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Talazoparib

National Cancer Institute

Source

National Cancer Institute. *Talazoparib*. NCI Thesaurus. Code C95733.

An orally bioavailable inhibitor of the nuclear enzyme poly(ADP-ribose) polymerase (PARP) with potential antineoplastic activity. Talazoparib selectively binds to PARP and prevents PARP-mediated DNA repair of single strand DNA breaks via the base-excision repair pathway. This enhances the accumulation of DNA strand breaks, promotes genomic instability and eventually leads to apoptosis. PARP catalyzes post-translational ADP-ribosylation of nuclear proteins that signal and recruit other proteins to repair damaged DNA and is activated by single-strand DNA breaks.