NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Health Technology Appraisal

Etanercept, infliximab and adalimumab for the treatment of psoriatic arthritis (review)

Draft scope

Draft remit/appraisal objective
To review the Institute's earlier guidance on the clinical and cost-effectiveness of etanercept, infliximab and adalimumab\(^1\), in their licensed indications for the treatment of psoriatic arthritis

Background
Psoriatic arthritis (PsA, psoriatic arthropathy) is an inflammatory arthritis closely associated with psoriasis. An estimated 5–7% of all people with psoriasis, and approximately 40% of those with extensive skin disease, have PsA. The prevalence of psoriatic arthritis in the UK is estimated to be around 0.1% to 0.3% of the total population (50,000 to 156,000 people in England and Wales). It affects men and women equally and its incidence peaks between the ages of 30 and 55 years. PsA may remain undiagnosed because many asymptomatic people with psoriasis have radiological evidence of joint damage.

Although PsA is a chronic progressive condition, its course may be erratic, with flare-ups and remissions. Symptoms can range from mild inflammation of the synovial membrane surrounding a joint (synovitis) to severe progressive erosion of the joints. When the spine is affected the condition may be indistinguishable from ankylosing spondylitis.

The relationship between the skin and joint manifestations is unclear. In 60% of people with the condition the psoriasis precedes the arthritis, in 25% of people the arthritis appears first and in 15% of people the symptoms occur simultaneously. People with severe arthritis can have little or no skin disease, and vice versa. Flare-ups of symptoms do not necessarily coincide.

PsA can significantly impair a person’s quality of life and cause disability; both skin and joints can be affected and people with PsA report more ‘role limitation’ and body pain than do people with rheumatoid arthritis. PsA also appears to be associated with an increased risk of premature mortality.

\(^1\) This appraisal will be a review of the following appraisals: NICE Technology Appraisal guidance No. 104 - Etanercept and infliximab for the treatment of psoriatic arthritis, July 2006 and NICE Technology Appraisal guidance No. 125 – Adalimumab for the treatment of psoriatic arthritis, Aug 2007.
Mild psoriatic arthritis can be managed with non-steroidal anti-inflammatory drugs and physical therapy, with intra-articular corticosteroid injections when necessary. Disease modifying anti-rheumatic drugs (DMARDs), including azathioprine, methotrexate, sulphasalazine, ciclosporin and leflunomide, are additionally used in individuals with severe or progressive disease. Gold compounds and anti-malarial drugs are also used to treat psoriatic arthritis, but less commonly, and photochemotherapy may be used to treat peripheral arthritis.

In addition, a tumour necrosis factor (TNF) inhibitor may currently be used for the treatment of adults with severe active psoriatic arthritis. NICE technology appraisal guidance recommended etanercept or adalimumab (no 104 and 125 respectively) when a person has peripheral arthritis with three or more tender joints and three or more swollen joints, and the psoriatic arthritis has not responded to at least two other DMARDs, given on their own or together. Guidance no 104 also recommended infliximab if the person satisfies the criteria for treatment with etanercept, but is either intolerant of, or has contraindications to, treatment with etanercept, or has major difficulties with self administered injections.

The technologies
Etanercept (Enbrel, Wyeth Pharmaceuticals), infliximab (Remicade, Schering-Plough) and adalimumab (Humira, Abbott Laboratories) all inhibit the activity of TNF alpha, one of the factors responsible for the damaging processes that affect articular cartilage and bone.

Etanercept, infliximab and adalimumab are licensed for the treatment of active and progressive PsA in patients who have responded inadequately to DMARDs. Etanercept and adalimumab are administered via subcutaneous injection. Infliximab can be administered by intravenous infusion either in combination with methotrexate or alone in patients who show intolerance to methotrexate or for whom methotrexate is contraindicated.

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Adults with active and progressive psoriatic arthritis who have responded inadequately to previous DMARDs</th>
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<tbody>
<tr>
<td>Etanercept</td>
<td></td>
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<tr>
<td>Infliximab (mono and combination therapy)</td>
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<tr>
<td>Adalimumab</td>
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<tr>
<td>[Golimumab(^2)]</td>
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\(^2\) Subject to consultation and Ministerial referral. See question for consultation below

National Institute for Health and Clinical Excellence
Draft scope for the proposed appraisal of Etanercept, infliximab and adalimumab for psoriatic arthritis (review of existing guidance 104 and 125)
Issue Date: May 2008
### Appendix A

<table>
<thead>
<tr>
<th><strong>Standard comparators</strong></th>
<th><strong>Outcomes</strong></th>
<th><strong>Economic analysis</strong></th>
<th><strong>Other considerations</strong></th>
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</thead>
</table>
| • Alternative TNF inhibitors  
  • Conventional management strategies for active and progressive psoriatic arthritis that has responded inadequately to previous DMARD therapy excluding TNF inhibitors | The outcome measures to be considered include:  
  • pain and other symptoms  
  • functional capacity  
  • effect on concomitant skin condition  
  • disease progression (e.g. imaging)  
  • adverse effects of treatment  
  • health-related quality of life. | The reference case stipulates that the cost effectiveness of treatments should be expressed in terms of incremental cost per quality-adjusted life year.  
  The reference case stipulates that the time horizon for estimating clinical and cost effectiveness should be sufficiently long to reflect any differences in costs or outcomes between the technologies being compared.  
  Costs will be considered from an NHS and Personal Social Services perspective. | Where the evidence allows, sequencing of different drugs may be considered.  
  Guidance will only be issued in accordance with the marketing authorisations. |
Related NICE recommendations

<table>
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<th>Related published Technology Appraisals:</th>
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<tr>
<td>NICE Technology Appraisal guidance No. 104 - Etanercept and infliximab for the treatment of psoriatic arthritis, July 2006</td>
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</tr>
<tr>
<td>Related Technology Appraisals in development:</td>
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<tr>
<td>Leflunomide for the treatment of psoriatic arthritis. Expected date of issue: TBC</td>
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<td>Related Guidelines:</td>
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<td>None</td>
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Questions for consultation

Are there any issues that require special attention in light of the duty to have due regard to the need to eliminate unlawful discrimination and promote equality?

Are there any subgroups of patients in whom these drugs are expected to be more clinically effective and cost effective or other groups that should be examined separately?

The Institute would welcome consultees’ and commentators’ views on whether golimumab (CNTO – 148, Centocor), also a TNF alpha inhibitor, should be considered as an intervention in this appraisal. The inclusion of golimumab is subject to Ministerial referral. Golimumab is currently not licensed in the UK and is expected to be positioned in the treatment pathway for psoriatic arthritis alongside etanercept, infliximab and adalimumab.