This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Gastrointestinal disease				
Pancreatitis	Toll-like receptor 4 (TLR4)	<p>Mouse studies suggest CO-based therapeutics could help treat acute pancreatitis. In two mouse models of acute pancreatitis, a CO-releasing molecule or adoptive transfer of macrophages primed with the molecule decreased mortality, pancreatic damage, systemic inflammation and Tlr4 activation compared with vehicle or an inactive form of the molecule. In mice engrafted with Tlr4-deficient bone marrow cells, compared with those given wild-type bone marrow, pancreatic injury was decreased and CO had no further protective effect. Next steps could include investigating how CO inhibits TLR4 activation and testing the effects of the CO-releasing molecule in larger animal models of pancreatic injury. At least six companies have TLR4-targeted compounds in Phase III or earlier testing for various indications.</p> <p>SciBX 7(3); doi:10.1038/scibx.2014.88 Published online Jan. 23, 2014</p>	Patent application filed; unlicensed	<p>Xue, J. & Habtezion, A. <i>J. Clin. Invest.</i>; published online Dec. 16, 2013; doi:10.1172/JCI71362 Contact: Aida Habtezion, Stanford University, Stanford, Calif. e-mail: aidah@stanford.edu</p>