This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Sepsis	Programmed cell death 1 (PDCD1; PD-1; CD279)	<p>Studies in mice and <i>in vitro</i> studies in murine macrophages suggest that antagonizing PD-1 could help treat sepsis. In mouse models of sepsis, PD-1 knockout led to less organ damage, lower serum inflammatory cytokines, better clearance of bacterial infection and longer survival than what was seen in wild-type controls. In <i>ex vivo</i> cultured mouse macrophages, increased levels of PD-1 expression correlated with progression to septic shock. Future studies could include identifying PD-1 inhibitors and measuring PD-1 levels in sepsis patients.</p> <p>Eli Lilly and Co. markets Xigris drotrecogin alfa to treat sepsis. Merck & Co. Inc.'s MK3009 is in Phase III testing to treat sepsis associated with methicillin-resistant <i>Staphylococcus aureus</i> infection. Biosynexus Inc.'s pagibaximab is in Phase II/III testing to prevent <i>S. aureus</i>-induced sepsis in neonatal infants.</p> <p>SciBX 2(13); doi:10.1038/scibx.2009.540 Published online April 2, 2009</p>	Patent and licensing status undisclosed	<p>Huang, X. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 23, 2009; doi:10.1073/pnas.0809422106</p> <p>Contact: Alfred Ayala, Brown University School of Medicine, Providence, R.I. e-mail: aayala@lifespan.org</p>