This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Syndecan-1 (SDC1); integrin $\alpha_v\beta_3$; integrin $\alpha_v\beta_5$	<p>Studies in human cells and in mice suggest that synstatin, a peptide derived from the cell-surface receptor SDC1, could treat cancer by inhibiting angiogenesis. In human vascular cells, synstatin disrupted interactions between SDC1 and integrins $\alpha_v\beta_3$ and $\alpha_v\beta_5$, which play known roles in angiogenesis. Synstatin also disrupted those interactions in mouse aortic tissue and prevented vascular growth, which decreased tumor growth, in a mouse model of mammary carcinoma. Ongoing work includes development of better synstatin mimetics. Merck KGaA's cilengitide, an inhibitor of integrins $\alpha_v\beta_3$ and $\alpha_v\beta_5$, is in Phase III testing to treat glioblastoma. At least four other companies have compounds targeting integrin $\alpha_v\beta_3$, α_v integrins or unspecific integrins in preclinical to early-stage clinical testing to treat various cancers.</p> <p>SciBX 2(10); doi:10.1038/scibx.2009.397 Published online March 12, 2009</p>	Patented; available for licensing	<p>Beauvais, D. <i>et al. J. Exp. Med.</i>; published online March 2, 2009; doi:10.1084/jem.20081278</p> <p>Contact: Alan C. Rapraeger, University of Wisconsin-Madison, Madison, Wis. e-mail: acraprae@wisc.edu</p>