This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Protein tyrosine kinase 2 (PTK2; FAK)	<i>In vitro</i> assays and mouse studies suggest that inhibiting FAK could help to treat Ras-dependent and phosphoinositide 3-kinase (PI3K)-dependent breast cancers. Mammary gland-specific <i>Fak</i> knockout protected mice from Ras- and PI3K-activated tumorigenesis without affecting normal epithelial cells. <i>In vitro</i> assays of FAK-deficient mammary tumor cells showed more growth arrest and apoptosis and less invasiveness than tumor cells expressing FAK. Human breast cancer cells with activated Ras or PI3K signaling showed similar responses after suppression of FAK. In addition, mouse xenograft models of FAK-deficient tumor cells showed lower tumor invasion and metastatic capacity than tumor cells expressing FAK. Further studies are necessary to identify small molecule FAK inhibitors. Pfizer Inc.'s FP-562271 FAK inhibitor is in Phase I testing to treat cancer.	Findings unpatented; licensing status not applicable	Pylayeva, Y. <i>et al.</i> <i>J. Clin. Invest.</i> ; published online Jan. 19, 2009; doi:10.1172/JCI37160 Contact: Filippo G. Giancotti, Memorial Sloan-Kettering Cancer Center, New York, N.Y. e-mail: f-giancotti@ski.mskcc.org Contact: Yuliya Pylayeva, New York University School of Medicine, New York, N.Y. e-mail: pylayy01@nyumc.org
SciBX 2(4); doi:10.1038/scibx.2009.129 Published online Jan. 29, 2009				