This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Baculoviral IAP repeat-containing 2 (BIRC2; cIAP1); cIAP2 (BIRC3); diablo homolog (DIABLO; SMAC); X-linked inhibitor of apoptosis (XIAP)	<p>Rodent and <i>in vitro</i> studies identified an orally bioavailable, bivalent SMAC mimetic that could help treat cancer. <i>In vitro</i>, the bivalent SMAC mimetic SM-1200 bound to cIAP1, cIAP2 and XIAP and inhibited growth of human breast and ovarian cancer cell lines with nanomolar IC₅₀ values. In rats, SM-1200 showed greater oral bioavailability than related bivalent mimetics. In a mouse xenograft model for human breast cancer, SM-1200 caused greater tumor regression than docetaxel. Next steps include <i>in vivo</i> studies to evaluate SM-1200 and related analogs as monotherapy or in combination with other drugs in cancer models.</p> <p>Ascentage Pharma Group Corp. Ltd. and 3SBio Inc. have a multi-cIAP inhibitor in preclinical development to treat solid tumors.</p> <p>At least seven companies have SMAC mimetics in Phase II testing or earlier to treat various cancers.</p> <p>SciBX 6(21); doi:10.1038/scibx.2013.512 Published online May 30, 2013</p>	Patented by the University of Michigan; licensed to Ascentage Pharma Group	<p>Sheng, R. <i>et al. J. Med. Chem.</i>; published online May 7, 2013; doi:10.1021/jm400216d</p> <p>Contact: Shaomeng Wang, University of Michigan, Ann Arbor, Mich. e-mail: shaomeng@umich.edu</p>