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(54) Title: COMBINATION THERAPIES FOR TREATING METHYLTHIOADENOSINE PHOSPHORYLASE DEFICIENT CELLS

(57) Abstract: The present invention is directed to combination therapies fro treating cell proliferative disorders associated with methylthioadenosine phosphorylase (MTAP) deficient cells in a mammal. The combination therapies selectively kill MTAP-deficient cells by administering an ihibitor of de novo inosinate synthesis and administering an anti-toxicity agent, wherein the inhibitors of de novo inosinate synthesis are inhibitors of glycinamide ribonucleotide formyltransferase ("GARFT") and/or aminoinidazolecarboximide ribonucleotide formyltransferase ("AICARFT"), and the anti-toxicity agent is an MTAP substrate (e.g. methylthioadenosine or "MTA"), a precursor of MTA, an analog of an MTA precursor or a prodrug of an MTAP substrate.