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PARP 1/2 Inhibitor NOV1401

National Cancer Institute

Source

National Cancer Institute. *PARP 1/2 Inhibitor NOV1401*. NCI Thesaurus. Code C154560.

An orally available small molecule inhibitor of the nuclear enzymes poly (ADP-ribose) polymerase (PARP) 1 and 2, with potential antineoplastic activity. Upon administration, NOV1401 selectively binds to PARP-1 and -2, thereby preventing PARP-1 and -2-mediated DNA repair. This promotes genetic instability and enhances the accumulation of single and double strand DNA breaks, ultimately leading to apoptosis. The PARP family of proteins catalyzes post-translational ADP-ribosylation of nuclear proteins and is activated by single-strand DNA (ssDNA) breaks.