Ibuprofen

Class: Nonsteroidal Anti-inflammatory Drug (NSAID)

Indications:
- Oral: Inflammatory diseases and rheumatoid disorders including juvenile idiopathic arthritis (JIA), mild-to-moderate pain, fever, dysmenorrhea, osteoarthritis
- Ibuprofen injection (Caldolor®): Management of mild-to-moderate pain; management of moderate-to-severe pain when used concurrently with an opioid analgesic; reduction of fever
- Ibuprofen lysine injection (NeoProfen®): To induce closure of a clinically-significant patent ductus arteriosus (PDA) in premature infants weighing between 500-1500 g and who are ≤32 weeks gestational age (GA) when usual treatments are ineffective
- Use - Unlabeled: Ankylosing spondylitis, cystic fibrosis, gout, acute migraine headache, migraine prophylaxis, pericarditis

Available dosage form in the hospital:
- Tablet, oral: 400 mg, 600 mg
- Syrup, oral: 100 mg/5 mL

Trade Names:

Dosage:
- **Inflammatory disease:** Oral: 400-800 mg/dose 3-4 times daily (maximum: 3.2 g daily)
- **Analgesia/pain/fever/dysmenorrhea:** Oral: 200-400 mg/dose every 4-6 hours (maximum daily dose: 1.2 g, unless directed by physician; under physician supervision daily doses ≤2.4 g may be used)
- **Analgesic:** I.V. (Caldolor®): 400-800 mg every 6 hours as needed (maximum: 3.2 g daily). **Note:** Patients should be well hydrated prior to administration.
- **Antipyretic:** I.V. (Caldolor®): Initial: 400 mg, then every 4-6 hours or 100-200 mg every 4 hours as needed (maximum: 3.2 g/day). **Note:** Patients should be well hydrated prior to administration.

**OTC labeling (analgesic, antipyretic):** Oral: 200 mg every 4-6 hours as needed (maximum: 1200 mg/24 hours); treatment for >10 days is not recommended unless directed by healthcare provider.

- Migraine: 400 mg at onset of symptoms (maximum: 400 mg/24 hours unless directed by healthcare provider)

**Pericarditis (unlabeled use):** Oral: 400-800 mg 3-4 times daily (maximum dose: 3.2 g daily) (Imazio, 2009); with pericarditis postmyocardial infarction, the ACCF/AHA prefers the use of aspirin (O’Gara, 2013)

**Dosing: Renal Impairment:** If anuria or oliguria evident, hold dose until renal function returns to normal.

**Dosing: Hepatic Impairment:** Avoid use in severe hepatic impairment
**Common side effects:** Cardiovascular: Edema (1% to 3%)

Central nervous system: Dizziness (3% to 9%), headache (1% to 3%), nervousness (1% to 3%)

Dermatologic: Rash (3% to 9%), itching (1% to 3%)

Endocrine & metabolic: Fluid retention (1% to 3%)

Gastrointestinal: Epigastric pain (3% to 9%), heartburn (3% to 9%), nausea (3% to 9%), abdominal pain/cramps/distress (1% to 3%), appetite decreased (1% to 3%), constipation (1% to 3%), diarrhea (1% to 3%), dyspepsia (1% to 3%), flatulence (1% to 3%), vomiting (1% to 3%)

Otic: Tinnitus (3% to 9%)

**Pregnancy Risk Factor:** C/D ≥30 weeks gestation