays, there are several therapeutic options to treat this disease.

Aim and objectives
To conduct indirect comparisons (ICs) between abatacept, brodalumab, guselkumab, ixekizumab, risankizumab, secukinumab and ustekinumab using a common comparator in patients diagnosed with PA.

Material and methods
A review in PubMed and European Medicines Agency databases was performed.
Inclusion criteria: phase III randomized clinical trials (RCTs) of treatments cited with a double-blind and placebo-controlled design, which included patients previously treated with anti-tumour necrosis factor agents.
Exclusion criteria: RCT without a comparator common to alternatives considered and recruiting treatment-naive patients.
American College of Rheumatology 50% improvement criteria (ACR50) at 24 weeks in RCTs were selected as endpoint to estimate absolute risk reduction (ARR) for each drug.
We conducted adjusted ICs using Bucher method.
The therapeutic alternative with the greatest magnitude of effect in RCTs was selected as reference therapy. The maximum difference without clinical relevance (Δ) was defined as ±16% according to previous published literature.

Results
7 studies included

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Conclusion and relevance
• Our ICs provide comparative efficacy data between current therapeutic alternatives for PA in terms of ACR50.
• No statistically significant benefit was observed between ixekizumab, brodalumab, guselkumab and secukinumab.
• Ixekizumab did not show relevant clinical superiority over brodalumab, guselkumab, secukinumab and risankizumab.
• Ixekizumab only demonstrated a clinically relevant benefit versus ustekinumab and abatacept.
• These results could promote price competition between these drugs and improve the efficiency of PA treatments.