

## Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

(Examples of brand names: Brufen, Celebrex, Mobic, Naprosyn, Nurofen, Orudis, Voltaren)

### What are NSAIDs?

Non-steroidal anti-inflammatory drugs, or NSAIDs, are common medicines used to treat the symptoms of arthritis. They reduce pain and stiffness due to inflammation of the joints, without using steroids. (You can find out about steroids from the separate information sheet on corticosteroids).

There are many different NSAIDs. Some can be bought over the counter e.g. ibuprofen (Nurofen). Others such as ketoprofen (Orudis) are only available with a prescription. The **brand** name of your NSAID will have the generic name next to it on the packet or bottle.

### What benefit can you expect from your treatment?

NSAIDs provide relief from pain and stiffness. They work quickly, usually within a few hours. The maximum benefit can take 1-3 weeks or sometimes longer. You may need to try two or three different NSAIDs to find one that suits you best. You **must** only take one type of NSAID at a time.

### How are NSAIDs taken?

NSAIDs are usually taken by mouth in tablet or capsule form. They are also available as liquids, injections, creams, sprays and suppositories. Side effects may still occur with any method of administration, even when NSAIDs are applied to the skin.

### When should they be taken?

NSAIDs can be taken when needed to treat short term symptoms. They can also be taken regularly to manage persistent pain and stiffness. Ask your doctor or pharmacist if you are uncertain about how often to take your medicine.

### Are other medicines taken with NSAIDs?

To minimise side effects, sometimes a medicine to protect the stomach may be given.

NSAIDs may be used with other arthritis medicines including:

- DMARDs (anti rheumatoid arthritis drugs) such as methotrexate; and/or
- simple pain medicines such as paracetamol.

**Note:** corticosteroids are not generally used with NSAIDs as the risk of side effects such as ulcers are increased.

### How long is the treatment continued?

Treatment with NSAIDs can be for a short period or long term. They should not be continued indefinitely without regular review by your doctor who will confirm they are still working and no serious side effects are occurring.

### Are there any side effects?

A reduction in dose or change to another NSAID may decrease the side effects, so that you can continue to take the medicine.

**Tell your doctor if you experience any possible side effects.**

### Most common side effects:

- **Gastrointestinal:** - may include decreased appetite, nausea (feeling sick), vomiting, diarrhoea, constipation, heart burn and stomach pain or cramps.
- NSAIDs can make **heart failure** or **kidney failure** worse. Fluid retention can lead to weight gain or swelling of ankles or legs. Kidney failure is more likely if you are also taking fluid tablets and certain blood pressure tablets.
- **Blood pressure:** An increase in blood pressure may occur
- **Heart disease** and **stroke:** NSAIDs, including the cox-2 inhibitors or coxibs, may increase your risk of thrombosis (clotting). Heart attacks and strokes may occur slightly more often in high risk patients.
- **Dizziness, lightheadedness, tiredness, ringing in the ears (tinnitus) and headache:** Can occur.
- **Bleeding:** More easily than usual is often noticed.

## Less common or rare but potentially serious side effects:

- **Stomach or duodenal ulcers:** NSAIDs can cause ulcers in the stomach or duodenum (upper bowel).

The risk of ulcers is higher if:

- you are older than 65 years;
- you have had a previous stomach or duodenal ulcer;
- you are also taking warfarin, corticosteroid tablets or low-dose aspirin (used by many people to help prevent a heart attack or stroke).

Your doctor may advise that you take an anti-ulcer medicine to help reduce the risk of getting a stomach or duodenal ulcer. A newer type of NSAID, the cox-2 inhibitors e.g. celecoxib (brand name Celecoxib), may be less likely to cause stomach ulcers and irritation than traditional NSAIDs.

- **Allergy:** Can occur resulting in skin rashes.
- **Shortness of breath:** May occur in some people with asthma. Seek medical help if your asthma suddenly becomes worse after taking NSAIDs.

**There are also a number of other uncommon side effects. Read the leaflet that comes with the medicine, which lists all the precautions and possible side effects.**

## What precautions are necessary?

### **Blood pressure:**

- Because NSAIDs can affect your blood pressure, it is a good idea to have your blood pressure monitored.

### **Blood tests:**

- Usually blood tests are not required for people taking NSAIDs but they may be needed in certain situations. For example, your kidney function may need to be monitored if you have other risk factors for reduced kidney function, such as being over 65 years old and taking blood pressure medicines or fluid tablets.

## **Other medicines:**

- NSAIDs can interact with other medicines. You should tell your doctor about all medicines you are taking, including herbal and naturopathic medicines. This includes over the counter medicines as some contain NSAIDs. You should also mention your treatment when you see other health professionals.
- Despite the possible increased risk of an ulcer, low doses of aspirin used to prevent heart attack and stroke can probably be used safely with NSAIDs if the risk for an ulcer is low in the first place.
- Methotrexate for rheumatoid arthritis or other arthritis treatment can be taken safely with NSAIDs, as long as your kidney function is normal.
- Paracetamol, and combined medicines such as Panadeine and Panadeine Forte can be used while taking NSAIDs, provided you take them as directed.
- If you are taking anticoagulants such as warfarin, you should tell your doctor as the combination with NSAIDs can increase the risk of bleeding.

## **Alcohol:**

- NSAIDs can increase the risk of an ulcer. Heavy alcohol use (more than four standard drinks in one session) should be avoided while taking these medicines.

## **Pregnancy and breastfeeding:**

- NSAIDs are not recommended during pregnancy or during breastfeeding, unless specifically advised by your doctor. If you are planning a family or you become pregnant you should discuss this with your doctor as soon as possible.
- Some recent studies suggest that if NSAIDs are taken around the time of conception, there may be an increased risk of miscarriage.
- If NSAIDs are taken in later stages of pregnancy they may have an effect on the blood vessels near the baby's heart. Paracetamol does not have these effects.

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The NHMRC publication: *How to present the evidence for consumers: preparation of consumer publications* (2000) was used as a guide in developing this publication.

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