

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Leukemia	B cell lymphoma 2 (BCL-2; BCL2)	<p>Mouse and cell culture studies suggest BCL-2 inhibitors could be useful for selectively killing leukemia stem cells. In mice engrafted with human chronic myelogenous leukemia (CML) stem cells, the pan-BCL-2 inhibitor sabutoclax decreased stem cell burden and increased stem cell sensitivity to the tyrosine kinase inhibitor Sprycel dasatinib compared with vehicle. In CML stem cell-enriched primary acute myelogenous leukemia (AML) samples, compared with non-stem cell-enriched AML samples, two related BCL-2 inhibitors, ABT-263 and ABT-737, caused selective increases in cell death. Next steps could include a clinical trial of BCL-2 inhibitors in combination with other antileukemia therapies. Bristol-Myers Squibb Co. markets Sprycel to treat acute lymphoblastic leukemia (ALL) and CML. Abbott Laboratories and Roche's Genentech Inc. unit have ABT-263 in Phase I/II testing or earlier to treat various cancers. ABT-737 is a research reagent from Abbott. Oncothyreon Inc.'s sabutoclax is in preclinical development to treat cancer. At least seven other companies have BCL-2 inhibitors in Phase II testing to treat various cancers including leukemia and lymphoma.</p> <p>SciBX 6(5); doi:10.1038/scibx.2013.113 Published online Feb. 7, 2013</p>	Patent and licensing status unavailable	<p>Goff, D.J. <i>et al. Cell Stem Cell</i>; published online Jan. 17, 2013; doi:10.1016/j.stem.2012.12.011 Contact: Catriona H.M. Jamieson, University of California, San Diego, La Jolla, Calif. e-mail: cjamieson@ucsd.edu</p> <p>Lagadinou, E.D. <i>et al. Cell Stem Cell</i>; published online Jan. 17, 2013; doi:10.1016/j.stem.2012.12.013 Contact: Craig T. Jordan, University of Rochester Medical Center, Rochester, N.Y. e-mail: craig_jordan@urmc.rochester.edu</p>