

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

Proposed Health Technology Appraisal

Naproxcinod for the treatment of osteoarthritis

Draft scope (Pre-referral)

Draft remit/appraisal objective

To appraise the clinical and cost effectiveness of naproxcinod within its licensed indication for the treatment of primary osteoarthritis.

Background

Osteoarthritis occurs when changes in cartilage occur that affect how synovial joints work. Any synovial joint can develop osteoarthritis, but knees, hips, spine, feet and small hand joints are most commonly affected. Osteoarthritis is a heterogeneous condition that develops over time. Symptoms vary from person to person, and between different affected joints. There can also be variation between the amount of damage to the joints and the severity of the symptoms. For example, a joint may be severely damaged without causing symptoms, or symptoms may be severe without affecting the movement of a joint. Osteoarthritis is the most common form of arthritis and one of the leading causes of pain and disability worldwide. It is estimated that up to 8.5 million people in the UK are affected by joint pain caused by osteoarthritis.

Risk factors for osteoarthritis can include joint injury from trauma or disease, obesity, and high bone density. The incidence of osteoarthritis increases with age and is more common in women. Most cases of osteoarthritis have no known cause and are referred to as primary osteoarthritis. When the cause of the osteoarthritis is known (such as a disease or trauma), the condition is referred to as secondary osteoarthritis.

There is no cure for osteoarthritis, but the symptoms can be eased by using a number of different treatments. Mild symptoms can often be managed through exercise, the application of heat or cold packs to the site of pain and/or by the use of suitable footwear. However, in more advanced cases of osteoarthritis other treatments may be necessary. NICE clinical guideline 59 for the care and management of osteoarthritis in adults recommends that exercise, education and weight loss should be a core treatment for people with osteoarthritis, irrespective of age, comorbidity, pain severity, or disability. Paracetamol is recommended as a first-line pharmacological treatment for pain relief. Topical non-steroidal anti-inflammatory drugs (NSAIDs) and topical capsaicin, may also be appropriate treatments depending on the joint site. Second-line treatments recommended in the guideline include oral NSAIDs (such as naproxen), including those with cyclo-oxygenase 2 (COX-2) selectivity (other than etoricoxib 60mg, such as celecoxib) or opioid

analgesics (such as codeine). Intra-articular corticosteroid injections may also be given for the relief of moderate to severe pain.

The technology

Naproxcinod (Beprana, NicOx) is a derivative of naproxen (an NSAID) with a substituted nitrobutyl ester. It is a COX-inhibiting nitric oxide donator (CINOD) which inhibits the enzyme cyclooxygenase (COX-1 and/or COX-2) and releases nitric oxide at sites of inflammation, which can reduce swelling. Naproxcinod is administered orally.

Naproxcinod does not currently have a UK marketing authorisation for the treatment of osteoarthritis. It has been studied in clinical trials compared with naproxen in adults with osteoarthritis in their knee or hip, who require chronic treatment with NSAIDs or paracetamol.

Intervention(s)	Naproxcinod
Population(s)	Adults with the pain and symptoms of osteoarthritis.
Comparators	Pharmacological treatments including: <ul style="list-style-type: none"> oral NSAIDs including COX-2 inhibitors
Outcomes	The outcome measures to be considered include: <ul style="list-style-type: none"> pain physical function 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.
Other considerations	Guidance will only be issued in accordance with the marketing authorisation.
Related NICE recommendations	Related Technology Appraisals: Technology Appraisal in Preparation. Diacerein for the treatment of osteoarthritis. Earliest anticipated date of publication TBC.

	<p>Related Guidelines:</p> <p>Clinical Guideline No.59, February 2008. The care and management of osteoarthritis in adults. Review date February 2011.</p> <p>Related Interventional Procedures:</p> <p>Interventional Procedure Guideline No.110, February 2005. Artificial metacarpophalangeal and interphalangeal joint replacement for end-stage arthritis.</p> <p>Interventional Procedure Guideline No.111, February 2005. Artificial trapeziometacarpal (TMC) joint replacement for end-stage osteoarthritis.</p> <p>Interventional Procedure Guideline No.230, August 2007. Arthroscopic knee washout, with or without debridement, for the treatment of osteoarthritis.</p> <p>Interventional Procedure Guideline No.112, February 2005. Minimally invasive two-incision surgery for total hip replacement. Under review. Earliest anticipated date of publication, Sept 2010.</p> <p>Interventional Procedure Guideline No.345, May 2010. Mini-incision surgery for total knee replacement.</p> <p>Interventional Procedure Guideline No.152, January 2006. Single min-incision surgery for total hip replacement. Under review. Earliest anticipated date of publication, Sept 2010.</p> <p>Interventional Procedure Guideline No.271, August 2008. Total wrist replacement. Due to be reviewed. Earliest anticipated date of publication, Aug 2011.</p>
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Questions for consultation

Have the most appropriate comparators for the treatment of osteoarthritis been included in the scope? Are the comparators listed routinely used in clinical practice?

Are there any subgroups of people in whom naproxen is expected to be more clinically effective and cost effective, or other groups that should be examined separately, for example, people at high risk of adverse events of NSAIDs? Should the appraisal consider subgroups according to site of osteoarthritis?

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?

National Institute for Health and Clinical Excellence
Draft scope for the proposed appraisal of naproxen for the treatment of osteoarthritis

What do you consider to be the relevant clinical outcomes and other potential health related benefits of naproxcinod in the treatment of osteoarthritis, particularly when compared with currently used treatment options?

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/aboutnice/howwework/devnicetech/technologyappraisalprocessguides/technology_appraisal_process_guides.jsp)