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Ropidoxuridine

National Cancer Institute

Source

National Cancer Institute. *Ropidoxuridine*. NCI Thesaurus. Code C48813.

An orally available 5-substituted 2-pyrimidinone-2'-deoxyribonucleoside analogue and prodrug of 5-iododeoxyuridine (IUdR), an iodinated analogue of deoxyuridine, with radiosensitizing activity. Upon oral administration, ropidoxuridine (IPdR) is efficiently converted to idoxuridine (IUdR) by a hepatic aldehyde oxidase. In turn, IUdR is incorporated into DNA during replication, thereby sensitizing cells to ionizing radiation by increasing DNA strand breaks. Compared to IUdR, ropidoxuridine is associated with a lower toxicity profile and improved anti-tumor activity.