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Ketorolac

National Cancer Institute

Source

National Cancer Institute. *Ketorolac*. NCI Thesaurus. Code C1219.

A synthetic pyrrolizine carboxylic acid derivative with anti-inflammatory, analgesic, and antipyretic activities. Ketorolac non-selective inhibits the enzymes cyclooxygenase 1 (COX-1) and COX-2. The inhibition of COX-2, up-regulated at sites of inflammation, prevents conversion of arachidonic acid to pro-inflammatory prostaglandins. The inhibition of COX-1 by this agent prevents the normal steady-state production of prostaglandins that play housekeeping roles in the protection of the gastrointestinal tract, the regulation of renal blood flow, and platelet aggregation. As a result, the inhibition of COX-1 may be associated with gastrointestinal toxicity, nephrotoxicity, and the inhibition of platelet aggregation.