This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Refillable, hydrogel-based drug delivery depots	<p>Hydrogel-based drug delivery depots that are refilled via direct infusion of drugs into the bloodstream could be useful systems for long-term drug delivery. The system uses hydrogel-based drug depots modified with oligodeoxynucleotides (ODNs) that provide a target for drug payloads modified with complementary ODNs. In a mouse xenograft model of breast cancer, an ODN-modified alginate hydrogel drug depot injected into the tumor could be refilled with ODN-modified doxorubicin infused into the bloodstream. In this model, infusion of the ODN-modified doxorubicin resulted in more potent inhibition of tumor growth than a bolus injection of unmodified doxorubicin. Next steps include evaluating the approach for refilling drug delivery devices designed to promote blood vessel growth and improve wound healing and for use in conjunction with stents and vascular grafts.</p> <p>SciBX 7(36); doi:10.1038/scibx.2014.1083 Published online Sept. 18, 2014</p>	Patent application filed; available for licensing	<p>Brundo, Y. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 19, 2014; doi:10.1073/pnas.1413027111 Contact: David J. Mooney, Harvard University, Cambridge, Mass. e-mail: mooneyd@seas.harvard.edu</p>