

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Tuberculosis (TB)	β -lactamase (BLAC)	<p><i>In vitro</i> studies suggest that a combination of meropenem and clavulanate could help treat drug-resistant strains of tuberculosis. β-lactam antibiotics like meropenem have been ineffective against <i>Mycobacterium tuberculosis</i> because the bacteria transcribe a BLAC that hydrolyzes the antibiotics. In aerobically grown Erdman <i>M. tuberculosis</i> cultures, meropenem plus the BLAC inhibitor clavulanate decreased bacterial growth and completely sterilized the bacterial culture in 9–12 days. The combination was also effective against aerobically grown cultures, which represent a persistent state, and against 13 drug-resistant isolates. Next steps include clinical testing of the combination.</p> <p>AstraZeneca plc markets Merrem meropenem to treat bacterial infection. GlaxoSmithKline plc and Ranbaxy Laboratories Ltd. each market amoxicillin-clavulanate combinations to treat infections.</p> <p>SciBX 2(10); doi:10.1038/scibx.2009.411 Published online March 12, 2009</p>	U.S. provisional patent application filed; available for licensing	<p>Hugonnet, J. <i>et al. Science</i>; published online Feb. 23, 2009; doi:10.1126/science.1167498</p> <p>Contact: John S. Blanchard, Albert Einstein College of Medicine, Bronx, N.Y. e-mail: blanchar@acom.yu.edu</p>