

## Guideline for the prescribing of Ketorolac trometamol by subcutaneous injection for Pain Control

### 1. BACKGROUND

Ketorolac trometamol is a non-steroidal anti-inflammatory drug (NSAID) with preferential COX-1 inhibitor action. It is unusual in that the analgesic action, especially peripheral, is greater than the anti-inflammatory and antipyretic actions. The injection is available as ampoules containing 30mg in 1ml.

This guideline aims to facilitate GP supply to their own patients in a community setting, after specialist initiation, and under specialist guidance and review. It also enables patients and their carers to obtain medication locally from their normal community pharmacies.

**Note** Ketorolac trometamol injection is licensed for short term, post-operative pain relief by intravenous or intramuscular routes. Ketorolac trometamol is also available as 0.5% eye drops. Ketorolac as a TABLET formulation is not available in the UK.

### 2. INDICATION

Ketorolac trometamol is indicated for second line treatment of moderate to severe pain in palliative care patients who have not obtained satisfactory pain control from oral NSAIDs (with opioid) from bone pain or neuropathic pain.

### 3. DOSE / DURATION

A Consultant in Palliative Care, Hospice doctor or Macmillan GP Specialist in Palliative Care, will initiate treatment. This will usually be in a bedded unit.

Initial dosing is 15mg to 30mg up to 3 times daily but if effective, will normally be converted to continuous 24 hour syringe driver administration. A maximum dose of 90mg in 24hours is normally observed if under 65 years (or 60mg in 24hours if over 65years or body mass less than 50kg).

Any dose change will normally be made after specialist review. As ketorolac trometamol is gastro-irritant, co-administration of eg PPI is usual and should not be stopped during treatment with ketorolac.

Ketorolac trometamol injection is diluted with 0.9% sodium chloride solution to the maximum reasonable volume and is compatible with oxycodone and diamorphine. It is **NOT** compatible with **morphine**, haloperidol, midazolam, cyclizine, glycopyrronium, or levomepromazine.

### 4. CONTRAINDICATIONS / CAUTIONS

#### Contraindications

Hypersensitivity to ketorolac trometamol or another NSAID  
Co-prescription with another NSAID

#### Cautions

Liver disease, renal impairment, cardiovascular risk factors, gastrointestinal conditions

## 5. ADVERSE EFFECTS

Headache, gastrointestinal upset, pain at injection site

This list is not exhaustive. For further information check current BNF

<https://www.bnf.org/products/bnf-online/> , or SPC ([www.medicines.org.uk](http://www.medicines.org.uk)).

**Details of contraindications, cautions, drug interactions and adverse effects listed above are not exhaustive. For further information always check with BNF [www.bnf.org.uk](http://www.bnf.org.uk) or SPC ([www.medicines.org.uk](http://www.medicines.org.uk)).**

## 6. DRUG INTERACTIONS

Interactions with other drugs met in the palliative setting include digoxin, lithium and methotrexate but this list is not exhaustive.

As NSAIDs cause sodium retention, the effects of diuretics, ACE inhibitors and antihypertensives may be reduced.

If a drug interaction is suspected, please contact a Palliative Care Specialist or Medicines Information at HUTH.

## 7. INFORMATION TO PATIENT

Patients or relatives/carers should be informed of risks and benefits of treatment including which follow up arrangements (eg monitoring) will come from the Specialist team and which (eg supply) arrangements from the GP.

## APPROVAL PROCESS

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