

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Eukaryotic translation initiation factor 2 α kinase 3 (EIF2AK3; PERK)	<p>Primary tumor, cell culture and mouse studies suggest PERK inhibitors could help treat breast cancer. In primary breast tumors and in human breast cancer cell lines, markers of epithelial-to-mesenchymal transition (EMT) were associated with upregulation of the PERK signaling pathway. In human breast cancer cell lines that underwent EMT, a research compound that inhibited PERK decreased cell growth and migration compared with vehicle. In mice injected with a metastatic mammary cancer cell line, pretreatment with the PERK inhibitor decreased tumor burden in the lungs compared with vehicle pretreatment. Next steps could include testing the PERK inhibitor in additional tumor types.</p> <p>SciBX 7(18); doi:10.1038/scibx.2014.516 Published online May 8, 2014</p>	Patent and licensing status unavailable	<p>Feng, Y. <i>et al. Cancer Discov.</i>; published online April 4, 2014; doi:10.1158/2159-8290.CD-13-0945 Contact: Piyush B. Gupta, Whitehead Institute for Biomedical Research, Cambridge, Mass. e-mail: pgupta@wi.mit.edu</p>