



Title	Tumor Necrosis Factor (TNF) Inhibitors for Patients with Rheumatic Diseases
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Aim

To assess the efficacy and safety of the TNF inhibitors adalimumab, etanercept, and infliximab in treating rheumatoid arthritis (RA), ankylosing spondylitis, and psoriatic arthritis.

Conclusions and results

Forty randomized controlled trials (RCTs) were included in this systematic review. The analysis compared the individual TNF inhibitor with placebo, or with methotrexate. Compared to placebo, or other active treatment (methotrexate), adalimumab, etanercept, and infliximab (alone or in combination with methotrexate) are effective in terms of reducing disease activity in RA, ankylosing spondylitis, and psoriatic arthritis. The analysis failed to find any evidence that either treatment is more effective.

Recommendations

Not applicable.

Methods

Published systematic reviews and randomized controlled trials of adalimumab, etanercept, and infliximab were identified through a comprehensive literature search and included for further analysis if the patients met the criteria for RA, ankylosing spondylitis, or psoriatic arthritis. Data on study characteristics were abstracted, and the expert group assessed study quality. Studies were pooled, and meta-analysis was performed only if approved doses for use in Norway were used. Disease activity, functional, radiological, and clinical outcomes were assessed.

Further research/reviews required

More long-term RCTs and studies based on registers that include more patients are needed to support these findings. This will determine the benefit-to-harm ratio, including potentially rare or delayed adverse events, and the sustainability of the treatments with TNF inhibitors.