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Epothilone KOS-1584

National Cancer Institute

Source

National Cancer Institute. *Epothilone KOS-1584*. NCI Thesaurus. Code C77892.

A second-generation epothilone with potential antineoplastic activity. Epothilone KOS-1584 binds to tubulin and induces microtubule polymerization and stabilizes microtubules against depolymerization, which may result in the inhibition of cell division, the induction of G2/M arrest, and apoptosis. Compared to first-generation epothilones, this agent exhibits greater safety and efficacy with an enhanced pharmaceutical profile, including enhanced water solubility and tumor penetration, and reduced CNS exposure. In addition, epothilone KOS-1584 is a poor substrate for the P-glycoprotein (P-gp) drug efflux pump.