This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Sonic hedgehog homolog (SHH; Hedgehog); smoothened (SMO)	<p>A cell culture study suggests that antagonizing SHH could be useful for treating various cancers. Human keratinocytes treated with robotnikinin, a small molecule SHH inhibitor, had lower SHH pathway activation levels than mock-treated controls. Robotnikinin-mediated inhibition of the SHH pathway was overcome with SMO agonists, confirming that robotnikinin interacts directly with SHH, the first element in the pathway, upstream of SMO. Next steps include using robotnikinin to decipher aberrant, disease-associated regulation patterns of the SHH pathway.</p> <p>GDC-0449, a SMO antagonist from Curis Inc. and Genentech Inc., is expected to start Phase II trials for advanced basal cell carcinoma (BCC) this month. BMS-833923 (XL139), a SMO antagonist from Bristol-Myers Squibb Co. and Exelixis Inc., is in Phase I trials to treat advanced solid tumors. Fate Therapeutics Inc. and Infinity Pharmaceuticals Inc. have compounds targeting the SHH pathway in preclinical development for cancer.</p> <p><i>SciBX</i> 2(5); doi:10.1038/scibx.2009.179 Published online Feb. 5, 2009</p>	Patent pending; available for licensing from Harvard University	<p>Stanton, B.Z. <i>et al. Nat Chem. Biol.</i>; published online Jan. 18, 2009; doi:10.1038/nchembio.142</p> <p>Contact: Stuart Schreiber, Broad Institute and Harvard, Cambridge, Mass. e-mail: stuart_schreiber@harvard.edu</p>