NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Proposed Health Technology Appraisal

Ixekizumab for treating moderate to severe chronic plaque psoriasis

Draft scope (pre-referral)

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of ixekizumab within its marketing authorisation for treating moderate to severe chronic plaque psoriasis.

Background

Psoriasis is an inflammatory skin disease that is characterised by an increased turnover of the upper layer of the skin (epidermis). Although it is a chronic condition, its course may be unpredictable, with flare-ups and remissions. The most common form of psoriasis is chronic plaque psoriasis (psoriasis vulgaris), which is characterised by well-demarcated, often symmetrically distributed thickened, red, scaly plaques. Although the plaques can affect any part of the skin, they are typically found on the extensor surfaces of the knees and elbows, and on the scalp.

Psoriasis can be graded as mild, moderate or severe according to the body surface area affected or by using indices such as the Psoriasis Area Severity Index (PASI), which takes into account the size of the area covered with psoriasis as well as redness, thickness and scaling. In addition, the Dermatology Life Quality Index (DLQI) is a validated tool that can be used to assess the impact of psoriasis on physical, psychological and social wellbeing.

The prevalence of psoriasis in England is estimated to be 1.63%[1], which is about 900,000 people, of whom approximately 20% have moderate to severe psoriasis (15% moderate, 5% severe)[2], equating to approximately 180,000 people. Approximately 90% of people with the condition have plaque psoriasis. There is no cure for psoriasis but there are a wide range of topical and systemic treatments that can manage the condition. Most treatments reduce severity rather than prevent episodes. Psoriasis has to be treated continually and on a long-term basis.

NICE clinical guideline 153 (2012) describes the care pathway for people with psoriasis. Initially, psoriasis is managed with topical treatments, including emollients and occlusive dressings, keratolytics (salicylic acid), coal tar, dithranol, corticosteroids and vitamin D analogues. Phototherapy may be used for people with plaque psoriasis that cannot be controlled with topical treatments. Systemic non-biological therapies (such as methotrexate,

ciclosporin and acitretin) should be offered to people with any type of psoriasis if:

- it cannot be controlled with topical therapy **and**
- it has a significant impact on physical, psychological or social wellbeing **and**
- one or more of the following apply:
    - psoriasis is extensive **or**
    - psoriasis is localised and associated with significant functional impairment and/or high levels of distress **or**
    - phototherapy has been ineffective, cannot be used or has resulted in rapid relapse.

NICE clinical guideline 153 on the assessment and management of psoriasis incorporates verbatim recommendations from several technology appraisals for people with psoriasis for whom other systemic therapies including ciclosporin, methotrexate and phototherapy with or without psoralen have been inadequately effective, not tolerated or contraindicated. Etanercept (NICE technology appraisal 103), adalimumab (NICE technology appraisal 146), ustekinumab (NICE technology appraisal 180) and secukinumab (NICE technology appraisal 350; published since clinical guideline 153 was issued) are recommended as treatment options for people with severe psoriasis (as defined by a total PASI score of 10 or more and a DLQI score of more than 10). Infliximab (NICE technology appraisal 134) is recommended for people with very severe psoriasis (PASI score of 20 or more and a DLQI score of more than 18).

The technology

Ixekizumb (Eli Lilly) is a humanised immunoglobulin G subclass 4 monoclonal antibody that neutralises interleukin-17A, which is a key T cell-derived cytokine involved in inducing and mediating inflammation.

Ixekizumab does not currently have a UK marketing authorisation for treating moderate to severe plaque psoriasis. It is administered by subcutaneous injection. It has been studied in three phase 3 clinical trials in comparison with placebo or etanercept in people with moderate-to-severe plaque psoriasis for whom systemic treatment or phototherapy are appropriate options.

Intervention(s)	Ixekizumab within its licensed indication
Population(s)	Adults with moderate to severe chronic plaque psoriasis for whom systemic treatment or phototherapy is suitable

Comparators	• Systemic non-biological therapies (including acitretin, ciclosporin, methotrexate) • Phototherapy with or without psoralen • TNF-alpha inhibitors (etanercept, infliximab, adalimumab) • Ustekinumab) • Secukinumab • Best supportive care.
Outcomes	The outcome measures to be considered include: • severity of psoriasis • other complications of psoriasis (including nail, scalp and joint outcomes) • mortality • response rate • relapse rate • adverse effects of treatment • health-related quality of life.
Economic analysis	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. The availability of any patient access schemes for the intervention or comparator technologies will be taken into account.

