This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Lung cancer; breast cancer	Signal transducer and activator of transcription 3 (STAT3)	<p><i>In vitro</i>, cell culture and mouse studies identified orally available STAT3 inhibitors that could help treat lung and breast cancer. In cell culture, a lead compound bound to STAT3 with high affinity and inhibited its activation and decreased tumor growth compared with vehicle. In mouse xenograft models of lung and breast cancers, oral delivery of the compound decreased STAT3 activity and tumor growth compared with vehicle. Next steps include toxicology studies in animals.</p> <p>Otsuka Pharmaceutical Co. Ltd.'s small molecule STAT3 inhibitor, OPB-31121, is in Phase I testing for solid tumors. GLG Pharma LLC has three STAT3 inhibitors in preclinical development for cancer.</p> <p>SciBX 5(26); doi:10.1038/scibx.2012.676 Published online June 28, 2012</p>	Patent pending; available for licensing	<p>Zhang, X. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online May 23, 2012; doi:10.1073/pnas.1121606109</p> <p>Contact: James Turkson, University of Hawaii Cancer Center, Honolulu, Hawaii e-mail: jturkson@cc.hawaii.edu</p>