This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	BCL2-associated X protein (BAX); BCL2-like 11 (apoptosis facilitator) (BCL2L11; BIM)	<p><i>In vitro</i> studies suggest that a proapoptotic site on BAX could be targeted to induce apoptosis and treat cancer. NMR identified the interaction domain between BAX and an α-helix of BCL-2 domains (BIM SAHB) that is known to initiate BAX-mediated mitochondrial apoptosis. BAX mutagenesis at the BIM binding site prevented BAX activation, lowered BAX-induced apoptosis of mouse embryonic fibroblasts and lowered staurosporine-induced apoptosis compared with what was seen in nonmutated controls. Further preclinical optimization of properties including tumor selectivity and pharmacokinetics are necessary before the peptide can enter clinical testing.</p> <p>No fewer than 11 companies have compounds targeting antiapoptotic BCL-2 in clinical and preclinical development to treat various cancers.</p> <p>SciBX 1(39); doi:10.1038/scibx.2008.943 Published online Oct. 30, 2008</p>	Stapled peptides patented by Aileron Therapeutics Inc.; licensed to Aileron	<p>Gavathiotis, E. <i>et al. Nature</i>; published online Oct. 22, 2008; doi:10.1038/nature07396</p> <p>Contact: Loren D. Walensky, Harvard Medical School, Boston, Mass. e-mail: loren_walensky@dfci.harvard.edu</p> <p>Contact: Nico Tjandra, National Institutes of Health, Bethesda, Md. e-mail: tjandran@nhlbi.nih.gov</p>