

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Alginate scaffolds for tissue and organ regeneration	<p>Studies in mice show that a scaffold-based delivery method of endothelial cells might be more effective than direct cell implantation for tissue regrowth and ischemia repair. The scaffold was made of macroporous alginate modified with VEGF and the cell-adhesion ligand RGD and loaded with human outgrowth endothelial cells (OECs). Implantation of the scaffold in ischemic limbs of severe combined immunodeficiency (SCID) mice increased survival of OECs, blood vessel density and wound healing compared with unscaffolded injection of OECs and VEGF. Next steps include testing the scaffolds in larger animal models of angiogenesis and wound healing.</p> <p>No fewer than 16 companies have tissue repair therapeutics and technologies in various stages of development and on the market.</p>	Patent pending; licensing negotiations underway	<p>Silva, E. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 25, 2008; doi:10.1073/pnas.0803873105</p> <p>Contact: David J. Mooney, Harvard University, Cambridge, Mass.</p> <p>e-mail: mooneyd@seas.harvard.edu</p>