This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	HER2 (ERBB2; neu); ADAM17	<p><i>In vitro</i> and mouse studies suggest that pan-HER and ADAM17 inhibitors could decrease breast cancer resistance to Herceptin trastuzumab, which occurs when the antibody fails to block HER2 phosphorylation. In HER2-overexpressing breast cancer cells, ADAM17 inhibitors or pan-HER inhibitors plus Herceptin lowered both HER2 phosphorylation and cell survival better than Herceptin alone. In mice with HER2⁺ xenografts, a HER inhibitor plus Herceptin blocked tumor growth, whereas growth was only delayed by either compound alone. Next steps include clinical trials of pan-HER inhibitors in combination with Herceptin. Roche's Genentech Inc. unit markets Herceptin to treat breast and gastric cancers. At least 25 other companies have therapeutics targeting HER2 in development stages ranging from preclinical to marketed to treat cancer. Incyte Corp's INCB7839, an ADAM17 inhibitor, is in Phase II testing to treat breast cancer.</p> <p>SciBX 4(4); doi:10.1038/scibx.2011.96 Published online Jan. 27, 2011</p>	Findings unpatented; unavailable for licensing	<p>Gijsen, M. <i>et al. PLoS Biol.</i>; published online Dec. 21, 2010; doi:10.1371/journal.pbio.1000563 Contact: Anthony Kong, University of Oxford, Oxford, U.K. e-mail: Anthony.kong@imm.ox.ac.uk</p>