

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Gastrointestinal disease				
Colitis	ST3 β -galactoside α -2,3-sialyltransferase 4 (ST3GAL4)	<p>Mouse studies suggest removing oligosaccharide sialyl(α2,3)lactose (3SL) from breast milk could help prevent colitis in susceptible infants. In a mouse model of spontaneous colitis, homozygous knockout of <i>St3gal4</i>, which encodes the enzyme that synthesizes 3SL in breast milk, delayed disease onset and decreased disease severity compared with no knockout. In colitis-susceptible newborn mice, 3SL-depleted milk decreased leukocyte infiltration and inflammation in the intestines compared with nondepleted milk. In these susceptible mice, supplementation with 3SL increased intestinal inflammation compared with lactose or water. Next steps could include developing agents or filters to remove 3SL from breast milk and evaluating the resulting milk in colitis-susceptible animals.</p> <p>SciBX 6(43); doi:10.1038/scibx.2013.1224 Published online Nov. 7, 2013</p>	Patent and licensing status unavailable	<p>Kurakevich, E. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 7, 2013; doi:10.1073/pnas.1306322110 Contact: Lubor Borsig, University of Zurich, Zurich, Switzerland e-mail: lborsig@access.uzh.ch</p>