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(54) **Title:** USE OF SUBSTITUTED HEXITOLS INCLUDING DIANHYDROGALACTITOL AND ANALOGS TO TREAT NEOPLASTIC DISEASE AND CANCER STEM CELLS INCLUDING GLIOBLASTOMA MULTIFORME AND MEDULLOBLASTOMA

(57) **Abstract:** The use of dianhydrogalactitol provides a novel therapeutic modality for the treatment of glioblastoma multiforme and medulloblastoma. Dianhydrogalactitol acts as an alkylating agent on DNA that creates N7 methylation. Dianhydrogalactitol is effective in suppressing the growth of cancer stem cells and is active against tumors that are refractory to temozolomide; the drug acts independently of the MGMT repair mechanism.

