This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Transferrin receptor (TFRC)-targeted lipid nanoparticles (TfLNs) for delivery of antisense oligonucleotides	<p>TfLNs may be useful for delivering antisense oligonucleotides to tumor cells. In three leukemic cell lines (K562, MV411, Raji), TfLNs loaded with the B-cell lymphoma 2 (BCL2; BCL-2)-targeting G3139 lowered BCL-2 mRNA levels compared with what was seen in controls. Pretreatment with the TFRC inducer deferoxamine increased TFRC on the cell membranes, boosting nanoparticle uptake and resulting in further decreases in BCL-2 mRNA levels. Next steps include evaluating the nanoparticles in an appropriate animal leukemia model before designing a trial in leukemia patients.</p> <p>Genta Inc.'s Genasense IV oblimersen (G3139), an antisense oligonucleotide targeting BCL-2 mRNA, is under regulatory review for melanoma.</p> <p>SciBX 2(3); doi:10.1038/scibx.2009.120 Published online Jan. 22, 2009</p>	<p>Patent pending covering targeted nanoparticles; available for licensing from the Ohio State University Office of Technology Licensing</p> <p>Contact: Jane New, Ohio State University, Columbus, Ohio phone: 614-292-3911 e-mail: new.16@osu.edu</p>	<p>Yang, X. <i>et al. Mol. Pharm.</i>; published online Dec. 16, 2008; doi:10.1021/mp800149s</p> <p>Contact: Robert J. Lee, Ohio State University, Columbus, Ohio e-mail: lee.1339@osu.edu</p> <p>Contact: Guido Marcucci, same affiliation as above e-mail: guido.marcucci@osumc.edu</p>