

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Ovarian cancer	Notch 3 (NOTCH3)	<p><i>In vitro</i> and mouse studies suggest NOTCH3 inhibitors could help treat ovarian cancer. In patients with ovarian cancer, amplification and upregulation of <i>NOTCH3</i> were associated with poor survival. In human ovarian cancer cell lines, an indirect NOTCH inhibitor increased apoptosis in NOTCH3⁺ cells compared with NOTCH3⁻ cells, and <i>NOTCH3</i> siRNA increased sensitivity to paclitaxel compared with scrambled control siRNA. In mice bearing NOTCH3⁺ xenograft ovarian tumors, systemic delivery of a <i>NOTCH3</i> siRNA and paclitaxel decreased tumor growth compared with delivery of either agent alone. Ongoing work includes testing NOTCH3 inhibitors in the models.</p> <p>OncoMed Pharmaceuticals Inc. has OMP-59R5 (Anti-Notch2/3), a HuCAL mAb that binds NOTCH2 and NOTCH3, in Phase I/II testing to treat pancreatic and small lung cell cancers and Phase I trials to treat solid tumors.</p> <p>SciBX 7(21); doi:10.1038/scibx.2014.612 Published online May 29, 2014</p>	<p>siRNA delivery method patented by The University of Texas System Board of Regents; unlicensed</p>	<p>Hu, W. <i>et al. Cancer Res.</i>; published online April 17, 2014; doi:10.1158/0008-5472.CAN-13-2066 Contact: Anil K. Sood, The University of Texas MD Anderson Cancer Center, Houston, Texas e-mail: asood@mdanderson.org</p>