This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Cyclin-dependent kinase inhibitor 1A (p21; Cip1); cyclin-dependent kinases (CDKs); estrogen receptor (ER)	In vitro studies showed that loss of p21 function in breast cancer cells can cause tamoxifen resistance. p21 knockout in immortalized human breast epithelial cells led to an increased proliferative response to tamoxifen. In contrast, tamoxifen inhibited growth of wild-type cells. Downstream hyperphosphorylation of ERs partly mediated tamoxifen-stimulated cell proliferation. The researchers are now identifying compounds that are selectively cytotoxic to tamoxifen-resistant cells. The compounds should next be characterized in animal models of breast cancer.	Patent applications filed covering the resistant cell lines and compounds that target tamoxifen-resistant, p21-null cells; available for licensing	Abukhdeir, A. *et al. Proc. Nat. Acad. Sci. USA*; published online Jan. 7, 2008; doi:10.1073/pnas.0710887105 **Contact:** Ben Ho Park, The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Johns Hopkins University School of Medicine, Baltimore, Md. e-mail: bpark2@jhmi.edu **Contact:** Kurtis E. Bachman, GlaxoSmithKline, King of Prussia, Pa. e-mail: kurtis.e.bachman@gsk.com