This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Glioma-associated oncogene homolog 2 zinc finger protein (GLI2)	<p>Studies in mice and cell culture suggest that arsenic-based therapeutics could help treat Hedgehog pathway-driven cancers. In mouse fibroblast cell lines, arsenic trioxide suppressed signaling in the Hedgehog pathway by reducing <i>Gli2</i> accumulation and stability compared with vehicle. GLI2 is a transcription factor important for Hedgehog pathway signaling. In a mouse model of Hedgehog pathway-dependent medulloblastoma, arsenic trioxide caused dose-dependent reductions in tumor growth compared with saline control. Next steps include evaluating the combination of arsenic-based compounds with undisclosed therapeutics in endogenous and genetic cancer models.</p> <p>Cephalon Inc. and Nippon Shinyaku Co. Ltd. market Trisenox arsenic trioxide to treat acute promyelocytic leukemia.</p> <p>SciBX 3(29); doi:10.1038/scibx.2010.886 Published online July 29, 2010</p>	Patent application filed covering use of arsenicals in Hedgehog pathway-driven cancers; available for licensing from the Stanford University Office of Technology Licensing	<p>Kim, J. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online July 14, 2010; doi:10.1073/pnas.1006822107</p> <p>Contact: Philip A. Beachy, Stanford University School of Medicine, Stanford, Calif. e-mail: pbeachy@stanford.edu</p>