This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Arthritis	β -Glucuronidase (GUSB)	<p>Mouse studies suggest stimulating GUSB activity could help protect against Lyme disease-associated arthritis. A partial loss-of-function variant of <i>Gusb</i> was found in mouse strains highly susceptible to severe arthritis following <i>Borrelia burgdorferi</i> infection but not in mice with lower susceptibility. In mice with the <i>Gusb</i> variant, overexpression of wild-type <i>Gusb</i> decreased <i>B. burgdorferi</i>-induced arthritis compared with normal expression. In mice with severe <i>B. burgdorferi</i>-induced arthritis, inflammatory glycosaminoglycans, which are degraded by <i>Gusb</i>, accumulated in joint tissues. Next steps could include study of GUSB or glycosaminoglycans as biomarkers of human susceptibility to arthritis.</p> <p>SciBX 7(4); doi:10.1038/scibx.2014.108 Published online Jan. 30, 2014</p>	Unpatented; licensing status not applicable	<p>Bramwell, K.K.C. <i>et al. J. Clin. Invest.</i>; published online Dec. 16, 2013; doi:10.1172/JCI72339 Contact: Janis J. Weis, University of Utah School of Medicine, Salt Lake City, Utah e-mail: janis.weis@path.utah.edu</p>