This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection	Sensor histidine kinase QseC	Studies in cell culture and in mice suggest that inhibiting QseC signaling could be useful for treating bacterial infections. QseC is a membrane-embedded sensor histidine kinase that activates gene expression following detection of specific host and/or bacterial factors. In bacterial cultures of *Escherichia coli*, *Salmonella typhimurium* and *Francisella tularensis*, administration of LED209, a substituted benzenesulfonamide that inhibits QseC, led to lower expression of several virulence genes. In mice infected with *S. typhimurium*, 80% of those given LED209 were alive 24 hours after infection compared with 30% of untreated controls. Next steps include developing a nonabsorbable formulation of LED209 to increase its antibacterial efficacy in the gut.	Provisional patent application filed for LED209 and its derivatives; available for licensing	Rasko, D. *et al. Science*; published online Aug. 22, 2008; doi:10.1126/science.1160354 **Contact:** Vanessa Sperandio, University of Texas Southwestern Medical Center, Dallas, Texas e-mail: vanessa.sperandio@utsouthwestern.edu