This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	B cell lymphoma 2 (BCL-2; BCL2); BCL-X _L ; myeloid leukemia cell differentiation protein (MCL-1); BCL2-related protein A1 (BCL2A1; BFL1)	<p><i>In vitro</i> and mouse studies identified a pan-BCL-2 inhibitor that could help treat cancer. <i>In vitro</i>, the lead analogs of gossypol, a pan-inhibitor of BCL-2, inhibited BCL-2, BCL-X_L, MCL-1 and BCL2A1 at low micromolar concentrations. In human prostate, lung, lymphoma and leukemia cell lines, the lead analog was cytotoxic with low to submicromolar EC₅₀ values. In mice bearing xenograft prostate tumors, the lead analog decreased tumor growth compared with gossypol. Planned work includes testing the lead analog in animal models of leukemia, lymphoma, melanoma, breast and lung cancers.</p> <p>AT-101, a small molecule pan-inhibitor of the BCL-2 family of proteins from Ascenta Therapeutics Inc., is in Phase I/II and Phase II testing to treat multiple cancers, including prostate, lung and brain cancers and B cell malignancies.</p> <p>Obatoclax (GX15-070), an i.v. formulation of a small molecule pan-inhibitor of the BCL-2 family of proteins from Gemin X Pharmaceuticals Inc., is in Phase I and Phase II testing to treat multiple solid tumor cancers and hematological malignancies.</p> <p>SciBX 3(44); doi:10.1038/scibx.2010.1318 Published online Nov. 11, 2010</p>	Patented by the Sanford-Burnham Medical Research Institute; available for licensing	<p>Wei, J. <i>et al. J. Med. Chem.</i>; published online Oct. 29, 2010; doi:10.1021/jm100746q Contact: Maurizio Pellicchia, Sanford-Burnham Medical Research Institute, La Jolla, Calif. e-mail: mpellicchia@sanfordburnham.org</p>