This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Gram-positive bacterial infection	GTP pyrophosphokinase (relA)	<p><i>In vitro</i> studies identified an inhibitor of relA that could help treat Gram-positive bacterial infections. relA synthesizes (p)ppGpp, which is required for a bacterial starvation survival mechanism called the stringent response. In enzymatic assays, a 2'-deoxyguanosine-based analog of (p)ppGpp, dubbed Relacin, inhibited relA and prevented synthesis of (p)ppGpp from <i>Escherichia coli</i> and <i>Deinococcus radiodurans</i>. In spore-forming <i>Bacillus subtilis</i> cells, the analog also decreased (p)ppGpp production, cell viability and sporulation compared with no treatment. Next steps include determining the effects of Relacin on eukaryotic cells and examining antibiotic activity in animal models.</p> <p>SciBX 5(40); doi:10.1038/scibx.2012.1054 Published online Oct. 11, 2012</p>	Patent application filed; unlicensed	<p>Wexselblatt, E. <i>et al. PLoS Pathog.</i>; published online Sept. 20, 2012; doi:10.1371/journal.ppat.1002925 Contact: Sigal Ben-Yehuda, The Hebrew University of Jerusalem, Jerusalem, Israel e-mail: sigalb@ekmd.huji.ac.il</p>