This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
Genetically engineered mouse models of cancer	<p>Genetically engineered mouse models of cancer could be useful for evaluating strategies to treat drug-resistant tumors. Using an engineered mouse model of BRCA1-associated breast cancer, long-term treatment with AZD2281 led to the development of AZD2281-resistant tumors. Tumors in that model had features of human BRCA1-associated breast cancer. The AZD2281 resistance in the mouse was reversed by coadministration of a P-glycoprotein inhibitor. Also, AZD2281 plus platinum drugs improved both recurrence-free and overall survival compared with what was seen in untreated control mice. These results suggest the model could be used to evaluate strategies to overcome or avoid drug resistance. Next steps include generating additional mouse models to test which resistance mechanisms arise in response to new drugs.</p> <p>AZD2281, a poly(ADP-ribose) polymerase (PARP) inhibitor from AstraZeneca plc, is in Phase II trials to treat breast and ovarian cancer.</p> <p>SciBX 1(41); doi:10.1038/scibx.2008.1006 Published online Nov. 13, 2008</p>	Unpatented; available for nonexclusive licensing	<p>Rottenberg, S. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 27, 2008; doi:10.1073/pnas.0806092105 Contact: Jos Jonkers, The Netherlands Cancer Institute, Amsterdam, the Netherlands e-mail: j.jonkers@nki.nl</p>