This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Tuberculosis	Decaprenylphosphoryl- β -D-ribose 2'-epimerase (dpE1)	<p><i>In vitro</i> and mouse studies suggest that 1,3-benzothiazin-4-one (BTZ) compounds could treat drug-resistant strains of tuberculosis. <i>In vitro</i>, the minimum inhibitory concentrations against 2 tuberculosis strains were 2.3 nM and 9.2 nM, respectively. Similar activities were seen against resistant strains. The BTZs blocked dpE1, disrupting synthesis of cell wall arabinans. <i>Ex vivo</i>, the lead BTZ protected macrophages from <i>Mycobacterium tuberculosis</i>. In mice infected by a low-dose TB aerosol, the lead compound lowered bacterial burden in the lungs and spleen without adverse effects. Next steps could include testing the lead BTZ in combination therapies to treat resistant TB.</p> <p>At least 15 companies have TB vaccines and antibiotics in development stages ranging from preclinical to marketed.</p> <p>SciBX 2(14); doi:10.1038/scibx.2009.583 Published online April 9, 2009</p>	Patent and licensing status unavailable	<p>Makarov, V. <i>et al. Science</i>; published online March 19, 2009; doi:10.1126/science.1171583</p> <p>Contact: Stewart T. Cole, Global Health Institute Lausanne, Lausanne, Switzerland e-mail: stewart.cole@epfl.ch</p>