This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Poly(ADP-ribose) polymerase (PARP); cyclin-dependent kinase 5 (CDK5)	A high throughput RNAi knockdown screen identified multiple kinases that could potentially be targeted to enhance tumor sensitivity to chemotherapeutics. The short interfering RNA screen identified 24 kinases that, when targeted and silenced, caused the breast cancer cell line CAL51 to be more sensitive to the cytotoxic effects of KU0058948, a PARP inhibitor, than were cells that received nontargeting siRNA (for all $Z<3$, or $p<0.00135$). Several of the kinases had known roles in the DNA damage response, including CDK5. Next steps include developing compounds that specifically inhibit the identified targets. AZD2281 from AstraZeneca plc and BSI-201 from BiPar Sciences Inc. are PARP inhibitors in Phase II testing to treat multiple cancers.	Patent application filed for sensitizing cancerous cells to PARP inhibitors; available for licensing from The Institute of Cancer Research enterprise unit	Turner, N.C. *et al. EMBO J.*; published online April 3, 2008; doi:10.1038/emboj.2008.61 **Contact:** Alan Ashworth, The Breakthrough Breast Cancer Research Centre, The Institute of Cancer Research, London, U.K. e-mail: alan.ashworth@icr.ac.uk