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 a mixture of four D-amino acids could help disperse or prevent bacterial biofilms. In <i>Bacillus subtilis</i> cultures, a mixture of D-leucine, D-methionine, D-tyrosine and D-tryptophan prevented biofilm formation with a minimum inhibitory concentration of about 10 nM and also disrupted existing biofilms compared with a mixture of corresponding L-amino acids, which had no effect on the biofilms. In <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> cultures, the D-amino acid mixture prevented biofilm formation, whereas the L-amino acid mixture had no effect. Next steps include identifying the mechanism of action of the D-amino acids in <i>Staphylococcus</i> and <i>Pseudomonas</i> and finding the factors that control the timing of D-amino acid production in bacteria.</p> <p>SciBX 3(19); doi:10.1038/scibx.2010.585 Published online May 13, 2010</p>	<p>Patent application filed covering use of D-amino acids in preventing and dispersing biofilms; available for licensing from the Harvard University Office of Technology Development; BASF AG has first rights for nonpharmaceutical applications</p>	<p>Kolodkin-Gal, I. <i>et al. Science</i>; published online April 29, 2010; doi:10.1126/science.1188628 Contact: Richard Losick, Harvard University, Cambridge, Mass. e-mail: losick@mcb.harvard.edu</p>