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# Probenecid/Colchicine

National Cancer Institute

## Source

National Cancer Institute. *Probenecid/Colchicine*. NCI Thesaurus. Code C29379.

A combination of probenecid and colchicine with antihyperuricemic activity. Probenecid, a benzoic acid derivative, competitively inhibits the reabsorption of urate at the proximal tubule in the kidney, thereby increasing urinary excretion of uric acid and lowering serum urate concentrations. This prevents urate deposition and promotes resolution of existing urate deposits. Colchicine is a natural alkaloid with anti-gout and anti-inflammatory properties. Colchicine binds to tubulin, thereby interfering with the polymerization of tubulin, interrupting microtubule dynamics, and disrupting mitosis leading to an inhibition of leukocyte migration and reduction of the inflammatory response to deposited urate crystals. This agent also interrupts monosodium urate crystal deposition in joint tissues, thereby preventing the resultant inflammatory response.