This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Asthma; multiple sclerosis (MS)	Galectin-9 (LGALS9); tumor necrosis factor receptor superfamily member 9 (TNFRSF9; 4-1BB; CD137)	<p>Mouse and <i>in vitro</i> studies suggest LGALS9 is required for the efficacy of anti-4-1BB antibodies in inflammatory and autoimmune disease. In a mouse experimental autoimmune encephalomyelitis (EAE) model of MS and a mouse model of allergic asthma, anti-4-1BB antibodies caused near-complete suppression of disease development in wild-type mice but failed to protect <i>Lgals9</i>-deficient mice. <i>In vitro</i> assays showed that human LGALS9 bound to 4-1BB at a carbohydrate-recognition domain and that binding is prevented when the site is deglycosylated. Researchers did not disclose next steps, which could include identifying LGALS9 agonists.</p> <p>Pfizer Inc. has the anti-TNFRSF9 mAb PF-05082566 in Phase I testing to treat cancer and non-Hodgkin's lymphoma.</p> <p>Bristol-Myers Squibb Co. has the TNFRSF9-targeting mAb urelumab (BMS-663513) in Phase I testing to treat solid tumors.</p> <p>SciBX 7(29); doi:10.1038/scibx.2014.874 Published online July 31, 2014</p>	Patent application filed; available for licensing	<p>Madireddi, S. <i>et al.</i> <i>J. Exp. Med.</i>; published online June 23, 2014; doi:10.1084/jem.20132687</p> <p>Contact: Michael Croft, La Jolla Institute for Allergy & Immunology, La Jolla, Calif. e-mail: mick@liai.org</p>