Open Peer Review on Qeios

Lometrexol Sodium

National Cancer Institute

Source

National Cancer Institute. Lometrexol Sodium. NCI Thesaurus. Code C90623.

The sodium salt form of lometrexol, a folate analogue antimetabolite with antineoplastic activity. As the stereoisomer of 5,10-dideazatetrahydrofolate, lometrexol selectively inhibits glycinamide ribonucleotide formyltransferase (GARFT), the enzyme that catalyzes the first step in the de novo purine biosynthetic pathway, thereby inhibiting DNA synthesis and leading to an inhibition of tumor cell proliferation. The agent has been shown to be active against tumors that are resistant to the folate antagonist methotrexate, but causes severe, dose-limiting toxicities.