This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platform			
Nanoparticle formulation of a proangiogenic peptide	<p>Studies in cell culture, zebrafish and mice suggest that a recombinant nonglycosylated variant of Hepatocyte growth factor heparin A scatter factor (HGF; SF) could help stimulate angiogenesis to treat vascular diseases. In a cell culture assay, a sustained-release formulation of the HGF variant induced endothelial cell proliferation more effectively than did vehicle control. In zebrafish and mice, implantation of the HGF sustained-release nanoparticles led to better angiogenesis than did control vector implantation. Next steps include testing the formulation in animal models of diabetic sores and peripheral vascular disease, which are two indications characterized by impaired angiogenesis.</p> <p>Collatene, a plasmid encoding HGF from AnGes MG Inc., Vical Inc. and Daiichi Sankyo Co. Ltd., is under regulatory review to treat peripheral vascular disease (PVD) and ischemia/reperfusion injury.</p> <p>SciBX 3(26); doi:10.1038/scibx.2010.808 Published online July 1, 2010</p>	Patents pending; available for licensing	<p>Rituparna, S.R. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online June 14, 2010; doi:10.1073/pnas.1006007107 Contact: Shiladitya Sengupta, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: shiladit@mit.edu Contact: Raghunath A. Mashelkar, National Chemical Laboratories, Pune, India e-mail: ram@ncl.res.in Contact: Ermanno Gherardi, MRC Center, Cambridge, U.K. e-mail: egherard@mrc-lmb.cam.ac.uk</p>