

### This week in therapeutics

| Indication  | Target/marker/pathway  | Summary   | Licensing status                                       | Publication and contact information  |
|---|--|---|--|--|
| <b>Infectious disease</b>   |  |   |  |  |
| Bacterial infection   | DNA gyrase subunit B (gyrB); topoisomerase IV Par E subunit (parE) | Rodent and <i>in vitro</i> studies have identified an aminobenzimidazole urea inhibitor of bacterial gyrB and parE that could help treat bacterial infections. In a panel of 5 Gram-positive and 2 Gram-negative bacterial strains, the compound inhibited growth with MIC values of less than 600 nM in all Gram-positive and one Gram-negative strain. In a mouse model of <i>Staphylococcus aureus</i> infection in the thigh, the compound decreased bacterial loads compared with vehicle. Next steps could include optimizing the lead aminobenzimidazole urea compound and evaluating it in additional bacterial infection models. | Patent application filed; licensing status undisclosed | Grillot, A.-L. <i>et al. J. Med. Chem.</i> ; published online Oct. 15, 2014; doi:10.1021/jm500563g<br><b>Contact:</b> Anne-Laure Grillot, Vertex Pharmaceuticals Inc., Boston, Mass.<br>e-mail: <a href="mailto:anne-laure_grillot@vrtx.com">anne-laure_grillot@vrtx.com</a> |
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