This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection; infectious disease	Unknown	<p><i>In vitro</i> and mouse studies identified 5-nitroimidazole (5-NI) derivatives that could help treat drug-resistant bacterial and protozoan infections. In growth and survival assays for <i>Giardia lamblia</i>, <i>Trichomonas vaginalis</i>, <i>Helicobacter pylori</i> and <i>Clostridium difficile</i>, 44 of the 378 tested 5-NI derivatives were more effective against all 4 organisms than the parent compound metronidazole. In these assays, the 5-NI derivatives showed antimicrobial activity against multiple clinical isolates, including those resistant to metronidazole. In mouse models of giardiasis, 7 of 16 tested 5-NI derivatives showed greater antimicrobial activity against the parasite than metronidazole. Next steps include selecting specific indications for testing individual compounds.</p> <p>SciBX 6(43); doi:10.1038/scibx.2013.1225 Published online Nov. 7, 2013</p>	Patent pending; available for licensing	<p>Miyamoto, Y. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Oct. 7, 2013; doi:10.1073/pnas.1302664110 Contact: Lars Eckmann, University of California, San Diego, La Jolla, Calif. e-mail: leckmann@ucsd.edu</p>