This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection	Guanosine 5'-diphosphate 3'-diphosphate (ppGpp); guanosine 5'-triphosphate 3'-diphosphate (pppGpp)	<i>In vitro</i> studies suggest inhibiting ppGpp and pppGpp could help treat bacterial infections by eliminating biofilms. <i>In vitro</i> , an innate defense peptide from bacteria including <i>Pseudomonas aeruginosa</i> , <i>Staphylococcus aureus</i> and <i>Escherichia coli</i> bound to and induced degradation of (p) ppGpp, which are involved in the bacterial stress response and biofilm formation. In culture, the peptide led to dispersal or death of multiple types of bacteria in established biofilms, whereas overproduction of (p)ppGpp increased biofilm formation and conveyed resistance to the peptide. Next steps include identifying the optimal dose and developing antibodies for use in combination with the peptide.	Patent application filed; available for licensing	de la Fuente-Núñez, C. <i>et al.</i> <i>PLoS Pathog.</i> ; published online May 22, 2014; doi:10.1371/journal.ppat.1004152 Contact: Robert E.W. Hancock, The University of British Columbia, Vancouver, British Columbia, Canada e-mail: bob@hancocklab.com
SciBX 7(25); doi:10.1038/scibx.2014.738 Published online June 26, 2014				