This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
<i>Pseudomonas</i>	Multiple virulence factor regulator (MvfR)	<p>Mouse and cell culture studies have identified benzamide-benzimidazole-based inhibitors of MvfR that could help treat <i>Pseudomonas aeruginosa</i> infection. In <i>P. aeruginosa</i> culture, the lead MvfR inhibitor decreased the formation of antibiotic-tolerant bacteria and quorum sensing-regulated pathogenicity compared with vehicle without disrupting bacterial growth. In two mouse models of burn wound or lung <i>P. aeruginosa</i> infection, i.v. injection of the lead MvfR inhibitor decreased acute virulence and increased survival compared with vehicle control injection. Next steps include studying the broad applicability of MvfR inhibition to treat acute and persistent bacterial infections.</p> <p>Spero Therapeutics LLC has narrow- and broad-spectrum inhibitors of MvfR in preclinical development.</p> <p>SciBX 7(37); doi:10.1038/scibx.2014.1103 Published online Sept. 25, 2014</p>	Multiple patents pending; exclusively licensed to Spero Therapeutics	<p>Starkey, M. <i>et al. PLoS Pathog.</i>; published online Aug. 21, 2014; doi:10.1371/journal.ppat.1004321</p> <p>Contact: Laurence Rahme, Harvard Medical School and Massachusetts General Hospital, Boston, Mass. e-mail: rahme@molbio.mgh.harvard.edu</p>