This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Acute lymphoblastic leukemia (ALL)	Growth differentiation factor 15 (GDF15)	<p>Mouse studies suggest inhibiting GDF15 could help eliminate residual cancer cells in patients with ALL. In mouse models of ALL, residual leukemia cells were present in a mesenchymal bone marrow niche following chemotherapy. In these mice, residual leukemia cells within the mesenchymal bone marrow niche secreted GDF15 that was processed to its active form. In the mouse ALL model, GDF15 knockdown or a neutralizing GDF15 mAb sensitized residual ALL cells to chemotherapy and decreased niche-resident ALL cells compared with no alteration or no antibody. Next steps include designing a clinical trial on the neutralizing GDF15 antibody in patients with ALL and identifying small molecule GDF15 inhibitors.</p> <p>Aveo Pharmaceuticals Inc. has the anti-GDF15 antibody AV-380 in preclinical development for cachexia.</p> <p>SciBX 7(28); doi:10.1038/scibx.2014.819 Published online July 24, 2014</p>	Patented; licensing status undisclosed	<p>Duan, C.-W. <i>et al. Cancer Cell</i>; published online June 16, 2014; doi:10.1016/j.ccr.2014.04.015</p> <p>Contact: Deng-Li Hong, Shanghai Jiao Tong University School of Medicine, Shanghai, China e-mail: dlhong@sjtu.edu.cn</p> <p>Contact: Guo-Qiang Chen, same affiliation as above e-mail: chengq@shsmu.edu.cn</p> <p>Contact: Tariq Enver, University College London, London, U.K. e-mail: t.enver@ucl.ac.uk</p>