This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Blood coagulation	Factor XII	<p>Mouse and rabbit studies suggest an anti-factor XII antibody can help prevent some forms of coagulation without increasing risk of bleeding. An <i>in vitro</i> screen of a human Fab-based phage antibody library identified 3F7, which inhibited factor XII proteolytic activity with an IC_{50} of 13 nM. In mice, 3F7 protected against thrombosis and dose-dependently decreased time to occlusion compared with control antibody. 3F7 did not increase blood loss compared with saline in tail-bleeding assays. In a rabbit model of extracorporeal membrane oxygenation, 3F7 provided thromboprotection comparable to that of heparin and did not prolong bleeding or impair wound site homeostasis. Next steps include optimizing the antibody for use in humans and preparing for a Phase I trial in hereditary angioedema, which is associated with mutations in the gene encoding factor XII.</p> <p>SciBX 7(8); doi:10.1038/scibx.2014.225 Published online Feb. 27, 2014</p>	Patented by CSL Ltd.; available for licensing	<p>Larsson, M. <i>et al. Sci. Transl. Med.</i>; published online Feb. 5, 2014; doi:10.1126/scitranslmed.3006804 Contact: Thomas Renné, Karolinska Institute, Stockholm, Sweden e-mail: thomas@renne.net</p>