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Morpholinodoxorubicin

National Cancer Institute

Source

National Cancer Institute. Morpholinodoxorubicin. NCI Thesaurus. Code C1442.

A semisynthetic derivative of the anthracycline antineoplastic antibiotic doxorubicin. As an antineoplastic agent, morpholinodoxorubicin is more potent than doxorubicin. Similar to doxorubicin, morpholinodoxorubicin intercalates into DNA and causes single- and double-strand breaks in DNA via inhibition of topoisomerase I and II. Unlike doxorubicin, this agent is metabolized in vivo to a DNA-alkylating derivative that forms DNA interstrand cross-links, thereby potentiating its doxorubicin-like cytotoxicity. (NCI04)