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Phosphoramidate Mustard

National Cancer Institute

Source

National Cancer Institute. *Phosphoramidate Mustard*. NCI Thesaurus. Code C29322.

One of a number of chemically-related alkylating agents with antineoplastic properties. The prototype of this group of agents is cyclophosphamide. Most phosphoramidate mustards are administered as prodrugs that undergo reductive activation in hypoxic environments to yield cytotoxic metabolites. These agents alkylate and crosslink DNA, resulting in inhibition of DNA replication. Phosphoramidate mustards are also immunosuppressants, mutagens and teratogens. (NCI04)