Etanercept and efalizumab for the treatment of psoriasis: a systematic review

CRD summary
This 2006 review found that etanercept and efalizumab were efficacious for patients with moderate-to-severe chronic plaque psoriasis, but they were only likely to be cost-effective for patients with a poor quality of life before treatment, who were at risk of hospitalisation. Long-term trials and trials comparing the drugs were needed. The mixed-treatment comparison favoured etanercept.

Objectives
To evaluate the clinical effectiveness, safety, tolerability and cost-effectiveness of etanercept and efalizumab for the treatment of moderate-to-severe chronic plaque psoriasis.

Review methods
Eleven databases, including MEDLINE, EMBASE, and ClinicalTrials.com, were searched, without language restrictions, up to April 2004. References were handsearched.

For efficacy, randomised controlled trials (RCTs) of adults with moderate-to-severe psoriasis were eligible if they compared either drug against placebo or another active drug. The main outcome was the score on the Psoriasis Area and Severity Index (PASI). For adverse events, long-term observational studies were also eligible if they were of more than 100 people.

Studies were selected by two reviewers. The data were extracted and quality checked, using the CRD checklist, by one reviewer and checked by another. Disagreements were resolved by consensus or with a third reviewer.

Results of the review
The review identified eight RCTs of etanercept (three; 1,347 patients) or efalizumab (five; 2,963 patients), and 10 studies of adverse events. Three of the efalizumab trials were poorly reported, otherwise quality was good.

For etanercept 25mg twice weekly over 12 weeks, 62% of patients achieved a PASI 50, 33% achieved a PASI 75, 11% achieved a PASI 90, and 40% were assessed as clear or almost clear of psoriasis. At a dose of 50mg the percentages increased (two RCTs). One trial indicated that the response was maintained.

For efalizumab 1mg per kg weekly over 12 weeks, 55% of patients achieved PASI 50, 27% achieved PASI 75, 4.3% achieved PASI 90, and 27% were clear or almost clear of psoriasis. There was no evidence that the response was maintained.

A mixed-treatment comparison found a higher response rate with etanercept than with efalizumab on the PASI 50, 75 and 90.

The most common adverse event was injection-site reaction for etanercept, which was generally well tolerated. For efalizumab, adverse events were headache, chills, and occasionally nausea, myalgia, pain and fever; there were few withdrawals from treatment.

The cost-effectiveness model, for the price years 2003 to 2005, suggested that the drugs were only cost-effective if the NHS was willing to pay over £60,000 for a quality-adjusted life-year gained, or for patients with a poor quality of life, at risk of hospitalisation.

Conclusions
Etanercept and efalizumab were efficacious, but were only likely to be cost-effective for patients with a poor quality of life before treatment, who were at risk of hospitalisation. Long-term trials and trials comparing the two drugs were needed.
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This is a high quality systematic review involving CRD that meets the criteria for inclusion on DARE. As CRD reviews are of high quality this structured abstract presents a brief summary of the review methods, the results and conclusions.