

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
Trypanosomiasis; sleeping sickness	<i>Trypanosoma brucei</i> haptoglobin-hemoglobin receptor (TbHpHbR); haptoglobin-related protein (Hpr; TLF-1); apolipoprotein L1 (ApoL1); haptoglobin-related protein-hemoglobin complex (Hpr-Hb complex)	Studies in mice and human serum samples suggest that targeting the parasitic TbHpHbR could be useful for treating trypanosomiasis and sleeping sickness. In human serum, the TbHpHbR mediated uptake of high-density lipoprotein particles that contained Hpr and ApoL1. ApoL1 protects humans against <i>T. brucei</i> infection. In human serum, TbHpHbR knockdown conferred parasitic resistance to ApoL1-mediated lysis. Next steps include coupling a toxin to the Hpr-Hb complex, which the parasitic TbHpHbR, but not the human host functional analog of HpHbR, would specifically bind.	Patent application filed; unlicensed	Vanhollebeke, B. <i>et al. Science</i> ; published online May 1, 2008; doi:10.1126/science.11556296 Contact: Etienne Pays, Université Libre de Bruxelles, Gosselies, Belgium e-mail: epays@ulb.ac.be