This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Malaria	Platelet factor 4 (PF4; CXCL4)	<p><i>In vitro</i> and mouse studies suggest small molecule mimetics of PF4 could help treat malaria. <i>In vitro</i>, the host defense peptide PF4 induced lysis of the <i>Plasmodium falciparum</i> digestive vacuole at low micromolar concentrations. A screen of small molecule host defense peptide mimetics identified a compound that killed <i>P. falciparum</i> at low nanomolar concentrations. In a mouse model of malaria, i.v. injection of a lead mimetic decreased parasite load and increased survival compared with vehicle injection. Next steps include increasing the oral bioavailability of the compounds.</p> <p>The study was carried out in collaboration with PolyMedix Inc., which has antimalarial host defense peptide mimetics in preclinical development.</p> <p>SciBX 6(2); doi:10.1038/scibx.2013.36 Published online Jan. 17, 2013</p>	Patent application filed; licensing status undisclosed	<p>Love, M.S. <i>et al. Cell Host Microbe</i>; published online Dec. 13, 2012; doi:10.1016/j.chom.2012.10.017</p> <p>Contact: Doron C. Greenbaum, University of Pennsylvania, Philadelphia, Pa. e-mail: dorong@upenn.edu</p>