

THE DISTILLERY

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	P glycoprotein (ABCB1; MDR1; P-gp)	Studies <i>in vitro</i> and in mice suggest that minicell- mediated, sequential delivery of small hairpin RNA and a cytotoxic drug could help treat drug-resistant cancers. Minicells coated with tumor-targeting antibodies were loaded with shRNA or cytotoxic agents for direct delivery to cancer cells. In colon cancer cells overexpressing <i>MDR1</i> , minicell delivery of <i>MDR1</i> shRNA followed by minicell delivery of a chemotherapeutic caused significantly higher cell death than treatment using either type of minicell alone. In mice with colon cancer xenografts, the sequential treatment led to complete survival, whereas treatment with either minicell alone led to early death. The strategy has been tested in monkeys and is now being tested in dogs with resistant, relapsed cancers. EnGeneIC Pty Ltd. plans to begin Phase I testing in the next two months.	Patent cooperation treaty and U.S. patent applications filed by EnGeneIC and now published; available for licensing	MacDiarmid, J. <i>et al. Nat. Biotechnol.</i> ; published online June 28, 2009; doi:10.1038/nbt.1547 Contact: Himanshu Brahmbhatt, EnGeneIC Pty Ltd., Sydney, Australia e-mail: hbrahmbhatt@engeneic.com

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