This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Glioblastoma	Epidermal growth factor receptor variant III (EGFRvIII); prominin 1 (PROM1; CD133)	<p>Studies in patient samples and mice suggest a bispecific antibody targeting EGFRvIII and CD133 could help treat glioblastoma. In samples from patients with glioblastoma, CD133 and EGFRvIII were often coexpressed. In a mouse model of glioblastoma, intracranially implanted cells coexpressing CD133 and EGFRvIII led to greater tumor formation than cells expressing CD133 alone. In the mouse model, a bispecific antibody targeting CD133 and EGFRvIII inhibited tumor formation and increased survival compared with antibodies targeting either protein alone or IgG. Next steps include scaling up production of the bispecific antibody for additional efficacy tests in the intracranial model of glioblastoma.</p> <p>ImmunoCellular Therapeutics Ltd. has ICT-121, an antibody targeting CD133, in Phase I testing to treat brain cancer.</p> <p>Celldex Therapeutics Inc.'s CDX-110, a vaccine targeting EGFRvIII, is in Phase III testing to treat glioblastoma.</p> <p>SciBX 7(6); doi:10.1038/scibx.2014.172 Published online Feb. 13, 2014</p>	Patent filed covering bispecific antibody and application to identify stem cells; available for licensing	<p>Emlet, D.R. <i>et al. Cancer Res.</i>; published online Dec. 23, 2013; doi:10.1158/0008-5472.CAN-13-1407</p> <p>Contact: Albert J. Wong, Stanford University, Stanford, Calif. e-mail: ajwong@stanford.edu</p>