

THE DISTILLERY

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug delivery			
Nanoparticle-mediated co-delivery of small interfering RNA and cisplatin prodrug	Engineered, self-assembling nanoparticles that co-deliver siRNA and a cisplatin prodrug could improve cancer chemotherapy response. The nanoparticles, consisting of a biodegradable diblock copolymer and a self-synthesized cationic lipid, are loaded with a cisplatin prodrug and siRNAs targeting REV1 and REV3-like catalytic subunit of DNA polymerase- ζ (REV3L). In mouse xenograft models of human prostate cancer, siRNA- and prodrug-loaded nanoparticles led to decreased tumor growth and increased survival compared with nanoparticles loaded with the prodrug or siRNAs alone. Next steps could include evaluating delivery of different siRNA and drug payload combinations with the nanoparticles. <i>SciBX</i> 6(46); doi:10.1038/scibx.2013.1334 Published online Dec. 5, 2013	Patent and licensing status undisclosed	Xu, X. <i>et al. Proc. Natl. Acad. Sci.</i> <i>USA</i> ; published online Oct. 28, 2013; doi:10.1073/pnas.1303958110 Contact: Omid C. Farokhzad, Harvard Medical School, Boston, Mass. e-mail: ofarokhzad@zeus.bwh.harvard.edu Contact: Graham C. Walker, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: gwalker@mit.edu