

New drug combination may effectively treat often fatal childhood brain tumor

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CI-994 induces apoptosis and downregulates MYC expression in MYC-driven medulloblastoma cell lines. (A) Representative FACS analysis of MED8A and D425 MED cells treated either with DMSO (control), 5 or 7.5 μ M of CI-994 for 48 hours, and bar graphs displaying the mean of n=4 replicates. CI-994 treatment resulted in a dose-dependent increase in mean early apoptotic and late apoptotic cells on treatment in both cell lines. (B) For MYC expression analyses MED8A



and D425 MED cells were treated with 2.5, 5, or 7.5 μ M of CI-994 for 48 hours. MYC mRNA expression values were normalized to housekeeping controls, and expression was calculated relative to DMSO control. Representative Western blots for MYC and ACTIN loading controls for MED8A and D425 MED cells following treatment with 5 or 7.5 μ M CI-994 treatment for 48 hours. (C) MYC overexpressing UW-228–3 cells (UW-228–3 MYC OE) were more sensitive toward CI-994 treatment than the respective isogenic control cells with low endogenous MYC expression (UW-228–3 ctrl). Values shown represent mean±SD of 3–4 replicates per condition. *, p

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