This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Cyclin dependent kinase 8 (CDK8); CDK19 (CDC2L6); cyclin-dependent kinase inhibitor 1A (p21, Cip1; CDKN1A; CIP1)	<i>In vitro</i> and mouse studies suggest dual CDK8 and CDK19 inhibitors could help improve chemotherapy efficacy. DNA-damaging chemotherapies can induce p21-regulated expression of tumor-promoting factors in tumors and host cells. Library screening, hit optimization and testing in human cancer cell lines identified Senexin A, an inhibitor of CDK8 and CDK19 that blocked p21-induced expression of multiple tumor-supporting proteins. In a mouse model of lung cancer, Senexin A plus doxorubicin decreased tumor growth compared with doxorubicin alone. Ongoing work by Senex Biotechnology Inc. includes testing an optimized form of Senexin A in animal models of lung, breast, colon and prostate cancer.	Patented by Senex Biotechnology; available for licensing	Porter, D.C. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Aug. 6, 2012; doi:10.1073/pnas.1206906109 Contact: Igor B. Roninson, Senex Biotechnology Inc., Columbia, S.C. e-mail: roninsoni@sccp.sc.edu
		SciBX 5(32); doi:10.1038/scibx.2012.835 Published online Aug. 16, 2012		