This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Chemokine CXC motif ligand 12 (CXCL12; SDF-1); CXC chemokine receptor 4 (CXCR4; NPY3R)	<p>Mouse studies suggest an oncolytic virus encoding a CXCR4 antagonist could help treat and prevent breast cancer metastasis. An oncolytic vaccinia virus was engineered to encode a fragment of the CXCR4 antagonist CTCE-9908 fused with a murine Fc fragment. In a mouse model for mammary cancer, i.v. treatment with the oncolytic virus decreased tumor volumes compared with treatment using the fusion protein itself or the same virus expressing a control protein. In a mouse model for metastatic mammary cancer, the oncolytic virus decreased lung metastases and increased survival compared with the same virus expressing a control protein. Next steps include evaluating the oncolytic virus therapy in combination with chemotherapy in breast cancer models.</p> <p>Chemokine Therapeutics Corp. previously tested CTCE-9908 in a Phase I/II trial in solid tumors, but the company has ceased operations.</p> <p>SciBX 6(13); doi:10.1038/scibx.2013.308 Published online April 4, 2013</p>	Patent application filed; licensing status undisclosed	<p>Gil, M. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 18, 2013; doi:10.1073/pnas.1220580110</p> <p>Contact: Danuta Kozbor, Roswell Park Cancer Institute, Buffalo, N.Y. e-mail: danuta.kozbor@roswellpark.org</p>