This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Chronic myelogenous leukemia (CML)	β -Catenin (CTNNB1)	<p>Mouse studies suggest inhibiting CTNNB1 could help treat CML. In Gleevec-treated mouse models of CML, <i>Ctnnb1</i> knockout led to lower disease burden than wild-type <i>Ctnnb1</i> expression and delayed disease progression. In mouse models of CML, bone marrow transplants from donors co-treated with Gleevec plus the CTNNB1 inhibitor indomethacin delayed disease onset and led to lower leukemic stem cell counts and longer survival compared with transplants from donors treated with Gleevec alone. Planned work includes elucidating the effect of CTNNB1 inhibition on CML stem cells.</p> <p>Novartis AG markets the BCR-ABL tyrosine kinase inhibitor Gleevec imatinib to treat CML, acute lymphoblastic leukemia (ALL) and other hematological malignancies and cancers.</p> <p>The generic NSAID indomethacin is marketed to treat fever, pain and inflammation.</p> <p>CEQ508, an oral RNAi targeting <i>CTNNB1</i> delivered using transKingdom RNAi (tkRNAi) technology from Marina Biotech Inc., is in Phase I/II testing to treat colorectal cancer.</p> <p>PRI-724, a CTNNB1 inhibitor from Prism BioLab Corp. and Eisai Co. Ltd., is in Phase I testing to treat solid tumors.</p> <p>EZN-3892, a <i>CTNNB1</i> RNA antagonist based on locked nucleic acid (LNA) technology from Santaris Pharma A/S and Enzon Pharmaceuticals Inc., is in preclinical testing to treat lung, colorectal and other cancers.</p> <p>SciBX 5(15); doi:10.1038/scibx.2012.388 Published online April 12, 2012</p>	Unpatented; available for partnering	<p>Heidel, F.H. <i>et al. Cell Stem Cell</i>; published online April 6, 2012; doi:10.1016/j.stem.2012.02.017</p> <p>Contact: Scott A. Armstrong, Children's Hospital Boston, Boston, Mass. e-mail: scott.armstrong@childrens.harvard.edu</p>