SciBX
Science-Business eXchange

THE DISTILLERY

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Brain cancer	H3 histone family 3A (H3.3A; H3F3A); v-myc myelocytomatosis viral related oncogene neuroblastoma derived (MYCN; NMYC); checkpoint kinase 1 (Chk1); aurora kinase A (AURKA; Aurora-A)	Cell culture studies suggest inhibiting Chk1 or AURKA may help treat pediatric and young adult patients with *H3F3A*-driven glioblastoma. In a glioblastoma cell line with G34-mutant *H3F3A*, *MYCN* was identified as the most highly overexpressed gene, and Chk1 and AURKA were identified as regulators of cell proliferation. In the same cell line, an AURKA inhibitor dose-dependently decreased *MYCN* levels and cell viability compared with no treatment. Next steps include testing AURKA and Chk1 inhibitors in a larger number of glioblastoma cell lines and building *in vivo* models to test the effects of the inhibitors in orthotopic brain tumors. At least eight companies have AURKA inhibitors in preclinical to Phase III testing in various cancers. At least six companies have Chk1 inhibitors in preclinical to Phase II trials in various cancer indications.	Unpatented; licensing status not applicable	Bjerke, L. *et al. Cancer Discov.*; published online March 28, 2013; doi:10.1158/2159-8290.CD-12-0426 **Contact:** Chris Jones, The Institute of Cancer Research, Surrey, U.K. e-mail: chris.jones@icr.ac.uk

SciBX 6(18); doi:10.1038/scibx.2013.433
Published online May 9, 2013