

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Various</b>				
Inflammatory bowel disease (IBD); graft-versus-host disease (GvHD)	Solute carrier family 2 facilitated glucose transporter member 1 (SLC2A1; GLUT1)	<p>Mouse studies suggest selective inhibition of GLUT1 could help treat IBD and GvHD. In mice, knocking out <i>Glut1</i> in <i>Cd4<sup>+</sup></i> T cells decreased effector T cell numbers compared with those seen in <i>Glut1<sup>+</sup></i> controls. In a mouse model of GvHD, adoptive transfer of T cell-depleted bone marrow plus <i>Glut1</i> knockout T cells decreased disease incidence compared with transfer of bone marrow plus <i>Glut1<sup>+</sup></i> T cells. In a mouse model of IBD, adoptive transfer of <i>Glut1</i>-knockout T cells did not induce inflammation and colitis. Next steps include evaluating GLUT1 inhibitors in inflammatory disorders and elucidating GLUT1 dependencies in other cell types.</p> <p><b>SciBX 7(27); doi:10.1038/scibx.2014.806</b>  <b>Published online July 17, 2014</b></p>	Unpatented; licensing status not applicable	<p>Macintyre, A.N. <i>et al. Cell Metab.</i>; published online June 12, 2014; doi:10.1016/j.cmet.2014.05.004</p> <p><b>Contact:</b> Jeffrey C. Rathmell, Duke University, Durham, N.C.            e-mail: <a href="mailto:jeff.rathmell@duke.edu">jeff.rathmell@duke.edu</a></p>