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Temozolomide

National Cancer Institute

Source

National Cancer Institute. *Temozolomide*. NCI Thesaurus. Code C1244.

A triazene analog of dacarbazine with antineoplastic activity. As a cytotoxic alkylating agent, temozolomide is converted at physiologic pH to the short-lived active compound, monomethyl triazeno imidazole carboxamide (MTIC). The cytotoxicity of MTIC is due primarily to methylation of DNA at the O6 and N7 positions of guanine, resulting in inhibition of DNA replication. Unlike dacarbazine, which is metabolized to MITC only in the liver, temozolomide is metabolized to MITC at all sites. Temozolomide is administered orally and penetrates well into the central nervous system. (NCI04)