Infliximab and etanercept in patients with rheumatoid arthritis: a systematic review and economic evaluation

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Record Status
This is a bibliographic record of a published health technology assessment from a member of INAHTA. No evaluation of the quality of this assessment has been made for the HTA database.

Citation

Authors' objectives
The aim of this report is to provide a clinical review and economic evaluation relating to the introduction of infliximab and etanercept to the sequence of disease-modifying anti-rheumatic drugs (DMARDs) used in the treatment of rheumatoid arthritis (RA) by answering two questions:

1. What is the evidence supporting the incremental benefit of infliximab and etanercept as additional therapies for the treatment of RA?
2. What is the cost-effectiveness of different sequences of DMARDs that may include infliximab or etanercept?

Authors' conclusions
Clinical Review:

Infliximab plus MTX is efficacious compared with MTX alone for treating long-standing RA after both six and 12 months in patients who no longer respond to DMARD treatment. Although long-term studies are lacking, current data suggest that infliximab is well tolerated.

Etanercept is efficacious compared with placebo after six months for treating long-standing RA in patients who no longer respond to DMARDs. Although long-term studies are lacking, current data suggest that etanercept is well tolerated by most patients in the short term.

More long-term randomized trials are needed to corroborate these findings and to determine the benefit-to-harm ratio, including an evaluation of potentially rare or delayed adverse events, and the sustainability of treatment response to infliximab and etanercept in patients with longstanding RA.

Ongoing post-marketing surveillance is required to establish effectiveness and to determine the incidence of adverse events and the sustainability of treatment response. The reports of disseminated or extra pulmonary tuberculosis, invasive fungal infections, and other opportunistic infections with an anti-TNF treatment require ongoing surveillance to determine the true incidence with infliximab and etanercept treatment, and to watch for rare adverse events.

Economic Analysis:

Neither etanercept nor infliximab seem to be cost-effective under commonly accepted criteria.

This study is limited to patients with long-standing RA and may be inapplicable when comparing infliximab and etanercept with more conventional DMARDs in patients with early RA. Head-to-head comparator trials between biological agents are needed to evaluate the comparative benefits and harms.
INAHTA brief and checklist

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