This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Bone cancer	Cathepsin B	<p><i>In vitro</i> and mouse studies have identified a bone-targeting doxorubicin prodrug that could help treat bone metastasis. The prodrug contains a bone-targeting bisphosphonate ligand and an acid-sensitive or cathepsin B-cleavable linker to release doxorubicin specifically in bone. In binding assays, the prodrug specifically bound hydroxyapatite or native bone, had high plasma stability and released doxorubicin under acidic or cathepsin B-containing conditions. In mice, the maximum tolerable dose of the prodrug was three times higher than that of doxorubicin. Next steps could include testing the prodrug in bone metastasis models.</p> <p>SciBX 5(37); doi:10.1038/scibx.2012.976 Published online Sept. 20, 2012</p>	Patent and licensing status unavailable	<p>Hochdörffer, K. <i>et al. J. Med. Chem.</i>; published online Aug. 13, 2012; doi:10.1021/jm300493m Contact: Felix Kratz, Tumor Biology Center, Freiburg, Germany e-mail: kratz@tumorbio.uni-freiburg.de</p>