This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Lung cancer	B cell lymphoma 2 (BCL-2; BCL2); Bcl-x _L	<p><i>In vitro</i> and mouse studies suggest a class of dual BCL2 and Bcl-x_L inhibitors could help treat lung cancer. Chemical synthesis, SAR studies and <i>in vitro</i> testing of 4,5-diphenyl-1H-pyrrole-3-carboxylic acid analogs identified several lead compounds as low nanomolar dual BCL2 and Bcl-x_L inhibitors. In a human small cell lung cancer cell line, the lead compounds induced dose-dependent apoptosis. In mice with xenograft small cell lung cancer tumors, one lead compound decreased tumor growth compared with vehicle without significant toxicity. Future studies could include testing the lead compounds in animal models of other cancers.</p> <p>AT-101, a small molecule pan-inhibitor of BCL-family proteins from Ascenta Therapeutics Inc. and Ascentage Pharma Group Corp. Ltd., is in Phase II testing to treat prostate and brain cancers, non-small cell lung cancer (NSCLC), chronic lymphocytic leukemia (CLL) and non-Hodgkin's lymphoma (NHL). It is also in Phase I/II testing to treat small cell lung cancer and esophageal cancer.</p> <p>Obatoclax (CEP-41601; GX15-070), a small molecule BCL2 antagonist from Teva Pharmaceutical Industries Ltd., is in Phase II testing to treat small cell lung cancer.</p> <p>Navitoclax (ABT-263; RG7433), a pan-inhibitor of BCL2-family proteins from Abbott Laboratories and Roche's Genentech Inc. unit, is in Phase I/II testing to treat small cell lung cancer.</p> <p>SciBX 5(29); doi:10.1038/scibx.2012.753 Published online July 26, 2012</p>	Patent and licensing status unavailable	<p>Zhou, H. <i>et al.</i> <i>J. Med. Chem.</i>; published online July 2, 2012; doi:10.1021/jm300608w Contact: Shaomeng Wang, University of Michigan, Ann Arbor, Mich. e-mail: shaomeng@umich.edu Contact: Jeanne A. Stuckey, same affiliation as above e-mail: jass@umich.edu</p>