NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Proposed Health Technology Appraisal

Secukinumab for treating ankylosing spondylitis after inadequate response to non-steroidal anti-inflammatory drugs or TNF-alpha inhibitors

Draft scope (pre-referral)

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of secukinumab within its marketing authorisation for treating ankylosing spondylitis after inadequate response to non-steroidal anti-inflammatory drugs or TNF-alpha inhibitors.

Background

Ankylosing spondylitis belongs to a clinically heterogeneous group of inflammatory rheumatologic diseases which share common genetic, histological and clinical features (also including psoriatic arthritis, arthritis associated with inflammatory bowel disease, reactive arthritis and undifferentiated spondyloarthritis). People with these diseases often have the genetic marker human leukocyte antigen (HLA)-B27.

The clinical symptoms can vary from person to person, but usually develop slowly over several months or years. The main symptoms can include back pain, usually inflammatory in nature, arthritis (inflammation of the joints in other parts of the body), enthesitis (inflammation where a bone is joined to a tendon), and fatigue.

In the early stages of disease, radiographs of the sacroiliac joints and spine can be normal (so-called ‘non-radiographic’ disease) although sacroiliitis (inflammation of the sacroiliac joints) or inflammation of the spine may be visible on MRI before structural damage occurs. If definite radiographic sacroiliitis (abnormalities seen in plain x-rays of the sacroiliac joints, such as erosions, sclerosis, and partial or total ankylosis) is present, the disease can be classified as ankylosing spondylitis. Radiographic changes to the spine are not part of the classification criteria, but new bone formation (such as syndesmophytes and ankylosis of the vertebral column) is characteristic of ankylosing spondylitis.

Around 200,000 people have been diagnosed as having ankylosing spondylitis in the UK. The prevalence is thought to range from 0.05% to 0.23%, representing approximately 2,300 new diagnoses each year in England and Wales. Ankylosing spondylitis is about 3 times more common in men than in women. Approximately 1 in 10 people with ankylosing spondylitis have a severe form of the disease.

Conventional therapy for ankylosing spondylitis includes anti-inflammatory treatment with non-steroidal anti-inflammatory drugs (NSAIDs) and physiotherapy. Tumour necrosis factor-alpha (TNF-alpha) inhibitors (adalimumab, certolizumab pegol, etanercept, golimumab and infliximab) are typically used when the disease has not responded adequately to conventional therapy. NICE technology appraisals 143 and 233 recommend, adalimumab, etanercept and golimumab as treatment options for adults with severe active ankylosing spondylitis for people who have active spinal disease as assessed on two separate occasions 12 weeks apart and have tried at least two non-steroidal anti-inflammatory drugs but they have not worked, Infliximab is not recommended for people with ankylosing spondylitis. (NICE technology appraisal 143)

The technology

Secukinumab (Cosentyx, Novartis) is a human monoclonal antibody which specifically inhibits the interleukin 17A (IL-17A) receptor. Secukinumab is administered by subcutaneous injection.

Secukinumab does not have a marketing authorisation in the UK. It has been studied in clinical trials compared with placebo in adults with radiologic evidence (X-ray) of moderate to severe ankylosing spondylitis whose disease had responded inadequately to or who are intolerant to non-steroidal anti-inflammatory drugs or TNF alpha inhibitors.

Intervention(s)	Secukinumab
Population(s)	Adults with moderate to severe active ankylosing spondylitis for whom non-steroidal anti-inflammatory drugs, or TNF-alpha inhibitors have been inadequately effective or not tolerated.
Comparators	For people whose disease has responded inadequately to, or is intolerant to non-steroidal anti-inflammatory drugs: • Adalimumab • Etanercept • Golimumab • Infliximab For people whose disease has responded inadequately to, or is intolerant to TNF-alpha inhibitors: • Established clinical management without secukinumab

Outcomes	The outcome measures to be considered include: • disease activity • functional capacity • disease progression • pain • peripheral symptoms (including enthesitis, peripheral arthritis and dactylitis) • symptoms of extra-articular manifestations (including uveitis, inflammatory bowel disease and psoriasis) • 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 should be taken into account.
Other considerations	Guidance will only be issued in accordance with the marketing authorisation. Where the wording of the therapeutic indication does not include specific treatment combinations, guidance will be issued only in the context of the evidence that has underpinned the marketing authorisation granted by the regulator.
Related NICE recommendations and NICE Pathways	Related Technology Appraisals: Technology Appraisal No. 233, August 2011, 'Golimumab for the treatment of ankylosing spondylitis'. Ongoing review with TA143. Technology Appraisal No. 143, May 2008, 'Adalimumab, etanercept and infliximab for ankylosing spondylitis'. Ongoing review with TA233. Technology appraisal in preparation, 'TNF-alpha

	inhibitors for ankylosing spondylitis and axial spondyloarthritis without radiographic evidence of ankylosing spondylitis (including a review of technology appraisal 143 and technology appraisal 233)', Earliest anticipated date of publication July 2015. Related NICE Pathways: NICE pathway on musculoskeletal conditions, available at: http://pathways.nice.org.uk/pathways/musculoskeletal-conditions
Related National Policy	Department of Health, NHS Outcomes Framework 2013-2014, Nov 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/256456/NHS_outcomes.pdf

Questions for consultation

Have all relevant comparators for secukinumab been included in the scope? Which treatments are considered to be established clinical practice in the NHS for ankylosing spondylitis?
Is certolizumab pegol used in clinical practice for treating adults with radiologic evidence (X-ray) of moderate to severe ankylosing spondylitis?

Are there any biosimilar drugs with a marketing authorisation in this therapeutic indication?

Are there any subgroups of people in whom secukinumab is expected to be more clinically effective and cost effective or other groups that should be examined separately?

Where do you consider secukinumab will fit into the existing NICE pathway for 'musculoskeletal conditions'?

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 secukinumab 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 secukinumab 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 secukinumab 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