

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Tuberculosis (TB)	<i>Mycobacterium</i> protein tyrosine phosphatase B (ptpB)	<p>Studies in cell culture identified a ptpB inhibitor that could help treat TB. The tyrosine phosphatase ptpB is a <i>Mycobacterium</i> virulence factor that suppresses the host's innate immune response. A screen of a salicylic acid-based combinatorial library identified a ptpB inhibitor that had 11-fold greater selectivity for ptpB than for mammalian protein tyrosine phosphatases. In infected mouse macrophages, the inhibitor significantly reduced bacterial loads compared with an inactive compound ($p < 0.001$). Next steps include evaluating the ptpB inhibitor and its derivatives in animal models of TB infection.</p> <p>SciBX 3(8); doi:10.1038/scibx.2010.248 Published online Feb. 25, 2010</p>	Patent application filed covering compound; licensed to Aarden Pharmaceuticals Inc.	<p>Zhou, B. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Feb. 15, 2010; doi:10.1073/pnas.0909133107 Contact: Zhong-Yin Zhang, Indiana University School of Medicine, Indianapolis, Ind. e-mail: zyzhang@iupui.edu</p>