The Pan Mersey Area Prescribing Committee recommends the prescribing of IBUPROFEN (low dose) and NAPROXEN (low dose) as the non-steroidal anti-inflammatory drugs (NSAIDs) of choice, if an NSAID is appropriate.¹

There are long-standing and well-recognised gastrointestinal and renal safety concerns with all NSAIDs. There is also substantial evidence confirming an increased risk of cardiovascular events with many NSAIDs, including COX-2 inhibitors and some traditional NSAIDs such as diclofenac and high-dose ibuprofen.¹

If an NSAID is appropriate, use ibuprofen (1200 mg a day or less) or naproxen (1000 mg a day or less). Use the lowest effective dose and the shortest duration of treatment necessary to control symptoms.¹

- The decision to prescribe an NSAID should be based on an assessment of a person's individual risk factors, including any history of cardiovascular and gastrointestinal illness.¹
- Naproxen (1000 mg a day or less) and low-dose ibuprofen (1200 mg a day or less) are considered to have the most favourable thrombotic cardiovascular safety profiles of all NSAIDs.¹
- The lowest effective dose should be used for the shortest duration necessary to control symptoms. A person's need for symptomatic relief and response to treatment should be re-evaluated periodically.¹
- A small increase in cardiovascular risk, similar to the risk associated with cyclo-oxygenase-2 inhibitors and diclofenac, has been reported with high-dose ibuprofen (≥ 2.4 g daily); use should be avoided in patients with established ischaemic heart disease, peripheral arterial disease, cerebrovascular disease, congestive heart failure (New York Heart Association classification II-III), and uncontrolled hypertension.²

Review the appropriateness of non-steroidal anti-inflammatory drug (NSAID) prescribing widely and on a routine basis, especially in people who are at higher risk of gastrointestinal, renal and cardiovascular morbidity and mortality (for example, older people).¹

There are specific indications where other Pan Mersey approved NSAIDs are more effective and preferred. Co-prescribe a proton pump inhibitor with NSAIDs for people who have osteoarthritis, rheumatoid arthritis or for people over 45 years who have low back pain in accordance with NICE guidance.¹

Paediatrics: There is a lack of information surrounding the cardiovascular effects of diclofenac in children, and evidence that diclofenac is more effective for the treatment for common paediatric pain conditions than other NSAIDs is limited. http://www.nppg.scot.nhs.uk/Newsletters/NPPG%2052.pdf

Note: Patients who are not eligible for treatment under this statement may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. In this situation, follow locally defined processes.
IBUPROFEN and NAPROXEN (oral formulations)

EFFECTIVENESS
NSAIDs reduce the production of prostaglandins by inhibiting the enzyme cyclo-oxygenase. They vary in their selectivity for inhibiting different types of cyclo-oxygenase. In single doses NSAIDs have analgesic activity comparable to paracetamol. In regular full dosage, NSAIDs have a lasting analgesic and anti-inflammatory effect. About 60% of patients will respond to any NSAID, of the others, those who do not respond to one may well respond to another.

Pain relief starts soon after taking the first dose and a full analgesic effect should normally be obtained within one week, whereas an anti-inflammatory effect may not be achieved (or may not be clinically assessable) for up to 3 weeks. If appropriate responses are not obtained within these times, another NSAID should be tried. NICE has issued advice on NSAIDs for people with osteoarthritis, rheumatoid arthritis, and low back pain (clinical guidelines 177, 79, and 88).

COST per annum

<table>
<thead>
<tr>
<th>NSAID</th>
<th>Cost per annum</th>
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<tbody>
<tr>
<td>Ibuprofen 200mg tablets three times a day</td>
<td>£44.32</td>
</tr>
<tr>
<td>Ibuprofen 400mg tablets three times a day</td>
<td>£40.67</td>
</tr>
<tr>
<td>Naproxen 250mg tablets twice a day</td>
<td>£21.64</td>
</tr>
<tr>
<td>Naproxen 500mg tablets twice a day</td>
<td>£37.02</td>
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</tbody>
</table>

PATIENT FACTORS

For advice on the use of individual NSAIDs in pregnancy and lactation consult the individual SPCs. Hepatic impairment: Use with caution; there is an increased risk of GI bleeding and fluid retention. Avoid in severe liver disease. Renal impairment: Avoid if possible or use with caution. Avoid in severe renal impairment. Long-term use of some NSAIDs is associated with reduced female fertility, which is reversible on stopping treatment.

PRESCRIBING and IMPLEMENTATION NOTES

Review the appropriateness of NSAID prescribing widely and on a routine basis, especially in people who are at higher risk of both gastrointestinal (GI) and cardiovascular (CV) morbidity and mortality (e.g. older patients). If initiating an NSAID is obligatory, use ibuprofen (1200mg per day or less) or naproxen (1000mg per day). Review patients currently prescribed NSAIDs. If continued use is necessary, consider changing to ibuprofen (1200mg per day or less) or naproxen (1000mg per day).

Co-prescribe a proton pump inhibitor with NSAIDs for people at higher risk of GI side-effects in accordance with NICE clinical guidelines 177, 79, and 88 (osteoarthritis, rheumatoid arthritis & low back pain respectively). Take account of drug interactions when co-prescribing NSAIDs with other medicines (see Summaries of Product Characteristics). For example, co-prescribing NSAIDs with angiotensin converting enzyme (ACE) inhibitors or angiotensin-2 receptor antagonists (A2RAs) may pose particular risks to renal function; this combination should be especially carefully considered and regularly monitored if continued.

NSAIDs should be avoided if possible or used with caution in patients with renal impairment; the lowest effective dose should be used for the shortest possible duration, and renal function should be monitored.

REFERENCES