

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Breast cancer	Breast cancer 1 early onset (BRCA1)	<p><i>In vitro</i> and mouse studies suggest small molecules that promote DNA repair could help prevent progression of <i>BRCA1</i><sup>+</sup> cancers. In an <i>in vitro</i> chemical screen, acetohexamide and benserazide were identified as compounds that increased DNA repair of a damaged reporter gene in <i>BRCA1</i>-mutant cells. In cultured <i>BRCA1</i>-mutant cancer cells, benserazide decreased colony formation compared with vehicle without affecting cell viability. In a mouse xenograft model of <i>BRCA1</i>-mutant cancer, benserazide delayed tumor formation and decreased metastasis compared with vehicle. Next steps could include identifying the molecular targets of the identified DNA repair-activating agents. Roche markets Madopar, a combination of benserazide and levodopa, to treat Parkinson's disease (PD). Acetohexamide is a generic sulfonylurea used to treat diabetes. The drug has been discontinued in the U.S.</p> <p><b>SciBX 7(40); doi:10.1038/scibx.2014.1171</b>  <b>Published online Oct. 16, 2014</b></p>	Patent pending; licensing status unavailable	<p>Alli, E. <i>et al. Cancer Res.</i>; published online Sept. 12, 2014;            doi:10.1158/0008-5472.CAN-14-1716  <b>Contact:</b> James M. Ford, Stanford University, Stanford, Calif.            e-mail:  <a href="mailto:jmf@stanford.edu">jmf@stanford.edu</a></p>