This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Myeloid leukemia cell differentiation protein (MCL-1); tumor necrosis factor-related apoptosis-inducing ligand (TRAIL)	<p>A study in cell culture suggests that inhibiting MCL-1 signaling could help prevent resistance to TRAIL-targeting cancer therapeutics. In TRAIL-resistant human colorectal and prostate cancer cell lines, small interfering RNA-mediated knockdown of MCL-1 increased TRAIL-induced apoptosis compared with control siRNA treatment. Next steps could include evaluating small molecule MCL-1 inhibitors in combination with TRAIL-targeted therapeutics in animal models of cancer.</p> <p>ChemGenex Pharmaceuticals Ltd. and Hospira Inc. are developing Omapro omacetaxine mepesuccinate, a small molecule that inhibits synthesis of oncoproteins including MCL-1. The compound is under FDA review for chronic myelogenous leukemia (CML).</p> <p>Ascenta Therapeutics Inc.'s AT-101, a small molecule inhibitor of the B cell lymphoma 2 (BCL-2; BCL2) family of proteins including MCL-1, is in Phase II testing to treat cancer.</p> <p>SciBX 3(14); doi:10.1038/scibx.2010.429 Published online April 8, 2010</p>	Patent and licensing status unavailable	<p>Gillissen, B. <i>et al.</i> <i>J. Cell Biol.</i>; published online March 15, 2010; doi:10.1083/jcb.200912070</p> <p>Contact: Peter T. Daniel, Humboldt University, Berlin, Germany e-mail: pdaniel@mdc-berlin.de</p>