This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Impact of receptor tyrosine kinase (RTK) ligands on sensitivity of human tumor-derived cell lines to kinase inhibitors	<p>Analysis of the impact of RTK ligands on sensitivity of human tumor-derived cell lines to kinase inhibitors could guide combination therapy to prevent drug resistance. In about half of <i>BRAF</i> mutant melanoma cell lines, the RTK ligand hepatocyte growth factor/scatter factor (HGF/SF) induced c-Met proto-oncogene (MET; HGFR) expression and resistance to the BRAF inhibitor Zelboraf vemurafenib. In these cell lines, co-treatment with the MET kinase inhibitor Xalkori crizotinib prevented resistance to Zelboraf. In patients with <i>BRAF</i> mutant melanoma, increased plasma HGF/SF levels correlated with poorer survival outcomes than normal HGF/SF levels. Next steps include analyzing the effects of RTK ligands on larger numbers of kinase-activated, human tumor-derived cell lines.</p> <p>Zelboraf, from Daiichi Sankyo Co. Ltd., Chugai Pharmaceutical Co. Ltd. and Roche, is marketed to treat melanoma, in Phase I testing for colorectal cancer and in Phase II testing for thyroid cancer.</p> <p>Xalkori from Pfizer Inc., which also inhibits anaplastic lymphoma kinase (ALK), is marketed to treat non-small cell lung cancer (NSCLC) and is in Phase I testing to treat solid tumors.</p> <p>SciBX 5(31); doi:10.1038/scibx.2012.825 Published online Aug. 9, 2012</p>	Patent and licensing status undisclosed	<p>Wilson, T.R. <i>et al. Nature</i>; published online July 4, 2012; doi:10.1038/nature11249 Contact: Jeffrey Settleman, Genentech Inc., South San Francisco, Calif. e-mail: settleman.jeffrey@gene.com</p>