This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Breast cancer	HER2 (ERBB2; neu); transferrin receptor	<p>Mouse studies suggest that a nanopolymer-based conjugate could help treat HER2-positive breast cancer. A conjugate was synthesized that linked three components to a polymalic acid (PMLA) backbone: trastuzumab, an antisense oligonucleotide directed against <i>HER2</i> mRNA and an anti-transferrin receptor antibody to penetrate the blood-tumor barrier. In mice bearing human HER2-positive breast tumors, the conjugate led to lower tumor growth than trastuzumab alone, free oligonucleotide or conjugates carrying only the oligonucleotide or trastuzumab. A forthcoming study will describe a similar nanoconjugate to treat triple-negative breast cancer.</p> <p>Roche's Genentech Inc. unit markets Herceptin trastuzumab, a humanized mAb against HER2, to treat breast and gastric cancers.</p> <p>SciBX 4(8); doi:10.1038/scibx.2011.216 Published online Feb. 24, 2011</p>	Patented by Cedars-Sinai Medical Center; licensed to Arrogene Nanotechnology Inc.	<p>Inoue, S. <i>et al. Cancer Res.</i>; published online Feb. 8, 2011; doi:10.1158/0008-5472.CAN-10-3093 Contact: Julia Y. Ljubimova, Cedars-Sinai Medical Center, Los Angeles, Calif. e-mail: ljubimovaj@cshs.org</p>