Open Peer Review on Qeios

Lometrexol

National Cancer Institute

Source

National Cancer Institute. Lometrexol. NCI Thesaurus. Code C979.

A folate analog antimetabolite with antineoplastic activity. As the 6R diastereomer of 5,10-dideazatetrahydrofolate, lometrexol inhibits glycinamide ribonucleotide formyltransferase (GARFT), the enzyme that catalyzes the first step in the de novo purine biosynthetic pathway, thereby inhibiting DNA synthesis, arresting cells in the S phase of the cell cycle, and inhibiting tumor cell proliferation. The agent has been shown to be active against tumors that are resistant to the folate antagonist methotrexate. (NCI04)