Abstract

Group 3 Medulloblastoma has the worst prognosis and outcomes largely due to its resistance to radiation and lack of alternative therapeutic targets. A CRISPR-Cas9 screen done on Group 3 MB cells identified that the cyclin dependent kinase CDK12 is up-regulated in Group 3 MB making it a potential therapeutic target. This study intends to confirm that Group 3 MB cells rely on CDK-12 for proliferation, and to show that inhibition of CDK12 using the drug E9 results in a decrease in proliferation of malignant cells. Additional work is needed to confirm these most recent results, however this study shows that CDK12 is a promising therapeutic target for Group 3 MB.