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Melphalan Hydrochloride

National Cancer Institute

Source

National Cancer Institute. *Melphalan Hydrochloride*. NCI Thesaurus. Code C48002.

A bifunctional alkylating agent and phenylalanine derivative of nitrogen mustard. Melphalan hydrochloride is converted into highly reactive ethylenimmonium intermediates that induce covalent guanine N7-N7 intra- and inter-crosslinks and alkylation of adenine N3 of DNA. This agent also alkylates RNA and protein structures. As a result RNA transcription and protein synthesis are inhibited, ultimately leading to cell growth arrest and/or death.