This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Inflammation				
Inflammation	Toll-interleukin 1 receptor domain containing adaptor protein (TIRAP); toll-like receptor 4 (TLR4); TLR2; tumor necrosis factor- α (TNF- α); IL-6	<i>In vitro</i> and mouse studies suggest Tirap-derived peptides could help treat inflammatory disease. In primary mouse macrophages, Tirap-derived peptides blocked Tlr4 and/or Tlr2 signaling to decrease lipopolysaccharide (LPS)-induced production of proinflammatory cytokines compared with an inactive control peptide. In mice pretreated with the Tirap-derived peptides, compared with mice pretreated with control peptide, LPS injection decreased serum levels of proinflammatory Tnf- α and IL-6. Ongoing work includes testing Tirap-derived and other Tir-derived peptides in mouse models of sepsis. <i>SciBX</i> 5(25); doi:10.1038/scibx.2012.659 Published online June 21, 2012	Patent application filed by the University of Maryland; TIRAP- and TIR-derived peptides available for licensing or partnering	Couture, L.A. <i>et al. J. Biol. Chem.</i> ; published online May 30, 2012; doi:10.1074/jbc.M112.360925 Contact: Vladimir Y. Toshchakov, University of Maryland School of Medicine, Baltimore, Md. e-mail: vtoshchakov@som.umaryland.edu