This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection	DNA gyrase; topoisomerase IV	<p>Mouse and <i>in vitro</i> studies identified a pyridylurea-based DNA gyrase and topoisomerase IV inhibitor that could be useful for treating bacterial infections. In culture, the lead compound in the series inhibited growth of multiple Gram-positive and Gram-negative bacterial strains with nanomolar minimum inhibitory concentration (MIC) values. In a mouse model of <i>Staphylococcus aureus</i> infection in the thigh, the compound caused a 4.5 log decrease in colony-forming units compared with vehicle. Next steps could include evaluating the lead inhibitor in additional animal models of bacterial infection.</p> <p>SciBX 6(44); doi:10.1038/scibx.2013.1259 Published online Nov. 14, 2013</p>	Patent application filed covering heterocyclic urea derivatives; licensing status unavailable	<p>Basarab, G.S. <i>et al. J. Med. Chem.</i>; published online Oct. 7, 2013; doi:10.1021/jm401208b</p> <p>Contact: Gregory S. Basarab, AstraZeneca R&D Boston, Infection Innovative Medicines, Waltham, Mass. e-mail: greg.basarab@astrazeneca.com</p>