This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
Intronic deletions in <i>BCL2-like 11 apoptosis facilitator</i> (<i>BCL2L11</i> ; <i>BIM</i>) as a marker for tyrosine kinase inhibitor drug resistance and bcl2 homology domain 3 (BH3) mimetic sensitivity	<p>Patient and cell culture studies identified an intronic deletion in <i>BIM</i> that could help predict resistance to tyrosine kinase inhibitors and sensitivity to BH3 mimetics in chronic myelogenous leukemia (CML) and non-small cell lung cancer (NSCLC). In samples from 203 patients with CML, genetic analysis identified an intronic deletion in <i>BIM</i> that was associated with resistance to Gleevec imatinib ($p=0.02$). An epidermal growth factor receptor (EGFR)-driven human NSCLC cell line carrying the deletion showed less sensitivity to the EGFR inhibitor Iressa gefitinib than a cell line without the deletion. In both CML and NSCLC cell lines carrying the deletion, the BH3 mimetic ABT-737 restored sensitivity to imatinib and gefitinib, respectively. Next steps could include screening additional cancers for <i>BIM</i> intronic deletions.</p> <p>ABT-737 is a research reagent from Abbott Laboratories.</p> <p>AstraZeneca plc markets Iressa in the EU for NSCLC.</p> <p>Novartis AG markets Gleevec to treat CML and gastrointestinal stromal tumors.</p> <p>Navitoclax (ABT-263), a BH3 mimetic and B cell lymphoma 2 (BCL-2; BCL2) protein antagonist from Abbott Laboratories and Roche's Genentech Inc. unit, is in Phase I/II testing to treat cancer.</p> <p>SciBX 5(14); doi:10.1038/scibx.2012.378 Published online April 5, 2012</p>	<p>Patent application filed; available for licensing from Exploit Technologies Pte. Ltd., the technology commercialization arm of the Agency for Science, Technology and Research (A*STAR)</p>	<p>Ng, K.P. <i>et al. Nat. Med.</i>; published online March 18, 2012; doi:10.1038/nm.2713 Contact: S. Tiong Ong, Duke-National University of Singapore Graduate Medical School, Singapore e-mail: sintiong.ong@duke-nus.edu.sg Contact: King Pan Ng, same affiliation as above e-mail: dmolwt@nccs.com.sg Contact: Yijun Ruan, Genome Institute of Singapore, Singapore e-mail: ruanyj@gis.a-star.edu.sg</p>