

Celecoxib

This is a COX-2-selective NSAID that lacks many of the toxic GI effects of other NSAIDs that have COX-1 inhibitory effects in addition to COX-2. This was a source of much promise initially; however, Celecoxib has been found to increase the risk of thrombosis possibly due to decreased prostacyclin production causing platelet aggregation.



PLAY PICMONIC

Indications

Rheumatoid Arthritis

Roman King-Arthur

Celecoxib can be used in rheumatoid arthritis, as it is helpful in patients who need regular and long-term pain relief.

Osteoarthritis

Ostrich-King-Arthur

Celecoxib is indicated for use in osteoarthritis, as it has less side effects than other NSAIDs.

Pain

Pain-bolt

Celecoxib relieves pain via inhibition of COX-2.

Mechanism of Action

NSAID

N-sad

Celecoxib is an NSAID; however, unlike most other NSAIDs it selectively blocks COX-2 and has little effect on COX-1.

Selectively Inhibits COX-2

Selectively puts Inhibiting-chains on Cock in (2) Tutu only

Due to its selective inhibition of COX-2, it does not have toxic GI effects which are mediated through inhibition of COX-1.

Side Effects

Sulfa Allergy

Sulfur-match Allergy-alligator

Celecoxib is a sulfonamide drug that can cause sulfa allergy.

Increased Risk of Thrombosis

Up-arrow Risk of Trombone

This is believed to occur due to COX-2 expression in vascular endothelial cells. Inhibition of COX-2 leads to decreased prostacyclin production and platelet aggregation.

GI Bleed

GI Bleeding

Celecoxib is much less likely than other NSAIDs to cause GI toxicity and bleeding, because it spares COX-1, which helps maintain the gastric mucosa. However, patients with a prior history of peptic ulcers still require precaution, because gastrointestinal complications can still occur, especially when

celecoxib is combined with aspirin.

Contraindication

Pregnancy > 30 Weeks

Caution-tape Pregnant-woman with Greater-than Dirty-30

It is a category D drug after 30 weeks gestation and should not be prescribed.