This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Cathepsin S	<p>Studies in patient samples and mice suggest inhibiting cathepsin S could help prevent cancer metastasis to the brain. In tissue samples from patients with breast cancer, high cathepsin S levels were associated with decreased metastasis-free survival. In a mouse model of brain metastasis, depletion of cathepsin S expression in both tumor and stromal cells decreased the incidence of brain metastasis compared with depletion of cathepsin S in just one of the two cell populations. In the mouse model, cathepsin S promoted the transmigration of metastatic cancer cells across the blood brain barrier. Next steps include elucidating the mechanism by which cathepsin S promotes metastasis.</p> <p>Virobay Inc. has the oral cathepsin S inhibitors VBY-891 and VBY-036 in Phase I trials to treat psoriasis and pain, respectively.</p> <p>Medivir AB's cathepsin S inhibitor, MIV-247, is in preclinical development for pain.</p> <p>SciBX 7(34); doi:10.1038/scibx.2014.1008 Published online Sept. 4, 2014</p>	Patent pending; available for licensing	<p>Sevenich, L. <i>et al. Nat. Cell Biol.</i>; published online Aug. 3, 2014; doi:10.1038/ncb3011 Contact: Johanna A. Joyce, Memorial Sloan-Kettering Cancer Center, New York, N.Y. e-mail: johanna@joycelab.org</p>