This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Proteomic method for developing rational combinations of kinase inhibitors	<p>A proteomic method could aid the development of rational combinations of kinase inhibitors to treat cancer. A mass spectrometry method profiled the activities of kinases in cell lines and in a genetically engineered mouse model of triple-negative breast cancer before and after treatment with AZD6244. The approach identified AZD6244-induced increases in the activity of multiple kinases, including those known to be blocked by Nexavar sorafenib. In the mouse model, AZD6244 plus Nexavar increased tumor regression compared with either agent alone. Next steps include using the approach to look at changes in kinase activities in the tumor tissue of patients with breast cancer treated with trametinib.</p> <p>AstraZeneca plc and Array BioPharma Inc. are running Phase II studies of the MAP kinase kinase 1 (MAP2K1; MEK1) and MAP2K2 (MEK2) dual inhibitor AZD6244 (ARRY-886) for multiple cancers.</p> <p>At least nine other companies have MEK1 and/or MEK2 inhibitors in clinical testing in cancer.</p> <p>Nexavar sorafenib, a multitargeted kinase inhibitor from Onyx Pharmaceuticals Inc. and Bayer AG, is marketed to treat advanced renal cell carcinoma (RCC) and hepatocellular carcinoma.</p> <p>SciBX 5(21); doi:10.1038/scibx.2012.561 Published online May 24, 2012</p>	Patent application filed covering technology; available for licensing	<p>Duncan, J.S. <i>et al. Cell</i>; published online April 13, 2012; doi:10.1016/j.cell.2012.02.053</p> <p>Contact: Gary L. Johnson, The University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, N.C. e-mail: glj@med.unc.edu</p>