This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Integrin α_5 (CD49e); radixin (RDX); Ras homolog gene family member (RHOA)	<p><i>In vitro</i> and mouse studies suggest that inhibiting CD49e, RDX or RHOA could help prevent breast cancer metastasis. <i>In vitro</i>, human breast cancer cells given small hairpin RNA against <i>CD49e</i>, <i>RDX</i> or <i>RHOA</i> had reduced invasiveness and motility compared with cells expressing control shRNAs. In mice, implantation of cancer cells expressing shRNA against <i>Itga5</i>, <i>Rdx</i> or <i>Rhoa</i> decreased lung metastasis by 85%, 70% and 50%, respectively, compared with that in controls. Also in mice, suppression of all three genes at once resulted in less metastasis than was seen in controls expressing the three genes. Next steps could include developing therapeutics that target the three genes or their products.</p> <p>SciBX 2(45); doi:10.1038/scibx.2009.1655 Published online Nov. 19, 2009</p>	Patent and licensing status unavailable	<p>Valastyan, S. <i>et al. Genes Dev.</i>; published online Oct. 28, 2009; doi:10.1101/gad.1832709</p> <p>Contact: Robert A. Weinberg, Whitehead Institute for Biomedical Research, Cambridge, Mass. e-mail: weinberg@wi.mit.edu</p>