

## Drug Portfolio

Drug class	examples	Mode of action & indication	Risks & adverse effects	Contraindications	Practice points
<b>Analgesic agents</b>					
<b>Non-narcotics/ non-opioid</b>	Aspirin Paracetamol	<p><b>Aspirin</b> Aspirin has analgesic, antipyretic, anti-inflammatory and antiplatelet actions.</p> <p><b>Paracetamol</b> Mechanisms involved in its analgesic effect may include inhibition of central prostaglandin synthesis and modulation of inhibitory descending serotonergic pathways. Paracetamol has negligible anti-inflammatory effects</p> <p style="text-align: center;"><b>Indications</b></p> <p><b>Aspirin</b> Mild to moderate pain Fever Acute migraines Inhibitor of platelet aggregation</p> <p><b>Paracetamol</b> Mild to moderate pain</p>	<p><b>Risks/adverse effects</b></p> <p><b>Aspirin</b> Nausea Dyspepsia Vomiting GI ulceration or bleeding Asymptomatic Blood loss Increased bleeding time Headache Dizziness Tinnitus</p> <p><b>Paracetamol</b> Increased aminotransferases</p>	<p><b>Contraindications</b></p> <p><b>Aspirin</b> Allergic to aspirin or other NSAID Surgery Bleeding disorders Hepatic disease Elderly (increased risk of AE) Pregnancy Breastfeeding</p> <p><b>Paracetamol</b> Chronic liver disease - may be at increased risk of liver damage following therapeutic dose or overdose of paracetamol</p>	<p><b>Aspirin</b> Monitor for GI bleeding, renal failure or hepatic dysfunction in chronic use</p> <p><b>Paracetamol</b> if regular paracetamol alone is inadequate for treating pain, adding an NSAID may provide additional analgesia and allow use of lower or intermittent doses of NSAID</p> <p>Onset of pain relief is approximately 30 minutes after oral administration</p> <p>Give IV infusion over 15 minutes</p>
<b>NSAIDS</b>	Ibuprofen Aspirin (analgesic) Ketoprofen	<p><b>Mode of action</b> Have analgesic, antipyretic and anti-inflammatory actions. They inhibit synthesis of prostaglandins by inhibiting cyclo-oxygenase (COX) present as COX-1 and COX-2:</p> <ul style="list-style-type: none"> <li>- inhibition of COX-1 results in impaired gastric cytoprotection and antiplatelet effects</li> <li>- inhibition of COX-2 results in anti-inflammatory and analgesic action</li> <li>- reduction in glomerular filtration rate and renal blood flow occurs with both COX-1 and COX-2 inhibition</li> </ul> <p><b>Indications</b> Pain due to inflammatory arthropathies Pain due to inflammation and tissue injury</p>	<p><b>Risks/adverse effects</b></p> <p>Dehydration Renal failure Asthma Nausea Dyspepsia GI ulceration or bleeding Raised liver enzymes Diarrhoea Headache Dizziness Salt and fluid retention Hypertension</p>	<p><b>Contraindications</b></p> <p>Coagulation disorders Bleeding Surgery Peptic ulcer disease or GI bleeding Hypersensitivity reactions Hepatic impairment Elderly (increase risk of adverse effects) Women (impaired fatality) Pregnancy</p>	<p>For extra pain relief NSAIDs may be used with paracetamol and, if pain is severe, an opioid, eg tumour metastases in bone</p> <p>Do not stop low-dose aspirin treatment when using an NSAID</p> <p>Before starting chronic treatment, measure complete blood count, haemoglobin, BP, weight, creatinine and liver function, and repeat at least once a year during continued treatment</p>