This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Cell-penetrating, DNA-targeting systemic lupus erythematosus (SLE) autoantibody 3E10 for sensitizing cancers to DNA-damaging agents	<p><i>In vitro</i> and mouse studies suggest lupus autoantibodies targeting DNA could help sensitize tumors to DNA-damaging agents. In human breast cancer and glioma cells and in a mouse xenograft model of human glioma, the DNA-targeting SLE autoantibody 3E10 plus ionizing radiation or doxorubicin increased cell death and tumor suppression compared with radiation or doxorubicin alone. In DNA binding assays, 3E10 bound single-stranded DNA and inhibited DNA repair. In cancer cells with <i>breast cancer 2 early onset (BRCA2)</i> mutations that impair DNA-damage responses, 3E10 alone showed cytotoxicity. Next steps include identifying tumor types most sensitive to the autoantibody.</p> <p>SciBX 5(43); doi:10.1038/scibx.2012.1148 Published online Nov. 1, 2012</p>	Patent application filed covering use of cell-penetrating autoantibodies to treat cancer; available for licensing	<p>Hansen, J.E. <i>et al. Sci. Transl. Med.</i>; published online Oct. 24, 2012; doi:10.1126/scitranslmed.3004385</p> <p>Contact: Peter M. Glazer, Yale School of Medicine, New Haven, Conn. e-mail: peter.glazer@yale.edu</p>