This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Spherical nucleic acid (SNA) nanoparticle conjugates to knock down oncogene expression	Systemic delivery of SNAs conjugated to siRNAs could be used to treat glioma. SNAs consist of gold nanoparticles covalently modified with densely packed, oriented siRNA duplexes. In cultured human glioma cell lines and patient- and mouse-derived neurospheres, SNAs conjugated to siRNAs targeting <i>BCL2-like 12</i> (<i>BCL2L12</i>) decreased expression of <i>BCL2L12</i> compared with SNAs conjugated to scrambled siRNAs. In mouse models of human glioma, i.v. injection of the SNAs led to their accumulation in tumor but not normal tissue, and SNAs conjugated to siRNAs targeting <i>BCL2L12</i> decreased expression of <i>BCL2L12</i> protein and RNA, decreased tumor burden and increased survival compared with control SNAs. Next steps could include elucidating the mechanism of SNA uptake into glioma cells and tumors or using SNA-based systemic delivery of siRNAs to study glioma. SciBX 6(48); doi:10.1038/scibx.2013.1409 Published online Dec. 19, 2013	Patent and licensing status unavailable	Jensen, S.A. <i>et al. Sci. Transl. Med.</i>; published online Oct. 30, 2013; doi:10.1126/scitranslmed.3006839 Contact: Alexander H. Stegh, Northwestern University, Chicago, Ill. e-mail: a-stegh@northwestern.edu Contact: Chad A. Mirkin, same affiliation as above e-mail: chadnano@northwestern.edu