This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
Cyclin-dependent kinase 12 (CDK12) loss-of-function mutations as predictors of poly(ADP-ribose) polymerase (PARP) inhibitor response	*In vitro* and mouse studies suggest CDK12 mutations could help predict tumor response to PARP inhibitors. CDK12 mutations have previously been detected in patients with ovarian cancer. In mice with ovarian cancer xenografts, CDK12-targeting shRNA combined with the PARP-1 and PARP-2 inhibitor olaparib decreased tumor volume compared with control shRNA plus olaparib. Next steps include testing CDK12 as a biomarker in tumor samples from clinical trials of PARP inhibitors. AstraZeneca plc's olaparib is in Phase III testing to treat breast cancer early onset (BRCA)-mutant ovarian cancer. Tesaro Inc. has the PARP inhibitor niraparib in Phase III testing for BRCA-mutant ovarian cancer and breast cancer. BioMarin Pharmaceutical Inc. has the PARP inhibitor BMN-673 in Phase III testing for BRCA-mutant breast cancer. At least eight other companies have PARP inhibitors in Phase II testing or earlier for cancer indications. *SciBX* 7(1); doi:10.1038/scibx.2014.38 Published online Jan. 9, 2014	Unpatented; unavailable for licensing	Bajrami, I. *et al. Cancer Res.*; published online Nov. 15, 2013; doi:10.1158/0008-5472.CAN-13-2541 **Contact:** Christopher J. Lord, The Institute of Cancer Research, London, U.K. e-mail: chris.lord@icr.ac.uk