This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Disease models			
<i>In vitro</i> model to predict pharmacokinetic parameters important to antimalarial drug efficacy	<p>An <i>in vitro</i> model to predict pharmacokinetic parameters important for antimalarial drug efficacy could help improve drug dosing. In a glass cartridge system, the ability of chloroquine to inhibit <i>Plasmodium falciparum</i> growth depended on minimum inhibitory concentration, whereas the ability of artemisinin to inhibit parasite growth depended on peak concentration (C_{max}) of the drug. In a mouse model of malarial infection, the relationship between C_{max} and the antimalarial activity of artemisinin was confirmed. Next steps include studying drug-resistant parasites and studying two drugs with different pharmacokinetic profiles at the same time.</p> <p>Chloroquine and artemisinin are generic drugs used to treat malaria infection.</p> <p>SciBX 6(43); doi:10.1038/scibx.2013.1239 Published online Nov. 7, 2013</p>	Patent status undisclosed; licensing status not applicable	<p>Bakshi, R.P. <i>et al. Sci. Transl. Med.</i>; published online Oct. 2, 2013; doi:10.1126/scitranslmed.3006684</p> <p>Contact: Theresa A. Shapiro, The Johns Hopkins University, Baltimore, Md. e-mail: tshapiro@jhmi.edu</p>