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Tetrahydrouridine

National Cancer Institute

Source

National Cancer Institute. *Tetrahydrouridine*. NCI Thesaurus. Code C868.

A synthetic pyrimidine nucleoside analogue with biomodulating activity. Tetrahydrouridine increases the efficacy of the radiosensitizer cytochlor (5-chloro-2'-deoxycytidine) by inhibiting the enzyme deoxycytidine monophosphate (dCMP) deaminase and preventing the premature deamination of the cytochlor metabolite 5-chloro-2'-deoxycytidine monophosphate (CldCMP) to 5-chloro-2'-deoxyuridine monophosphate (CldUMP); in turn, this increases tumor concentrations of CldUMP which is then further anabolized and incorporated selectively into tumor DNA as CldU (5-chloro-2'-deoxyuridine). (NCI04)