This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Tumor-specific delivery of chemotherapy using micelles with phenylboronic acid on their surface (PBA-micelles)	<p>Polymeric PBA-micelles could enable tumor-specific delivery of chemotherapy. PBA has a high binding affinity for sialic acids, which are highly expressed on cancer cells but not normal cells. In a mouse melanoma cell line, PBA-micelles loaded with oxaliplatin exhibited greater uptake and cytotoxicity and longer intracellular retention times than free oxaliplatin or oxaliplatin-loaded micelles lacking PBA. In a mouse model of melanoma, oxaliplatin-loaded PBA-micelles had greater accumulation in primary tumors and lung metastases and decreased tumor growth compared with free oxaliplatin or oxaliplatin-loaded micelles lacking PBA. Future studies could include generating and testing PBA-micelles loaded with other chemotherapeutics.</p> <p>SciBX 6(40); doi:10.1038/scibx.2013.1143 Published online Oct. 17, 2013</p>	Patent and licensing status unavailable	<p>Deshayes, S. <i>et al.</i> <i>J. Am. Chem. Soc.</i>; published online Sept. 12, 2013; doi:10.1021/ja406406h Contact: Kazunori Kataoka, The University of Tokyo, Tokyo, Japan e-mail: kataoka@bmw.t.u-tokyo.ac.jp</p>