This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	DNA	<p><i>In vitro</i> and rat studies have identified mitochondria-targeted nanoparticle formulations of cisplatin that could help treat cisplatin-resistant cancers. Cisplatin resistance is enhanced by nucleotide excision repair mechanisms that are absent in mitochondria. A cisplatin prodrug, platin-M, was engineered to target the mitochondria and encapsulated in a biodegradable nanoparticle to promote its half-life and mitochondrial release. In cisplatin-resistant cancer cell lines, the formulation showed greater cytotoxicity than unmodified cisplatin. In rats, i.v. injection of the formulation led to blood brain barrier penetration of the nanoparticles. Next steps include testing the safety and efficacy of the formulation in larger animal models.</p> <p>SciBX 7(31); doi:10.1038/scibx.2014.916 Published online Aug. 14, 2014</p>	Provisional patent filed; licensed by Partikula LLC; available for licensing for applications other than cancer	<p>Marrache, S. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online July 7, 2014; doi:10.1073/pnas.1405244111</p> <p>Contact: Shanta Dhar, University of Georgia, Athens, Ga. e-mail: shanta@uga.edu</p>