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Topoisomerase-II-beta Inhibitor Racemic XK469

National Cancer Institute

Source

National Cancer Institute. *Topoisomerase-II-beta Inhibitor Racemic XK469*. NCI Thesaurus. Code C2662.

The R-isomer of a synthetic quinoxaline phenoxypropionic acid derivative with proapoptotic and antiproliferative activities. R(+)XK469 selectively inhibits topoisomerase II-beta, blocks activation of MEK/MAPK signaling kinases, stimulates caspases, and upregulates p53-dependent proteins, including cyclins A and B1, thereby arresting cancer cells in the G2/M phase of the cell cycle. Both R(+) and S(-) isomers of this agent are cytotoxic, although the R-isomer is more potent. (NCI05)