This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Thyroid cancer	Signal transducer and activator of transcription 3 (STAT3)	<p><i>In vitro</i> and mouse studies suggest inhibiting STAT3 phosphorylation could worsen thyroid cancers. In primary papillary thyroid carcinoma samples, decreased expression of tyrosine phosphorylated STAT3 (pY-STAT3) correlated with larger tumors and distant metastases. In mice transplanted with pY-STAT3-expressing thyroid cancer cells, STAT3-targeting small hairpin RNA increased tumor growth compared with scrambled shRNA. Next steps include determining the correlation between activated STAT3 levels and therapeutic outcomes in cancer. At least four companies have STAT3 inhibitors in clinical and preclinical development to treat cancers.</p> <p>SciBX 5(35); doi:10.1038/scibx.2012.926 Published online Sept. 6, 2012</p>	Findings unpatented; unlicensed	<p>Couto, J.P. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 13, 2012; doi:10.1073/pnas.1201232109</p> <p>Contact: Jacqueline F. Bromberg, Memorial Sloan-Kettering Cancer Center, New York, N.Y. e-mail: brombergj@mskcc.org</p> <p>Contact: David Lyden, Weill Cornell Medical College, New York, N.Y. e-mail: dcl2001@med.cornell.edu</p>