

THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
MicroRNA (miRNA) insertion into replicating viruses to control tropism and improve safety of oncolytic virus therapeutics	Studies in mice suggest that insertion of tissue-specific miRNA into viral vectors could improve the specificity and limit the off-target toxicity of oncolytic virus therapies. In two xenograft tumor models, the picornavirus coxsackievirus A21 (CVA21) containing an insert of a sequence complementary to muscle-specific miRNA caused tumor regression without myositis. Treatment with virus containing a non-muscle-specific control insert caused lethal myositis. Virus with the muscle-specific insert could not replicate in muscle cells, which attenuated myositis. The next step is to obtain funding to move the viruses into clinical testing.	Patent application filed for the miRNA targeting paradigm in replicating viruses; available for licensing	Kelly, E. <i>et al. Nat. Med.</i> ; published online Oct. 26, 2008; doi:10.1038/nm.1776 Contact: Stephen J. Russell, Mayo Clinic College of Medicine, Rochester, Minn. e-mail: sjr@mayo.edu
	<i>SciBX</i> 1(40); doi:10.1038/scibx.2008.985 Published online Nov. 6, 2008		