This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Crohn's disease	Bacterial fimbrial adhesin (fimH)	<p>Cell culture and <i>ex vivo</i> studies suggest thiazolylaminomannosides could help treat Crohn's disease. Adherent-invasive <i>Escherichia coli</i> (AIEC), which are associated with Crohn's disease, use fimH to bind to oligomannosides on the surface of intestinal epithelial cells, leading to inflammation. In cultured human intestinal cells expressing the fimH receptor carcinoembryonic antigen related cell adhesion molecule 6 (CEACAM6; NCA; CD66c), a thiazole-modified <i>N</i>-mannoside decreased AIEC attachment compared with no treatment. In colonic explants from a mouse model for AIEC colonization, the thiazole-modified <i>N</i>-mannoside inhibited AIEC from binding to the mucosal surface with 10- to 100-fold higher potency than previously published <i>D</i>-mannosides. Next steps include testing the specificity of <i>N</i>-mannosides to different pathogenic fimH variants and determining <i>in vivo</i> treatment efficacy in a mouse model to assess preventive and curative effects.</p> <p>SciBX 6(27); doi:10.1038/scibx.2013.685 Published online July 18, 2013</p>	Patent application filed; available for licensing from France Scientific Innovation and Transfer SA	<p>Brument, S. <i>et al. J. Med. Chem.</i>; published online June 12, 2013; doi:10.1021/jm400723n Contact: Sébastien G. Gouin, University of Nantes Angers Le Mans (L'UNAM), Nantes, France e-mail: sebastien.gouin@univ-nantes.fr Contact: Rostyslav O. Bilyy, Institute of Cell Biology, National Academy of Sciences of Ukraine, Lviv, Ukraine e-mail: r.bilyy@gmail.com Contact: Arlette Darfeuille-Michaud, French National Institute for Agricultural Research (INRA), Clermont-Ferrand, France e-mail: arlette.darfeuille-Michaud@u-clermont1.fr Contact: Julie Bouckaert, Lille 1 University, Lille, France e-mail: julie.bouckaert@univ-lille1.fr</p>