This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Chronic lymphocytic leukemia (CLL)	Solute carrier family 7 member 11 cystine glutamate transporter (SLC7A11; xCT)	<i>In vitro</i> and mouse studies suggest the xCT inhibitor sulfasalazine could be repurposed to help treat CLL. In cocultures of primary CLL cells and human bone marrow stromal cell lines, compared with CLL cells cultured alone, xCT-mediated cystine uptake and subsequent cysteine secretion by stromal cells increased CLL cell viability. In the same coculture, sulfasalazine and chemotherapy increased CLL apoptosis compared with chemotherapy alone. In mouse models of CLL, sulfasalazine decreased leukemia burden compared with pretreatment burden in the same animal. Ongoing work includes testing additional therapies that block stromal cell protection of CLL cells <i>in vitro</i> and in animals. Generic sulfasalazine is approved to treat rheumatoid arthritis (RA) and inflammatory bowel disease (IBD).	Patent status undisclosed; available for licensing or partnering	Zhang, W. <i>et al. Nat. Cell Biol.</i> ; published online Feb. 19, 2012; doi:10.1038/ncb2432 Contact: Peng Huang, The University of Texas MD Anderson Cancer Center, Houston, Texas e-mail: phuang@mdanderson.org
<i>SciBX</i> 5(8); doi:10.1038/scibx.2012.198 Published online Feb. 23, 2012				