Guidance for prescribing Parecoxib 40mg Injection in palliative care patients

Indication

Subcutaneous parecoxib has a potential role in cancer pain management, particularly malignant bone pain, especially in patients who are unable to take medications orally.

The use of subcutaneous parecoxib in palliative care is off license for both the route of administration and indication, and this should be discussed with the patient before use.

Dosing

Parecoxib can be given 40mg SC once or twice daily (twice daily may be clinically preferred due to its limited duration of action), or 40-80mg/24hr via continuous subcutaneous infusion (CSCI). The maximum licensed dose in 80mg/24 hours.

In moderate liver impairment, severe renal failure and for the elderly (body weight up to 50kg), an initial dose of 20mg and maximum dose of 40mg may be appropriate.

Manufacturers also recommend a lower initial dose of 20mg if GFR<30ml/min.

Volumes, Diluent and Compatibility

Parecoxib should be diluted to a volume of 22ml, to reduce the risk of site reactions. 0.9% saline is the preferred diluent, in order to reduce the risk of site reactions.

There is very limited evidence for compatibility of subcutaneous parecoxib with other medications, and currently should not be combined with any other medications in the CSCI route.

CSCI Parecoxib has been combined with dexamethasone 500 micrograms in cases of site reactions.

Duration of usage

There is no evidence to limit the duration of usage for parecoxib in the palliative setting.

Monitoring

Baseline and repeat monitoring of renal function should be considered, especially in those who may have pre-existed renal impairment, are receiving concomitant nephrotoxic medications, or receive prolonged administration of parecoxib where the risk to renal function could feasibly change.

Amended Version V2.0
Originally produced in May 2022
Approved by Doncaster and Bassetlaw PMOC November 2024 Next Review November 2029

Cautions and contra-indications

Cautions and relative/absolute contraindications relevant to non-steroidal anti-inflammatory usage apply to parecoxib.

Contraindications include active gastro-intestinal bleeding; active gastro-intestinal ulceration; cerebrovascular disease; following coronary artery bypass graft surgery; inflammatory bowel disease; ischaemic heart disease; mild to severe heart failure; peripheral arterial disease.

Cautions include Allergic disorders; cardiac impairment (NSAIDs may impair renal function); coagulation defects; connective-tissue disorders; dehydration (risk of renal impairment); elderly (risk of serious side-effects and fatalities); history of cardiac failure; history of gastrointestinal disorders; hypertension; may mask symptoms of infection; oedema; risk factors for cardiovascular events.

Gastroprotection: where parecoxib has been used in existing palliative care settings, most patients have been prescribed gastroprotection, although this may not be necessary (PCF).

Renal function: the renal risks of different NSAIDs, including parecoxib, are similar; generally, NSAIDs are not recommended in severe renal impairment. No significant additional risk to renal function has been identified in studies of parecoxib, to date.

Cardiovascular events: Both non-selective NSAIDs and COX-2 inhibitors are associated with an increased risk of cardiovascular events in long-term use.

Parecoxib is also associated with unpredictable but serious skin reactions including angioedema, erythema multiforme and Stevens-Johnson Syndrome. In the event to this, discontinue parecoxib and seek urgent specialist advice.

In a pooled analysis of 28 placebo-controlled trials of parecoxib and review of post-authorisation safety, for patients receiving up to 7 days of parecoxib administration, the GI ulceration-related events, renal impairment, hypersensitivity reactions, severe cutaneous reactions and cardiovascular embolic/thrombotic events were similar to placebo.

Acknowledgement :

This document has been adapted from West Midlands palliative care team guidance: use of parecoxib in palliative care