This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Integrin $\alpha_4\beta_1$ (CD49D/CD29)	Human and mouse studies suggest inhibiting integrin $\alpha_4\beta_1$ could help prevent metastasis. In patient samples, integrin $\alpha_4\beta_1$ was expressed on 75% of lymphatic vessels from metastatic breast cancer samples and on 50% of lymphatic vessels from nonmetastatic breast cancer samples but at low levels in healthy samples. In mice with Lewis lung carcinoma, melanoma or pancreatic carcinoma cells, anti-integrin $\alpha_4\beta_1$ antibodies decreased metastasis compared with control antibodies. Next steps are to develop a human or humanized anti-integrin $\alpha_4\beta_1$ antibody for imaging lymph nodes associated with cancer and for therapeutic blockade of lymphangiogenesis and metastasis.	Therapeutic targeting and diagnostic analysis of vascular integrin $\alpha_4\beta_1$ patented; patent application filed for lymph node-specific findings; available for licensing	Garmy-Susini, B. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online May 13, 2013; doi:10.1073/pnas.1219603110 Contact: Judith Varner, University of California, San Diego, La Jolla, Calif. e-mail: jvarner@ucsd.edu
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