This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Notch homolog 1 translocation-associated (NOTCH1); Notch homolog 2 (NOTCH2)	<p><i>In vitro</i> and mouse studies suggest that antibodies specific for NOTCH1 or NOTCH2 could help treat cancer. Blocking all four NOTCH receptors inhibits tumors but can also cause severe GI toxicity. <i>In vitro</i>, NOTCH1-specific antibodies inhibited T cell acute lymphoblastic leukemia (T-ALL) cell growth. In mouse xenograft models, the NOTCH1 antibody inhibited proliferation and angiogenesis compared with control antibody. NOTCH1 and NOTCH2 antibodies showed minimal GI toxicity in rodents. Next steps by Roche's Genentech Inc. unit include determining which cancer types are best suited for treatment with the NOTCH1 and NOTCH2 antibodies.</p> <p>Aveo Pharmaceuticals Inc. has the NOTCH1-specific antibody AV-232 in preclinical development to treat cancer.</p> <p>OMP-21M18, a mAb targeting NOTCH ligand delta-like ligand 4 (DLL4) from OncoMed Pharmaceuticals Inc., is in Phase I testing for solid tumors.</p> <p>MK-0752, an inhibitor of the NOTCH processing enzyme γ-secretase from Merck & Co. Inc., is in Phase I/II testing for breast cancer.</p> <p>Aileron Therapeutics Inc. has a peptide antagonist of the Notch intracellular domain (NICD) in preclinical testing to treat ALL.</p> <p>SciBX 3(17); doi:10.1038/scibx.2010.518 Published online April 29, 2010</p>	Patents covering the antibodies owned by Genentech; Genentech and Exelixis Inc. developed the antibodies under a deal that gave Genentech ownership and Exelixis royalties and milestones; licensing status undisclosed	<p>Wu, Y. <i>et al. Nature</i>; published online April 14, 2010; doi:10.1038/nature08878</p> <p>Contact: Christian Siebel, Genentech Inc., South San Francisco, Calif. e-mail: siebel.christian@gene.com</p>