This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Prostate cancer	γ -Secretase	<p>Cell culture and mouse studies suggest γ-secretase inhibitors could help treat prostate cancer. Presenilin 1 (PSEN1; PS1) is the catalytic subunit of γ-secretase. In a human prostate cancer cell line, siRNA knockdown of PS1 decreased production of the intracellular domain (ICD) of transforming growth factor-β receptor 1 (TGFBR1; ALK5) compared with no alteration. In various human cancer cell lines and in a mouse xenograft model of prostate cancer, a γ-secretase inhibitor decreased ICD formation, expression of proinvasive genes, the number of invasive cells and tumor volume compared with vehicle. Next steps include testing γ-secretase inhibitors in <i>in vivo</i> models of metastasis and measuring TGFBR1 ICD levels in samples from patients with prostate cancer.</p> <p>At least 10 companies have γ-secretase inhibitors in Phase II or earlier testing to treat Alzheimer's disease (AD) or cancer.</p> <p>SciBX 7(5); doi:10.1038/scibx.2014.142 Published online Feb. 6, 2014</p>	Patented; available for licensing from the Ludwig Institute for Cancer Research Ltd.	<p>Gudey, S.K. <i>et al. Sci. Signal.</i>; published online Jan. 7, 2014; doi:10.1126/scisignal.2004207</p> <p>Contact: Marene Landström, Umeå University, Umeå, Sweden e-mail: marene.landstrom@medbio.umu.se</p>