

(Approved by NHS Tayside Drug and Therapeutics Committee)

Safety of Selective and Non-Selective NSAIDs

In late October 2006, the Chairman, Commission on Human Medicines issued advice on 'Safety of Selective and Non-Selective NSAIDs'. The advice is summarised below and is based on a review of new data relating to the safety of non-steroidal anti-inflammatory drugs (NSAIDs). [Click here](#) for MHRA information.

Non-selective NSAIDs may be associated with a small increase in the absolute risk of thrombotic events (such as heart attack or stroke), especially when used at **high doses** for **long-term treatment**.

- Diclofenac, (particularly at 150mg dose) may have a small thrombotic risk, similar to licensed doses of etoricoxib and other possibly other COX 2 inhibitors (coxibs) (preliminary analysis of the Multinational Etoricoxib and Diclofenac Arthritis Long term (MEDAL) study, which is due to be published soon)
- Ibuprofen, high doses (2400mg/day) may have a small thrombotic risk, but overall, at low doses (1200mg), epidemiological data do not suggest an increased risk of myocardial infarction
- Naproxen is associated with a lower thrombotic risk than coxibs and, overall, epidemiological data do not suggest an increased risk of myocardial infarction. However, some increase in risk cannot be excluded on the basis of available evidence.

Prescribing points for consideration:

For people with osteoarthritis or musculoskeletal pain, the following steps are appropriate, particularly for the elderly:

- Before using any NSAID consider other interventions: paracetamol and non-drug interventions should be tried first and will work for many.
- The **lowest effective dose** of the NSAID or coxib should be prescribed for the **shortest time** necessary for control of symptoms. The need for long-term treatment should be reviewed periodically.
- Prescribing should be based on the safety profiles of individual NSAIDs or coxib and on individual patient risk profiles (eg gastrointestinal and cardiovascular). Low-dose ibuprofen should normally be considered before naproxen or diclofenac. The Tayside Area Prescribing Guide (TAPG) first choice NSAID is ibuprofen.
- Consider gastroprotection with traditional NSAIDs in those at high risk of upper gastrointestinal (GI) complications (e.g. aged 65 or over, history of GI or CV disease). Options include misoprostol and proton-pump inhibitors.
- Prescribers should not switch between NSAIDs without careful consideration of the overall safety profile of the products, a patient's individual risk factors, and patient preference.
- Concomitant aspirin (and possibly other antiplatelet drugs) greatly increase the gastrointestinal risks of NSAIDs and severely reduce any gastrointestinal safety advantages of coxibs. Aspirin should only be co-prescribed if absolutely necessary.

CONCLUSION OF ADVICE

- Evidence continues to suggest that coxibs are associated with an increased thrombotic risk. Estimated risk across the whole population is three additional events (mainly myocardial infarction) per 1000 patients per year when compared to placebo.
- Evidence now suggests that some non-selective NSAIDs may be associated with a small increased risk of thrombotic events, when used at high doses and for long-term treatment.
- Updated advice will be issued on safety of these products as evidence emerges.