

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Various				
Cancer; neurology	MicroRNA-7 (miR-7); cerebellar degeneration-related protein 1 antisense (ciRS-7; CDR1as)	<p><i>In silico</i> and cell culture studies suggest inhibiting the circular RNA ciRS-7 upregulates miR-7 expression, which could help treat cancer or neurological diseases. MiR-7 was previously proposed as a therapeutic for various diseases including cancer. A computational analysis of RNA sequencing data from a human cell line predicted the existence of about 2,000 circular RNA transcripts including ciRS-7, which contains multiple binding sites for miR-7. In cell culture, small interfering RNA against ciRS-7 increased the expression of miR-7 target genes compared with control siRNA. Next steps include screens and functional characterization of circular RNAs in disease.</p> <p>MiReven Pty. Ltd. has miR-7 derivatives in preclinical development to treat cancer.</p> <p>SciBX 6(10); doi:10.1038/scibx.2013.245 Published online March 14, 2013</p>	<p>Patent and licensing status undisclosed for findings in first study</p> <p>Patent application filed for findings in second study; available for licensing</p>	<p>Memczak, S. <i>et al. Nature</i>; published online Feb. 27, 2013; doi:10.1038/nature11928 Contact: Nikolaus Rajewsky, Max Delbrück Center for Molecular Medicine, Berlin, Germany e-mail: rajewsky@mdc-berlin.de</p> <p>Hansen, T.B. <i>et al. Nature</i>; published online Feb. 27, 2013; doi:10.1038/nature11993 Contact: Jørgen Kjems, Aarhus University, Aarhus, Denmark e-mail: jk@mb.au.dk Contact: Thomas B. Hansen, same affiliation as above e-mail: tbh@mb.au.dk</p>