This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer; bone cancer	Vascular cell adhesion molecule-1 (VCAM-1); integrin α_4 (VLA-4; CD49D)	<i>In vitro</i>, mouse and human studies suggest inhibiting VCAM-1 or its receptor VLA-4 could help prevent bone metastases in breast cancer. In patients with breast cancer, higher VCAM-1 levels in primary tumors were associated with earlier relapse. In mouse models of metastatic breast cancer, VCAM-1 small hairpin RNA and antibodies against VCAM-1 and VLA-4 decreased the formation or growth of bone metastases compared with inactive controls. Next steps include testing anti-VLA-4 compounds from undisclosed companies in mouse models of metastatic breast cancer. Elan Corp. plc and Biogen Idec Inc. market Tysabri natalizumab, a humanized mAb against VLA-4, to treat multiple sclerosis (MS) and Crohn's disease. Firategrast, a VLA-4 antagonist from GlaxoSmithKline plc, is in Phase II testing to treat MS. ELND002, a humanized mAb against VLA-4 from Elan, is in Phase I/II testing to treat MS. SciBX 5(1); doi:10.1038/scibx.2012.9 Published online Jan. 5, 2012	Patented by Princeton University; available for licensing or partnering	Lu, X. <i>et al. Cancer Cell</i>; published online Dec. 1, 2011; doi:10.1016/j.ccr.2011.11.002 Contact: Yibin Kang, Princeton University, Princeton, N.J. e-mail: ykang@princeton.edu