This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	CXC chemokine receptor 1 (CXCR1)	<p><i>In vitro</i> and mouse studies suggest that blocking CXCR1 could eliminate cancer stem cells and help treat breast cancer. In human breast cancer cell lines, an anti-CXCR1 antibody or reparixin, a small molecule inhibitor of CXCR1 and CXCR2, depleted the cancer stem cell population and induced apoptosis in the bulk tumor population compared with vehicle control. In mice with human breast cancer xenografts, reparixin reduced tumor growth and metastasis compared with saline control. Next steps include studying CXCR1 inhibition in models of other types of cancer.</p> <p>Reparixin (formerly repertaxin), from Dompe Farmaceutici S.p.A., is expected to enter Phase II testing for an undisclosed indication in 3Q10. The compound previously missed the primary endpoint in two Phase II trials to prevent primary graft dysfunction following transplantation.</p> <p>SciBX 3(4); doi:10.1038/scibx.2010.111 Published online Jan. 28, 2010</p>	Findings patented; available for licensing from the University of Michigan	<p>Ginestier, C. <i>et al. J. Clin. Invest.</i>; published online Jan. 4, 2010; doi:10.1172/JCI39397</p> <p>Contact: Max S. Wicha, University of Michigan Comprehensive Cancer Center, Ann Arbor, Mich. e-mail: mwicha@umich.edu</p> <p>Contact: Christophe Ginestier, Institut National de la Santé et de la Recherche Médicale (INSERM), Marseille, France e-mail: christophe.ginestier@inserm.fr</p>