This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection	Ampicillin class C β -lactamase	<p><i>In vitro</i> and cell culture studies suggest that sulfonamide boronic acids could help treat drug-resistant bacterial infections. <i>In vitro</i>, a lead compound had an ampicillin class C (AmpC) inhibition value of 25 nM. In cultures of cephalosporin-resistant bacteria, the lead lowered the minimum inhibitory concentration of cephalosporins by approximately eightfold compared with cephalosporins alone. Next steps include improving the potency and cell permeability of the boronic acid compounds.</p> <p>Cubist Pharmaceuticals Inc.'s CXA-201, a combination of a cephalosporin antibiotic and the β-lactamase inhibitor tazobactam, is in Phase II testing to treat bacterial infections.</p> <p>AstraZeneca plc's CAZ-104, a combination of a cephalosporin antibiotic and a β-lactamase inhibitor, is partnered with Forest Laboratories Inc. and is in Phase I/II trials to treat bacterial infections.</p> <p>SciBX 3(42); doi:10.1038/scibx.2010.1268 Published online Oct. 28, 2010</p>	Patent and licensing status undisclosed	<p>Eidam, O. <i>et al. J. Med. Chem.</i>; published online Oct. 14, 2010; doi:10.1021/jm101015z</p> <p>Contact: Brian K. Shoichet, University of California, San Francisco, Calif. e-mail: shoichet@cgl.ucsf.edu</p> <p>Contact: Fabio Prati, University of Modena and Reggio Emilia, Modena, Italy e-mail: fabio.prati@unimore.it</p>