This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	TANK-binding kinase 1 (TBK1); inhibitor of κ-light polypeptide gene enhanced in B cells kinase-ε (IKBKE; IKK-i); HER2 (EGFR2; ErbB2; neu)	*In vitro* and mouse studies suggest inhibiting TBK1 could help treat HER2⁺ breast cancers. In cultured HER2⁺ human breast cancer cells, an inhibitor of TBK1 and IKBKE plus the HER2 inhibitor Tykerb lapatinib prevented sphere formation, a surrogate for cancer stem cell potential, better than either treatment alone. The TBK1 and IKBKE inhibitor also increased Tykerb-induced apoptosis compared with Tykerb alone. In xenograft HER2⁺ tumor–bearing mice, inhibition of TBK1 and IKBKE plus treatment with Tykerb suppressed tumor growth more effectively than either treatment alone. Next steps include developing an inhibitor of TBK1 and IKBKE with a longer half-life *in vivo*. GlaxoSmithKline plc markets Tykerb to treat breast cancer. ***SciBX*** **7(11); doi:10.1038/scibx.2014.310** **Published online March 20, 2014**	Findings unpatented; licensing status not applicable	Deng, T. *et al. Cancer Res.*; published online Jan. 31, 2014; doi:10.1158/0008-5472.CAN-13-2138 **Contact:** Eldad Zacksenhaus, Toronto General Research Institute, University Health Network, Toronto, Ontario, Canada e-mail: eldad.zacksenhaus@utoronto.ca