This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Topoisomerase II (TOP2)	<p><i>In vitro</i> studies identified a new class of naphthalimides that could help treat cancer. In cancer cell lines, the naphthalimide derivatives had better antiproliferative activity than Xanafide amonafide, a naphthalimide compound in Phase III testing. In cell-free assays, the derivatives worked by two distinct anticancer mechanisms: inhibition of TOP2 and induction of lysosomal membrane permeabilization. Next steps could include testing the naphthalimides in animal models of cancer. At least 16 companies have TOP2 inhibitors in development stages ranging from preclinical to marketed to treat cancers. Antisoma plc has Xanafide in Phase III testing for acute myelogenous leukemia (AML).</p> <p>SciBX 3(10); doi:10.1038/scibx.2010.303 Published online March 11, 2010</p>	Patent and licensing status unavailable	<p>Chen, Z. <i>et al. J. Med. Chem.</i>; published online Feb. 19, 2010; doi:10.1021/jm100025u</p> <p>Contact: Xuhong Qian, East China University of Science and Technology, Shanghai, China e-mail: xhqian@ecust.edu.cn</p> <p>Contact: Yufang Xu, same affiliation as above e-mail: yfxu@ecust.edu.cn</p>