

Are tumour necrosis factor inhibitors (TNFi) effective and safe for people with psoriatic arthritis?

Clinical Question	What are the benefits and harms of TNFi when used to treat adults with psoriatic arthritis?
Bottom Line	In disease-modifying anti-rheumatic drug (DMARD)-naïve participants, TNFi treatment likely leads to large clinical improvements at 12 weeks and higher minimal disease activity at 24 weeks compared to methotrexate. However, TNFi was not shown to improve physical function at 52 weeks. TNFi slightly reduce radiographic progression at 52 weeks. No significant differences in harms between TNFi and methotrexate were found. TNFi significantly improve clinical outcomes at 12 and 24 weeks and may improve function at 24 weeks compared to placebo. TNFi are generally well-tolerated short-term, with a slight increase in withdrawals due to adverse events. Treatment with TNFi shows consistent benefits across studies, despite some heterogeneity and potential publication bias. Overall, TNFi improved clinical outcomes, pain, fatigue, and psoriasis more effectively than methotrexate or placebo.
Caveat	When TNFi was compared to methotrexate all but one study used it in combination with methotrexate. The improvements in quality of life at 24 weeks and the reduction of radiographic progression with TNFi compared to methotrexate although statistically significant were relatively small and potentially would not have been clinically significant. It is worth noticing that data on long-term disability, quality of life, and radiographic progression came from a single study.
Context	Psoriatic arthritis is a chronic condition with a prevalence of 30% among those with psoriasis. The condition equally affects men and women, with higher prevalence in individuals over 40 years old. Musculoskeletal symptoms include various forms of arthritis, spondylitis, and enthesitis, while extra-articular manifestations can involve the eyes, bowel, and cardiovascular system. Untreated, it can lead to significant disability and reduced quality of life. Treatment aims to improve quality of life by reducing inflammation and preventing structural damage. For individuals with active enthesitis, dactylitis, or predominantly axial disease unresponsive to NSAIDs, TNFi is a biologic disease-modifying anti-rheumatic drug (bDMARDs) and is a therapy recommended as a potential option.
Cochrane Systematic Review	Cagnotto G, Bruschettini M, Stróżyk A, Scirè CA, Compagno M. Tumor necrosis factor (TNF) inhibitors for psoriatic arthritis. Cochrane Database of Systematic Reviews 2025, Issue 2. Art. No.: CD013614. DOI: 10.1002/14651858.CD013614.pub2. This review contains 25 trials which included 7,857 participants.

Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013614.pub2/full>