This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	ATP-binding cassette, sub-family B (MDR/TAP) member 1 (ABCB1; PGP); ATP-binding cassette sub-family C (CFTR/MRP) member 1 (ABCC1; MRP1)	<p>A study in cell culture identified multidrug resistant (MDR) cancer inhibitors that could be useful for treating drug-resistant cancers. MDR is thought to originate from a cellular efflux of cancer therapeutics by proteins such as PGP and MRP1. In doxorubicin-resistant PGP-expressing erythroleukemia cells, 3 μM of one of the inhibitors lowered the IC_{50} of doxorubicin to 0.078 μM from 2.84 μM for doxorubicin alone. Next steps include evaluating the inhibitors in additional drug-resistant preclinical cancer models.</p> <p>Oraxol, an oral formulation of paclitaxel and ABCB1 inhibitor HM30181A from Hanmi Pharmaceuticals Co. Ltd., is in Phase I testing to treat cancer.</p> <p>Oratecan, an oral formulation of irinotecan and HM30181A also from Hanmi, is in preclinical testing to treat cancer.</p> <p>SciBX 2(6); doi:10.1038/scibx.2009.221 Published online Feb. 12, 2009</p>	Patent and licensing status unavailable	<p>Martelli, C. <i>et al. J. Med. Chem.</i>; published online Jan. 13, 2009; doi:10.1021/jm8012745</p> <p>Contact: Elisabetta Teodori, University of Firenze, Sesto Fiorentino, Italy e-mail: elisabetta.teodori@unifi.it</p>