

celecoxib

Celebrex

Pharmacologic class: Nonsteroidal cyclooxygenase-2 (COX-2) inhibitor, anti-inflammatory drug (NSAID)

Therapeutic class: Antirheumatic

Pregnancy risk category C

Action

Exhibits anti-inflammatory, analgesic, and antipyretic action due to inhibition of the enzyme COX-2

Availability

Capsules: 100 mg, 200 mg

Indications and dosages

➤ Osteoarthritis

Adults: 200 mg/day P.O. as a single dose or 100 mg P.O. b.i.d.

➤ Rheumatoid arthritis

Adults: 100 to 200 mg P.O. b.i.d.

➤ Adjunctive treatment to decrease the number of adenomatous colorectal polyps in familial adenomatous polyposis

Adults: 400 mg P.O. b.i.d.

Dosage adjustment

- Hepatic impairment
- Patients weighing less than 50 kg (110 lb)

Contraindications

- Hypersensitivity to drug, sulfonamides, or other NSAIDs
- Severe hepatic impairment
- History of asthma or urticaria
- Advanced renal disease
- Late pregnancy
- Breastfeeding

Administration

- Give with food or milk.

Route	Onset	Peak	Duration
P.O.	Unknown	3 hr	Unknown

Adverse reactions

CNS: dizziness, drowsiness, headache, insomnia, fatigue

CV: peripheral edema

EENT: ophthalmic effects, tinnitus, pharyngitis, rhinitis, sinusitis

GI: nausea, diarrhea, constipation, abdominal pain, dyspepsia, flatulence, dry mouth, **GI bleeding**

GU: menorrhagia

Hematologic: decreased hemoglobin or hematocrit, eosinophilia, epistaxis, bruising, **neutropenia, leukopenia, pancytopenia, thrombocytopenia, agranulocytosis, granulocytopenia, aplastic anemia, bone marrow depression**

Hepatic: hepatotoxicity

Metabolic: hyperchloremia, hypophosphatemia

Musculoskeletal: back pain, leg cramps

Respiratory: upper respiratory tract infection

Skin: rash

Other: anaphylactic reaction

Interactions

Drug-drug. *Angiotensin-converting enzyme inhibitors, furosemide, thiazides:* reduced celecoxib efficacy

Antacids containing aluminum and magnesium: decreased celecoxib blood level

Aspirin (regular doses): increased risk of GI bleeding and GI ulcers

Fluconazole: increased celecoxib blood level

Lithium: increased lithium blood level

Warfarin: increased risk of bleeding

Drug-diagnostic tests. *Alanine aminotransferase, aspartate aminotransferase, blood urea nitrogen:* increased levels

Drug-herb. *Dong quai, feverfew, garlic, ginger, horse chestnut, red clover:* increased risk of bleeding

White willow: increased risk of GI ulcers

Drug-behaviors. *Long-term alcohol use, smoking:* GI irritation and bleeding

Precautions


Use cautiously in:

- renal insufficiency, hypertension
- history of asthma, renal disease, hepatic dysfunction, heart failure
- patients on long-term NSAID therapy
- elderly patients
- pregnant patients
- children younger than age 18 (safety not established).

Patient monitoring

- Monitor complete blood count, electrolyte levels, creatinine clearance, and occult fecal blood test and liver function test results every 6 to 12 months.

Patient teaching

 Advise patient to immediately report bloody stools, blood in vomit, or signs or symptoms of liver damage (nausea, fatigue, lethargy, pruritus, yellowing of eyes or skin, tenderness on upper right side of abdomen, or flulike symptoms).

- Instruct patient to take drug with food or milk.
- Teach patient to avoid aspirin and other NSAIDs (such as ibuprofen and naproxen) during therapy.