This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Neurokinin 1 substance P (TAC1; NK1); NK1 substance P receptor (TACR1); HER2 (EGFR2; ErbB2; neu)	<p>Studies in cell culture and mice suggest antagonizing NK1 or TACR1 could be useful for treating HER2⁺ breast cancer. In cultured tumor cells, NK1 increased HER2 signaling compared with vehicle. In cell culture and mouse xenografts, a small molecule TACR1 antagonist decreased HER2 signaling and tumor growth compared with saline control. Next steps include comparing the effects of TACR1 inhibitors and anti-NK1 mAbs in mouse models of breast cancer.</p> <p>Merck & Co. Inc. markets the TACR1 antagonist Emend fosaprepitant dimeglumine to prevent chemotherapy-induced nausea and vomiting (CINV).</p> <p>At least eight other TACR1 antagonists are in preclinical through Phase III testing for various neurological indications.</p> <p>SciBX 6(40); doi:10.1038/scibx.2013.1121 Published online Oct. 17, 2013</p>	Patented in EU; available for licensing	<p>Garcia-Recio, S. <i>et al. Cancer Res.</i>; published online Sept. 12, 2013; doi:10.1158/0008-5472.CAN-12-4573</p> <p>Contact: Vanessa Almendro, Hospital Clinic of Barcelona, Barcelona, Spain e-mail: almendro@clinic.ub.es</p>