This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	S100 calcium binding protein A8 (S100A8; calgranulin A; MRP8); S100A9 (calgranulin B; MRP14)	<p><i>In vitro</i> and mouse studies identified myeloid-derived suppressor cell (MDSC)-depleting peptides that could help promote antitumor immunity. Immunosuppressive MDSCs in the tumor environment help tumors evade immune detection. Phage-display studies identified two peptides targeting MDSC-expressed S100A8 and S100A9. In a mouse model of cancer, i.v. injection of either peptide fused to mouse IgG2b depleted MDSCs in blood and spleen, delayed tumor development and decreased tumor size compared with injection of a control peptide-antibody fusion or no treatment. Next steps include developing a therapeutic targeting human MDSCs.</p> <p>Active Biotech AB and Ipsen Group have tasquinimod, a small molecule that binds S100A9, in Phase III testing to treat prostate cancer.</p> <p>SciBX 7(25); doi:10.1038/scibx.2014.733 Published online June 26, 2014</p>	Patent application filed covering the peptide-antibody fusions; licensing discussions under way	<p>Qin, H. <i>et al. Nat. Med.</i>; published online May 25, 2014; doi:10.1038/nm.3560</p> <p>Contact: Larry W. Kwak, The University of Texas MD Anderson Cancer Center, Houston, Texas e-mail: llkwak@mdanderson.org</p>