This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Mice with directed integration of human immunoglobulin transgenes to produce chimeric antibodies with fully human variable domains	<p>Transgenic mice that produce chimeric antibodies with fully human variable domains could be used to discover therapeutic antibodies. In mouse embryonic stem cells, the entire human immunoglobulin variable gene repertoire was inserted into the corresponding mouse loci, and endogenous mouse variable genes were silenced. The resulting transgenic mice had functional immune systems that when injected with a human CD40 ligand (CD40LG; CD40L; CD154) antigen or a <i>Staphylococcus aureus</i> α-hemolysin (aHL) antigen produced antibodies with neutralization capacity comparable to or more potent than that of the anti-CD40L antibody 5C8 or anti-aHL antibody KBSA301. Next steps could include testing eight different antibodies produced by the transgenic mice in animal models of disease.</p> <p>Biogen Idec Inc. has 5C8 in Phase I testing to treat systemic lupus erythematosus (SLE).</p> <p>Kenta Biotech Ltd. has KBSA301 in Phase I/II trials to treat pneumonia and Phase I testing to treat <i>Staphylococcus</i> infection.</p> <p>SciBX 7(16); doi:10.1038/scibx.2014.473 Published online April 24, 2014</p>	Patented; available for partnering	<p>Lee, E.-C. <i>et al. Nat. Biotechnol.</i>; published online March 16, 2014; doi:10.1038/nbt.2825 Contact: Allan Bradley, Kymab Ltd., Cambridge, U.K. e-mail: abradley@kymab.com</p>