

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Phosphatidylinositol-5-phosphate 4-kinase type II α (PIP4K2A); PIP4K2B	<p>Mouse and cell culture studies suggest inhibiting PIP4K2A and PIP4K2B could help treat p53⁻ breast cancer. In human breast cancer samples, deletion of <i>TP53</i>, which encodes p53, increased <i>PIP4K2B</i> levels compared with no alteration. In cultured <i>TP53</i>-deficient breast cancer cells and mouse xenografts, knockdown of both <i>PIP4K2A</i> and <i>PIP4K2B</i> decreased cancer cell proliferation and tumor formation compared with no alteration. In <i>Tp53</i>-deficient mice, homozygous deletion of <i>Pip4k2a</i> and heterozygous deletion of <i>Pip4k2b</i> decreased tumor formation. Next steps could include studies to understand the relationship between PIP4K2A and PIP4K2B and glucose metabolism in tumors.</p> <p>SciBX 6(48); doi:10.1038/scibx.2013.1377 Published online Dec. 19, 2013</p>	Patent and licensing status unavailable	<p>Emerling, B.M. <i>et al. Cell</i>; published online Nov. 7, 2013; doi:10.1016/j.cell.2013.09.057 Contact: Lewis C. Cantley, Harvard Medical School, Boston, Mass. e-mail: lcantley@med.cornell.edu</p>