This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection	Bacterial RNA polymerase	Computational and SAR studies suggest anthranilic acid compounds could be useful for treating Gram-positive bacterial infections. A structural model of bacterial RNA polymerase in complex with known inhibitors identified a theoretical pharmacophore predicted to have high inhibitory potency. Virtual screening and SAR studies identified anthranilic acid compounds with features corresponding to this pharmacophore. The best of these compounds showed <i>in vitro</i> potency against Gram-positive bacteria and lower rates of spontaneous resistance than the generic RNA polymerase inhibitor rifampicin. Next steps could include lead optimization and testing in animal models of bacterial infection.	Patent and licensing status undisclosed	Hinsberger, S. <i>et al. J. Med. Chem.</i> ; published online Oct. 11, 2013; doi:10.1021/jm400485e Contact: Rolf W. Hartmann, Saarland University, Saarbruecken, Germany e-mail: rolf.hartmann@helmholtz-hzi.de
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