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Belotecan Hydrochloride

National Cancer Institute

Source

National Cancer Institute. *Belotecan Hydrochloride*. NCI Thesaurus. Code C66954.

The hydrochloride salt of the semi-synthetic camptothecin analogue belotecan with potential antitumor activity. Belotecan binds to and inhibits the activity of topoisomerase I, stabilizing the cleavable complex of topoisomerase I-DNA, which inhibits the religation of single-stranded DNA breaks generated by topoisomerase I; lethal double-stranded DNA breaks occur when the topoisomerase I-DNA complex is encountered by the DNA replication machinery, DNA replication is disrupted, and the tumor cell undergoes apoptosis. Topoisomerase I is an enzyme that mediates reversible single-strand breaks in DNA during DNA replication.