This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Interferon- β (IFNB; IFN- β)	<p>Mouse studies suggest directly coupling antibodies to IFN-β could help treat cancer. In multiple mouse models of breast cancer, the anti-epidermal growth factor receptor (EGFR) antibody Erbitux cetuximab fused to IFN-β decreased tumor growth compared with Erbitux alone. In mice with melanoma, an anti-programmed cell death 1 ligand 1 (CD274 molecule; PD-L1; B7-H1) antibody that blocks inhibitory T cell signaling increased the efficacy of the fusion antibody compared with either antibody alone. Next steps include increasing the half-life of the IFN-β-coupled antibody. Eli Lilly and Co., Bristol-Myers Squibb Co. and Merck KGaA market Erbitux to treat colorectal cancer and head and neck cancer. At least five companies have therapeutic antibodies against PD-L1 in Phase II or earlier development to treat cancer.</p> <p>SciBX 7(6); doi:10.1038/scibx.2014.169 Published online Feb. 13, 2014</p>	Patent application filed; available for licensing	<p>Yang, X. <i>et al. Cancer Cell</i>; published online Jan. 13, 2014; doi:10.1016/j.ccr.2013.12.004</p> <p>Contact: Yang-Xin Fu, Institute of Biophysics, Chinese Academy of Sciences, Beijing, China e-mail: yfu@uchicago.edu</p>