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# Polyamine Analogue PG11047

National Cancer Institute

## Source

National Cancer Institute. *Polyamine Analogue PG11047*. NCI Thesaurus. Code C60816.

A second generation polyamine analogue, synthesized through the restriction of molecular conformations of parent polyamine compounds, with potential antineoplastic activity. Polyamine analogue PG11047 may displace endogenous polyamines from DNA binding sites, thereby interfering with cell cycle processes dependent upon polyamine binding and function, and resulting in cell-cycle arrest, induction of apoptosis, depletion of polyamines, and interference with gene and ligand-receptor activities involved with cell growth. This agent may exhibit decreased toxicity and enhanced cytotoxicity profiles compared to first-generation polyamine compounds. In tumor cells, there is an increase dependence on polyamines as well as a dysregulated polyamine metabolic pathway resulting in abnormal or sustained tumor growth.