This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Mantle cell lymphoma (MCL)	Signal transducer and activator of transcription 3 (STAT3)	<p><i>In vitro</i> and mouse studies suggest inhibiting STAT3 could enhance antitumor immunity to help treat MCL. In cultured mouse B cell lymphoma cells, expression of a dominant-negative <i>Stat3</i> mutant to inhibit the protein's signaling increased antigen-specific T cell activation compared with that seen in mock-transfected controls. In mice injected with mouse MCL or B cell lymphoma cells, a Stat3 inhibitor decreased tumor growth compared with vehicle. Immunodeficient mice given the Stat3 inhibitor did not have an antitumor response. Next steps could include conducting clinical trials of STAT3 inhibitors in patients with MCL and testing the effects of STAT3 inhibition in preclinical models of other B cell malignancies.</p> <p>At least four companies have STAT3 inhibitors in clinical and preclinical testing to treat various cancers.</p> <p>SciBX 5(28); doi:10.1038/scibx.2012.724 Published online July 19, 2012</p>	Patent and licensing status unavailable	<p>Cheng, F. <i>et al. Cancer Res.</i>; published online June 22, 2012; doi:10.1158/0008-5472.CAN-11-3619 Contact: Eduardo M. Sotomayor, H. Lee Moffitt Cancer Center & Research Institute, Tampa, Fla. e-mail: eduardo.sotomayor@moffitt.org</p>