This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection	DNA ligase, NAD ⁺ -dependent (LigA)	<i>In vitro</i> and mouse studies identified inhibitors of the bacterial enzyme LigA that could help treat bacterial infections. <i>In vitro</i> , adenosine analogs inhibited multiple bacterial LigA variants with nanomolar to low micromolar IC ₅₀ values. In cell assays, the analogs had antibacterial activity against a range of Gram-positive, Gram-negative and atypical bacteria. In mice, pretreatment with an adenosine analog decreased the burden of <i>Staphylococcus aureus</i> thigh infection and <i>S. pneumoniae</i> lung infection compared with pretreatment using vehicle. Next steps could include increasing the potency of the inhibitors and testing them in additional animal models of bacterial infection.	Patent and licensing status unavailable	Miller, S.D. <i>et al. Antimicrob. Agents Chemother.</i> ; published online Dec. 28, 2010; doi:10.1128/AAC.01181-10 Contact: Scott D. Mills, AstraZeneca R&D Boston, Waltham, Mass. e-mail: Scott.Mills@astrazeneca.com
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