This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Colorectal cancer	Mammalian target of rapamycin (mTOR; FRAP; RAFT1); protein phosphatase 2 regulatory subunit B β (PPP2R2B); 3-phosphoinositide-dependent protein kinase-1 (PDPK1; PDK1); c-Myc	<p>Studies in mice and in cell culture suggest that inhibiting <i>PDK1</i> could sensitize <i>c-Myc</i>-driven colorectal cancers to the mTOR inhibitor rapamycin. In human colorectal cancer cell lines, small molecule inhibition of PDK1 lowered resistance to rapamycin compared with vehicle control administration. Next steps include evaluating the combination of a PDK1 inhibitor with an mTOR inhibitor in additional animal cancer models.</p> <p>Pfizer Inc. markets Rapamune rapamycin (sirolimus) to prevent organ rejection in renal transplantation.</p> <p>AR-12, a small molecule PDK1 inhibitor that blocks the phosphoinositide 3-kinase (PI3K) and protein kinase B (PKB; Akt) pathway from Arno Therapeutics Inc., is in Phase I testing for lymphoma and solid tumors.</p> <p>SciBX 3(47); doi:10.1038/scibx.2010.1409 Published online Dec. 9, 2010</p>	Patent application filed; available for licensing	<p>Tan, J. <i>et al. Cancer Cell</i>; published online Nov. 16, 2010; doi:10.1016/j.ccr.2010.10.021</p> <p>Contact: Qiang Yu, Genome Institute of Singapore, Agency for Science, Technology and Research, Biopolis, Singapore e-mail: yuq@gis.a-star.edu.sg</p>