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Plicamycin

National Cancer Institute

Source

National Cancer Institute. *Plicamycin*. NCI Thesaurus. Code C658.

An antibiotic isolated from the bacterium *Streptomyces plicatus* with antineoplastic activity. Plicamycin, also known as mithramycin, binds to the minor groove of DNA at GC-rich sites, resulting in inhibition of RNA synthesis; this agent also inhibits mRNA expression, resulting in a reduction in protein synthesis. In addition, plicamycin may inhibit bone resorption by down regulating transcription of c-src, an oncogene involved in bone metabolism and resorption. (NCI04)