Other considerations	Where the evidence allows, the following subgroups will be considered: • previous use of systemic non-biological therapy • previous use of biological therapy • severity of psoriasis (moderate, severe) Where the evidence allows, sequencing of different drugs and the place of ixekizumab in such a sequence will be considered. Guidance will only be issued in accordance with the marketing authorisation.

Related NICE recommendations and NICE Pathways	**Related Technology Appraisals:** Technology Appraisal No.103, July 2006, 'Etanercept and efalizumab for the treatment of adults with psoriasis'. Static list. Note: guidance for efalizumab has now been withdrawn. Technology Appraisal No.134, January 2008, 'Infliximab for the treatment of adults with psoriasis'. Static list. Technology Appraisal No. 146, June 2008, 'Adalimumab for the treatment of adults with psoriasis'. Static list. Technology Appraisal No. 180, September 2009, 'Ustekinumab for the treatment of adults with moderate to severe psoriasis'. Static list. Technology Appraisal No 350, July 2015: 'Secukinumab for treating moderate to severe plaque psoriasis'. Review proposal date: TBC **In-development** Technology Appraisal in development, 'Apremilast for treating moderate to severe psoriasis'. Anticipated publication date: October 2015. **Related Guidelines:** Clinical Guidelines No. 153, October 2013, 'Psoriasis. The assessment and management of psoriasis'. Review Proposal Date: December 2016. **Related Interventional Procedures:** Interventional Procedures No. 236, November 2007, 'Grenz rays therapy for inflammatory skin conditions'. **Related Quality Standards:** Quality Standard No. 40, August 2013, 'Psoriasis'. http://www.nice.org.uk/guidance/qualitystandards/qualitystandards.jsp **Related NICE Pathways:** NICE Pathway: "Psoriasis", Pathway created October 2012: http://pathways.nice.org.uk/
Related National Policy	None

Questions for consultation

Have all relevant comparators for ixekizumab been included in the scope? Which treatments are considered to be established clinical practice in the NHS for moderate to severe psoriasis?

Are the subgroups suggested in 'other considerations' appropriate? Are there any other subgroups of people in whom the technology is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider ixekizumab will fit into the existing NICE pathway for psoriasis?

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others. Please let us know if you think that the proposed remit and scope may need changing in order to meet these aims. In particular, please tell us if the proposed remit and scope:

- could exclude from full consideration any people protected by the equality legislation who fall within the patient population for which ixekizumab will be licensed;

- could lead to recommendations that have a different impact on people protected by the equality legislation than on the wider population, e.g. by making it more difficult in practice for a specific group to access the technology;

- could have any adverse impact on people with a particular disability or disabilities.

Please tell us what evidence should be obtained to enable the Committee to identify and consider such impacts.

Do you consider the technology to be innovative in its potential to make a significant and substantial impact on health-related benefits and how it might improve the way that current need is met (is this a 'step-change' in the management of the condition)?

Do you consider that the use of the technology can result in any potential significant and substantial health-related benefits that are unlikely to be included in the QALY calculation?

Please identify the nature of the data which you understand to be available to enable the Appraisal Committee to take account of these benefits.

NICE intends to appraise this technology through its Single Technology Appraisal (STA) Process. We welcome comments on the appropriateness of appraising this topic through this process. (Information on the Institute's

Technology Appraisal processes is available at http://www.nice.org.uk/article/pmg19/chapter/1-Introduction)

References

1. Estimated prevalence of psoriasis obtained from costing template and report for Adalimumab for the treatment of adults with psoriasis' (2008). NICE technology appraisal guidance 146 (TA146). Available from: www.nice.org.uk/TA146
2. Menter A, Korman NJ, Elmets CA et al. Guidelines of care for the management of psoriasis and psoriatic arthritis. Section 6. Guidelines of care for the treatment of psoriasis and psoriatic arthritis: case-based presentations and evidence-based conclusions. J Am Acad Dermatol 2011; 65:137–74.