This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Brain cancer	Cyclin dependent kinase 1 (CDK1; CDC2); CDK2; phosphoinositide 3-kinase (PI3K)	<p>Mouse and cell culture studies suggest combined inhibition of CDK1 and CDK2 could help improve the efficacy of PI3K inhibitors in glioma. In a human glioma cell line, a PI3K inhibitor plus the CDK1 and CDK2 inhibitor seliciclib increased apoptosis compared with either compound alone. In a mouse xenograft model of human glioma, a PI3K inhibitor in combination with a CDK1 and CDK2 inhibitor resulted in smaller tumors than either inhibitor alone. Next steps could include evaluating the combination therapy of a PI3K inhibitor and CDK1 and CDK2 inhibitor in clinical trials.</p> <p>Cyclacel Pharmaceuticals Inc. has seliciclib in Phase II testing or earlier to treat multiple cancers.</p> <p>Merck & Co. Inc. and Ligand Pharmaceuticals Inc. have dinaciclib, a CDK inhibitor that targets both CDK1 and CDK2, in Phase II testing to treat multiple cancers.</p> <p>At least five other companies have CDK inhibitors in Phase II trials or earlier to treat various cancers.</p> <p>SciBX 5(30); doi:10.1038/scibx.2012.780 Published online Aug. 2, 2012</p>	Patent and licensing status unavailable	<p>Cheng, C.K. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online July 16, 2012; doi:10.1073/pnas.1202492109</p> <p>Contact: Qi-Wen Fan, University of California, San Francisco, Calif. e-mail: qiwen.fan@ucsf.edu</p> <p>Contact: William A. Weiss, same affiliation as above e-mail: waweiss@gmail.com</p>