This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Lung cancer; liver cancer	MicroRNA-221 (miR-221); miR-222; phosphatase and tensin homolog deleted on chromosome ten (PTEN; MMAC1; TEP1); tissue inhibitor of metalloproteinases 3 (TIMP3); tumor necrosis factor–related apoptosis-inducing ligand (TRAIL)	Studies in cell culture suggest that inhibiting miR-221 and miR-222 could help treat lung and liver cancers. In human non–small cell lung cancer (NSCLC) and hepatocellular carcinoma (HCC) cells, increased miR-221 and miR-222 levels were associated with reduced expression of the tumor suppressors PTEN and TIMP3. Cancer cells with low expression of miR-221 and miR-222 had greater TRAIL-induced cell death than those with higher expression of the two miRNAs. Next steps include determining whether liver cancer can be induced via liver-specific overexpression of miR-221 and miR-222. ***SciBX*** **3(1); doi:10.1038/scibx.2010.10** **Published online Jan. 7, 2010**	Patent application filed; licensing status undisclosed	Garofalo, M. *et al. Cancer Cell*; published online Dec. 7, 2009; doi:10.1016/j.ccr.2009.10.014 **Contact:** Carlo Maria Croce, Ohio State University, Columbus, Ohio e-mail: carlo.croce@osumc.edu **Contact:** Gerolama Condorelli, University of Naples, Naples, Italy e-mail: gecondor@unina.it