This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	Carbonic anhydrase IX (CAIX)	<p>Studies in mice identified two classes of small molecule CAIX inhibitors that could help treat breast cancer. In xenograft mice with a human breast cancer cell line, implantation of CAIX-depleted cells decreased tumor growth and increased survival compared with implantation of cells expressing control small hairpin RNA. In a mouse model of metastatic breast cancer, either of two classes of CAIX inhibitors lowered metastasis compared with vehicle controls. Next steps include testing inhibitors of CAIX in additional models of CAIX-expressing tumors and determining the pharmacokinetic and safety profiles of the compounds.</p> <p>Wilex AG's Rencarex girentuximab, a CAIX chimeric mAb, is in Phase III testing to treat renal cell carcinoma (RCC). A ¹²⁴I-labeled version of the antibody, Redectane girentuximab, is in Phase III trials to detect RCC.</p> <p>Bayer AG's BAY 79-4620, a CAIX antibody-cytotoxic compound conjugate, is in Phase I trials to treat cancer.</p> <p>Dendreon Corp.'s CA9-GM-CSF, an antigen delivery cassette technology targeting CAIX, is in preclinical development to treat kidney, colon and cervical cancer.</p> <p>SciBX 4(13); doi:10.1038/scibx.2011.361 Published online March 31, 2011</p>	Patent and licensing status undisclosed	<p>Pacchiano F. <i>et al. J. Med. Chem.</i>; published online March 1, 2011; doi:10.1021/jm101541x Contact: Claudiu T. Supuran, University of Florence, Florence, Italy e-mail: claudiu.supuran@unifi.it Contact: Shoukat Dedhar, BC Cancer Agency, Vancouver, British Columbia, Canada e-mail: sdedhar@bccrc.ca</p> <p>Lou, Y. <i>et al. Cancer Res.</i>; published online March 17, 2011; doi:10.1158/0008-5472.CAN-10-4261 Contact: Shoukat Dedhar, BC Cancer Agency, Vancouver, British Columbia, Canada e-mail: sdedhar@bccrc.ca</p>