This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Cyclin dependent kinase 5 (CDK5)	<p><i>In vitro</i> studies suggest inhibiting CDK5 could help prevent metastatic cancers. In cellular models of metastasis and in human cancer cell lines, two CDK5 inhibitors, including purvalanol, prevented formation of invadopodia, which are cell membrane protrusions that enable cancer cell invasion and metastasis, compared with vehicle. In a human ovarian cancer cell line resistant to paclitaxel, purvalanol blocked invadopodia formation compared with vehicle. Ongoing work includes testing the effects of CDK5 inhibitors and paclitaxel on metastasis in animal models of cancer.</p> <p>AT7519, an inhibitor of CDK1, CDK2, CDK4, CDK5 and CDK9 from SuperGen Inc., is in Phase II testing to treat multiple myeloma (MM) and Phase I testing to treat mantle cell lymphoma (MCL), chronic lymphocytic leukemia (CLL) and solid tumors. BAY 1000394, a pan-CDK inhibitor from Bayer AG, is in Phase I testing to treat cancer.</p> <p>SciBX 4(30); doi:10.1038/scibx.2011.849 Published online Aug. 4, 2011</p>	Unpatented; available for licensing or partnering	<p>Quintavalle, M. <i>et al. Sci. Signal.</i>; published online July 26, 2011; doi:10.1126/scisignal.2002032</p> <p>Contact: Sara A. Courtneidge, Sanford-Burnham Medical Research Institute, La Jolla, Calif. e-mail: courtneidge@sanfordburnham.org</p>