This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Acute myelogenous leukemia (AML)	Matrix metalloproteinase 9 (MMP9)	<p><i>In vitro</i> and mouse studies suggest that inhibiting proteins of the leukemia cell invadosome complex could help treat AML. <i>In vitro</i> assays identified MMP9 and integrin β_2 as two proteins within the invadosome protein complex. In AML xenograft mice, a hexapeptide inhibitor prevented MMP9 from binding to integrin β_2 and reduced leukemia cell accumulation in the bone marrow and medulla compared with scrambled peptide. The hexapeptide did not target the enzymatic site like available MMP inhibitors, indicating the peptide is a new class of MMP-targeting compounds. Next steps could include testing the peptide in animal models of AML.</p> <p>SciBX 2(32); doi:10.1038/scibx.2009.1235 Published online Aug. 20, 2009</p>	Patent and licensing status unavailable	<p>Stefanidakis, M. <i>et al. Blood</i>; published online July 27, 2009; doi:10.1182/blood-2008-04-148643</p> <p>Contact: Erkki Koivunen, The University of Texas M.D. Anderson Cancer Center, Houston, Texas e-mail: ekoivunen@mdanderson.org</p>