

Efficacy and Safety of Oral Osteoarthritis Agents

<i>Drug Class</i>	<i>Advantages</i>	<i>Adverse Effects</i>	<i>Contraindications</i>	<i>Drug Interactions</i>
NSAID				
Carprofen, Deracoxib, Firocoxib, Meloxicam, etc	anti-inflammatory, analgesic and antipyretic by modulating prostaglandin production	Gastritis, GI ulceration, diarrhea, inappetance, hypersensitivity, reduce renal blood flow and glomerular filtration. Urticaria and decreased serum T4 have been reported for etodolac. In people, some temporarily raise blood pressure and have caused strokes and arrhythmias.	Bleeding disorders, hypoproteinemia, renal disease, hepatic insufficiency, inflammatory bowel disorders; cardiac disease for some in this class.	Other NSAIDs, steroids, other drugs that are protein bound, other drugs that may cause renal injury such as aminoglycosides and diuretics. Some interact with methotrexate.
Herbal				
Devils Claw	Anti-inflammatory via modulation of eicosanoid production, antioxidant, chondroprotective	Clinical trials in people have indicated that Devils claw is as safe or safer than NSAIDs. Possible gastrointestinal effects found in some human clinical trials. Possible cardiac effects based on in vitro studies using high doses. Anecdotally, has been reported to have hypoglycemic effects in diabetics.	Theoretical contraindication for use in patients with GI ulcer. Use cautiously in patients with heart disease and diabetes.	May have additive effects with other anti-inflammatory agents. May have additive effects with anti-arrhythmic drugs, and interactions with inotropes may also be possible. May change insulin dose in diabetics.
Corydalis	Analgesic; believed to act through opioid and cannabinoid systems. Has been reported in Chinese studies to improve clinical signs due to gastric ulcers.	Sedation at high doses	None reported.	May have additive effects with opioids and sedatives.
Boswellia	Anti-inflammatory – inhibits formation of eicosanoids such as COX- 1, COX-2, and LO. May also inhibit Cathepsin G, a monocyte chemoattractant. May inhibit ulcer formation.	Mild gastrointestinal side effects possible.	None reported	None reported
Enzyme				
Bromelain	Activates fibrinolysis; may inhibit release of inflammatory mediators such as plasmakinins and eicosanoids.	Rare diarrhea, nausea, or gastric disorders. Patients with allergies may rarely exhibit allergic reactions	None reported	May increase the absorption of antibiotics. My increase effects of anticoagulant drugs.