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Tenifatecan

National Cancer Institute

Source

National Cancer Institute. <u>Tenifatecan</u>. NCI Thesaurus. Code C64772.

A highly lipophilic preparation of 7-Ethyl-10-hydroxycamptothecin (SN-38) with potential antineoplastic activity. SN2310 is an oil-in-water emulsion of tocopherol covalently linked, via a succinate linker, to SN-38, a synthetic derivative of the cytotoxic alkaloid camptothecin. After succinate linker is hydrolyzed in vivo, the active moiety SN-38 is released and selectively stabilizes topoisomerase I-DNA covalent complexes, thereby inhibiting religation of topoisomerase I-mediated single-stranded DNA breaks and inducing lethal double-stranded DNA breaks. This inhibits DNA replication and triggers programmed cell death. SN2310 emulsion provides longer circulation time and potentiates drug exposure as compared to the unconjugated SN-38.