

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	HER2 (EGFR2; ErbB2; neu); PD-1 receptor (PDCD1; PD-1; CD279)	<p>Mouse studies suggest inhibiting PD-1 could enhance the antitumor effects of HER2 chimeric antigen receptor (CAR) T cell therapies. In HER2 transgenic mice with HER2⁺ sarcoma or breast carcinoma tumors, HER2-targeting CAR T cells plus an anti-PD-1 antibody decreased tumor growth and increased long-term survival compared with HER2 CAR T cells or anti-PD-1 antibody alone, and the combination did not induce autoimmunity. In the mice receiving the combination therapy, the enhanced antitumor effects were attributed to increased function of the HER2 CAR T cells and decreased tumor infiltration of myeloid-derived suppressors. Next steps could include testing the combination therapy in clinical trials.</p> <p>At least six companies have PD-1 antibodies to treat several cancer indications in development stages from preclinical to Phase III.</p> <p>SciBX 6(45); doi:10.1038/scibx.2013.1285 Published online Nov. 21, 2013</p>	Patent and licensing status unavailable	<p>John, L.B. <i>et al. Clin. Cancer Res.</i>; published online July 19, 2013; doi:10.1158/1078-0432.CCR-13-0458</p> <p>Contact: Phillip K. Darcy, Peter MacCallum Cancer Centre, East Melbourne, Victoria, Australia e-mail: phil.darcy@petermac.org</p>