This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Mammalian target of rapamycin complex 1 (mTORC1); mTORC2	<p>An SAR study suggests dual-specificity inhibitors of mTORC1 and mTORC2 could help treat cancer. <i>In vitro</i> lead optimization studies identified benzoxazepine-based compounds that were nanomolar inhibitors of both mTORC1 and mTORC2 but not of phosphoinositide 3-kinase (PI3K). In a mouse xenograft model, the lead compound, XL388, decreased tumor growth compared with vehicle control. Next steps could include further optimization or IND-enabling studies.</p> <p>Exelixis Inc.'s XL388 is in preclinical development for cancer indications.</p> <p>Takeda Pharmaceutical Co. Ltd.'s INK128, an inhibitor of mTORC1 and mTORC2, is in Phase I testing for various cancers.</p> <p>SciBX 6(9); doi:10.1038/scibx.2013.213 Published online March 7, 2013</p>	Patented by Exelixis; available for partnering or licensing	<p>Takeuchi, C.S. <i>et al. J. Med. Chem.</i>; published online Feb. 8, 2013; doi:10.1021/jm3007933</p> <p>Contact: James W. Leahy, University of South Florida, Tampa, Fla. e-mail: jwleahy@usf.edu</p> <p>Contact: Byung Gyu Kim, Asan Institute for Life Science, Seoul, South Korea e-mail: byunggyu72kim@gmail.com</p>