

## This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Cancer	Procaspase-3	<p><i>In vitro</i> and mouse studies suggest combining compounds that activate procaspase-3 by different mechanisms could help treat cancer. The compound PAC-1 activates procaspase-3 by chelating inhibitory zinc, whereas the compound 1541B activates procaspase-3 by promoting enzyme maturation. In human lymphoma, breast cancer and lung cancer cell lines, a combination of 1541B and PAC-1 increased caspase activation faster and more potently than either agent alone. In multiple mouse and human cancer cell lines, 1541B and PAC-1 synergistically increased procaspase-3 activity and cell death. In a mouse xenograft model of lymphoma, the combination of 1541B and PAC-1 decreased tumor size more than either agent alone. Next steps could include optimizing 1541B and PAC-1 and testing the combination in additional tumor models.</p> <p><b>SciBX 7(7); doi:10.1038/scibx.2014.195</b> <b>Published online Feb. 20, 2014</b></p>	Patent and licensing status unavailable	Botham, R.C. <i>et al. J. Am. Chem. Soc.</i> ; published online Jan. 2, 2014; doi:10.1021/ja4124303 <b>Contact:</b> Paul J. Hergenrother, University of Illinois at Urbana-Champaign, Urbana, Ill. e-mail: <a href="mailto:hergenro@illinois.edu">hergenro@illinois.edu</a>