This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Leishmaniasis; malaria; trypanosomiasis	Not applicable	<p>An SAR study identified a series of dicationic pentamidine analogs that could help treat various protozoan infections. <i>In vitro</i>, several of the compounds had better activity against <i>Leishmania donovani</i>, <i>Plasmodium falciparum</i> and <i>Trypanosoma brucei rhodesiense</i> than marketed antiprotozoan compounds. In a mouse model of acute trypanosomiasis, a 2,2'-dichloro substituted diamidine and a diimidazoline cured all four infected mice, with IC₅₀ values comparable to those of melarsoprol. Next steps could include testing the compounds in other animal models of leishmaniasis, malaria and trypanosomiasis.</p> <p>Pentamidine and melarsoprol are generic drugs that are approved to treat pneumonia caused by <i>Pneumocystis carinii</i> and human African trypanosomiasis, respectively. Artemisinin is a generic drug approved to treat malaria.</p> <p>SciBX 2(12); doi:10.1038/scibx.2009.497 Published online March 26, 2009</p>	Patent and licensing status unavailable	<p>Bakunova, S. <i>et al. J. Med. Chem.</i>; published online March 6, 2009; doi:10.1021/jm801547t</p> <p>Contact: Richard R. Tidwell, The University of North Carolina at Chapel Hill, Chapel Hill, N.C. e-mail: Tidwell@med.unc.edu</p>