This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Bacterial infection	Unknown	<p>A study in cell culture suggests that monosubstituted vancomycin derivatives could help treat vancomycin-resistant bacterial infections. In a vancomycin-resistant <i>Staphylococcus aureus</i> strain, 2 of the derivatives had minimum inhibitory concentration (MIC) values of 16 µg/mL compared with an MIC value of over 64 µg/mL for vancomycin. In vancomycin-resistant strains of <i>Enterococcus faecium</i> and <i>E. faecalis</i>, two other derivatives also had lower MIC values than vancomycin. Next steps include preparing a larger chemical library to identify suitable candidates for drug development.</p> <p>Vancomycin, a tricyclic glycopeptide antibiotic targeting D-alanyl-D-alanine from Eli Lilly and Co., Iroko Pharmaceuticals LLC and ViroPharma Inc., is marketed to treat infectious diarrhea.</p> <p>SciBX 3(11); doi:10.1038/scibx.2010.345 Published online March 18, 2010</p>	Patent application filed covering antibiotic glycopeptide derivatives based on a vancomycin scaffold; available for licensing from Tohoku University and Shionogi & Co. Ltd.	<p>Nakama, Y. <i>et al. J. Med. Chem.</i>; published online Feb. 24, 2010; doi:10.1021/jm9017543</p> <p>Contact: Hirokazu Arimoto, Tohoku University, Sendai, Japan e-mail: arimoto@biochem.tohoku.ac.jp</p>