This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Intranasal, acetazolamide (AZA)- and sodium carboxymethyl cellulose (CMC)-based delivery of drugs to the brain	AZA- and CMC-aided intranasal drug delivery to the brain could help treat brain cancer and other CNS diseases. Pharmacokinetic studies in rats showed that intranasal co-delivery of methotrexate with AZA and CMC increased concentrations of the drug in the cerebrospinal fluid (CSF) and cerebral cortex compared with intraperitoneal injection of methotrexate alone. In rats with brain tumors, the intranasal delivery resulted in a fourfold greater reduction in tumor growth compared with the intraperitoneal delivery. Future studies could include testing intranasal delivery of therapeutic agents to treat other CNS diseases. The generic methotrexate is marketed to treat cancer and autoimmune diseases.	Patent and licensing status unavailable	Shingaki, T. <i>et al. Mol. Pharm.</i> ; published online July 26, 2010; doi:10.1021/mp900275s Contact: Tomotaka Shingaki, ADME Research Inc., Osaka, Japan e-mail: t.shingaki@adme.jp
	<i>SciBX</i> 3(31); doi:10.1038/scibx.2010.967 Published online Aug. 12, 2010		