

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infections	Not applicable	<p>Two studies suggest reactive oxygen species (ROS) production may not be the major contributor to bactericidal activity. Previous studies have suggested a unifying theory of antibiotic action in which induction of ROS leads to cell death. <i>In vitro</i>, ampicillin or norfloxacin killed <i>Escherichia coli</i> grown in anaerobic conditions at rates comparable to those for bacteria grown in aerobic conditions. In titration experiments using different quantities of norfloxacin in combination with an ROS-detecting dye, a correlation was not observed between ROS and antibacterial activity. Next steps include identifying new mechanisms that explain the bactericidal effects of antibiotics.</p> <p>EnBiotix Inc. is discovering compounds that increase production of ROS to treat bacterial infections.</p> <p>SciBX 6(12); doi:10.1038/scibx.2013.292 Published online March 28, 2013</p>	Patent and licensing status not applicable	<p>Keren, I. <i>et al. Science</i>; published online March 8, 2013; doi:10.1126/science.1232688 Contact: Kim Lewis, Northeastern University, Boston, Mass. e-mail: k.lewis@neu.edu</p> <p>Liu, Y. & Imlay, J.A. <i>Science</i>; published online March 8, 2013; doi:10.1126/science.1232751 Contact: James A. Imlay, University of Illinois at Urbana-Champaign, Urbana, Ill. e-mail: jimlay@illinois.edu</p>