

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Breast cancer	Matrix metalloproteinase 9 (MMP9)	<i>In vitro</i> , cell culture and mouse studies identified inhibitors of MMP9 dimerization that could help treat breast cancer. <i>In vitro</i> , computational modeling identified small molecules that specifically bound to MMP9 and inhibited its dimerization without blocking the enzyme's catalytic activity. In cultured breast cancer cells, the lead molecules prevented migration and proliferation compared with vehicle control. In a mouse xenograft model of breast cancer, intraperitoneal and intratumoral injection of a lead compound lowered metastasis compared with injection of vehicle control. Next steps include screening for more potent inhibitors of MMP9 dimerization	Patent application filed; available for licensing	Dufour, A. <i>et al. Cancer Res.</i> ; published online June 6, 2011; doi:10.1158/0008-5472.CAN-10-4552 <b>Contact:</b> Jian Cao, State University of New York at Stony Brook, Stony Brook, N.Y. e-mail: <a href="mailto:jian.cao@sunysb.edu">jian.cao@sunysb.edu</a>
		<b>SciBX 4(25); doi:10.1038/scibx.2011.703</b> Published online June 23, 2011		