This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Bone metastases	MicroRNA-141 (miR-141); miR-219	<p>Cell culture and mouse studies suggest miR-141 and miR-219 could help prevent bone metastases. In cultured pre-osteoclasts, conditioned medium from highly metastatic tumors induced osteoclast differentiation, whereas medium from weakly metastatic tumors did not. miRNA profiling identified 5 miRNAs, including miR-141 and miR-219, that were downregulated during osteoclast differentiation. Overexpression of any of the miRNAs in cultured pre-osteoclasts decreased conditioned medium-induced differentiation compared with normal expression. In mouse xenograft models of bone metastasis, miR-141 and miR-219 decreased metastatic tumor burden compared with saline. Next steps include improving the targeting of miRNA mimics to bone in mice.</p> <p>SciBX 6(46); doi:10.1038/scibx.2013.1312 Published online Dec. 5, 2013</p>	Patent application filed; available for licensing	<p>Ell, B. <i>et al. Cancer Cell</i>; published online Oct. 14, 2013; doi:10.1016/j.ccr.2013.09.008 Contact: Yibin Kang, Princeton University, Princeton, N.J. e-mail: ykang@princeton.edu</p>