Psoriatic arthritis (PA) is an inflammatory disease affecting joints and connective tissues. The anti-tumor necrosis factor (TNF) biologics are increasingly being used in patients who have failed traditional disease-modifying antirheumatic drugs. Etanercept has shown efficacy in treatment of PA. The objective of this study was to conduct meta-analysis and present total evidence for etanercept in treatment of PA.

METHODS: For this meta-analysis we included randomized controlled trials (RCTs) evaluating etanercept for the treatment of PA. RCTs studying adult populations with active and progressive PA with an inadequate response to previous DMARD therapy were eligible. Trials conducted among PA populations with prior experience with anti-TNF agents, including an inadequate response, were excluded. A systematic literature search for clinical trials was undertaken for the PubMed, Embase, BIOSIS, Cochrane Library, and Google Scholar, and Cochrane. Data was collected for the study size, interventions, year, and the three outcomes HAQ, PASI and PGA. Results: Meta-analysis was performed on two sets of trials: (a) Paired (b) Single. The PROMs were selected as a moderator of the outcomes. RESULTS: Two RCTs with a total of 131 patients were identified. The pooled response rates for Etanercept for PsA was 75% (95% CI 60%-90%) versus placebo was 59% (95% CI 46%-72%), and for PASI was 24% (95% CI 13%-34%). The pooled response rates for placebo was 30% (95% CI 26%-35%), for HAQ was 5% (95% CI 1%-9%), and for PASI was 3% (95% CI 0%-7%). For PaSR the cumulative relative risk of Etanercept versus placebo was 0.40 (95% CI 0.33-0.48). For PASI, the cumulative relative risk was 0.51 (95% CI 0.46-0.56). For HAQ, the cumulative relative risk versus placebo was 0.08 (95% CI 5%–12%). For PASI, the cumulative relative risk of Etanercept versus placebo was 0.14 (95% CI 8%-20%). CONCLUSIONS: Meta-analysis shows Etanercept offers patients with psoriatic arthritis an effective therapeutic option for control of their disease.