This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Dual specificity phosphatase 4 (DUSP4; MKP2); c-jun N-terminal kinase (JNK); MEK	*In vitro* and mouse studies suggest inhibiting MEK and JNK could help treat triple-negative breast cancer by targeting cancer stem cells. DUSP4 normally suppresses MEK and JNK pathways, but it is downregulated in basal-like breast cancer cells. In cultured, triple-negative, basal-like breast cancer cells, inhibition of MEK and JNK or overexpression of DUSP4 decreased expression of cancer stem cell markers compared with no treatment. Next steps could include testing MEK and JNK inhibition in animal models of the cancer. GlaxoSmithKline plc markets Mekinist trametinib (GSK1120212), a small molecule MEK inhibitor, to treat melanoma. At least 14 other companies have MEK inhibitors in Phase III testing or earlier to treat various cancers.	Patent and licensing status unavailable	Balko, J.M. *et al. Cancer Res.*; published online Aug. 21, 2013; doi:10.1158/0008-5472.CAN-13-1385 **Contact:** Carlos L. Arteaga, Vanderbilt University, Nashville, Tenn. e-mail: carlos.arteaga@vanderbilt.edu

SciBX 6(37); doi:10.1038/scibx.2013.1020
Published online Sept. 26, 2013