This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Multidrug resistance 1 gene (MDR1)	<p>An <i>in vitro</i> study suggests that a series of diltiazem-derived MDR1 inhibitors could help treat multidrug resistant cancer. In a resistant ovarian cancer cell line, several 8-aryl-8-alkoxy-5-methyl-8<i>H</i>-[1,4]thiazino[3,4-<i>c</i>][1,2,4]oxadiazol-3-ones increased intracellular accumulation of doxorubicin compared with using doxorubicin alone. Next steps include synthesizing new diltiazem analogs with higher activity and evaluating their toxicity <i>in vivo</i>. Diltiazem is a generic, L-type Ca²⁺ channel blocker approved for angina and hypertension. Myocet doxorubicin, a liposomal formulation of doxorubicin from Cephalon Inc. and Sopherion Therapeutics Inc., is marketed to treat breast cancer. Doxil liposomal doxorubicin from Johnson & Johnson and Schering-Plough Corp. is marketed to treat various cancers.</p> <p>SciBX 2(2); doi:10.1038/scibx.2009.44 Published online Jan. 15, 2009</p>	Unpatented; unlicensed	<p>Viale, M. <i>et al.</i> <i>J. Med. Chem.</i>; published online Dec. 19, 2008; doi:10.1021/jm801195k</p> <p>Contact: Domenico Spinelli, University of Bologna, Bologna, Italy e-mail: domenico.spinelli@unibo.it</p>