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Indomethacin

National Cancer Institute

Source

National Cancer Institute. *Indomethacin*. NCI Thesaurus. Code C576.

A synthetic nonsteroidal indole derivative with anti-inflammatory activity and chemopreventive properties. As a nonsteroidal anti-inflammatory drug (NSAID), indomethacin inhibits the enzyme cyclooxygenase, thereby preventing cyclooxygenase-mediated DNA adduct formation by heterocyclic aromatic amines. This agent also may inhibit the expression of multidrug-resistant protein type 1, resulting in increased efficacies of some antineoplastic agents in treating multi-drug resistant tumors. In addition, indomethacin activates phosphatases that inhibit the migration and proliferation of cancer cells and downregulates survivin, which may result in tumor cell apoptosis. (NCI04)