

Open Peer Review on Qeios

Mericitabine

National Cancer Institute

Source

National Cancer Institute. Mericitabine. NCI Thesaurus. Code C98959.

An orally available prodrug of PSI-6130 which is a selective cytidine nucleoside analogue and non-cytotoxic hepatitis C virus (HCV) polymerase inhibitor. After intracellular uptake, mericitabine is phosphorylated into two active triphosphate metabolites, which disable HCV RNA-dependent RNA polymerase (non-structural protein 5B; NS5B) upon binding. This results in the blockage of viral HCV RNA production and thus viral replication. This agent has a high barrier to resistance, however, a substitution mutation (S282T) on HCV NS5B impairs mericitabine's activity significantly.