This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Other				
Hearing loss	MicroRNA-15a-1 (miRNA-15a-1); miRNA-18a	<p>Studies in mice and in zebrafish suggest that targeting a series of miRNAs in the inner ear could help treat hearing loss. Microarray analysis of the inner ear compartments of deaf mice identified several miRNAs that might be important for the postnatal survival of the functional hair cells essential for hearing. Two of the miRNAs, miRNA-15a-1 and miRNA-18a, were required for inner ear development and morphogenesis of zebrafish. Next steps include identifying which of the miRNAs may be directly involved in hair cell survival and could thus be therapeutic targets.</p> <p>Quark Pharmaceuticals Inc. has a small interfering RNA molecule in preclinical development to treat acute hearing loss associated with ototoxicity and acoustic trauma.</p> <p>SciBX 2(16); doi:10.1038/scibx.2009.672 Published online April 23, 2009</p>	Unpatented; unavailable for licensing	<p>Friedman, L. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online April 13, 2009; doi:10.1073/pnas.0812446106</p> <p>Contact: Karen B. Avraham, Tel Aviv University, Tel Aviv, Israel e-mail: karena@post.tau.ac.il</p>