This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Myeloid leukemia cell differentiation protein (MCL1); f-box and WD repeat domain containing 7 (FBXW7; FBW7)	<p><i>In vitro</i> and mouse studies suggest that profiling FBW7 and MCL1 levels in tumors could help predict patient response to chemotherapy. In primary ovarian and non-small cell lung cancer (NSCLC) tumor cells, FBW7 deficiency led to higher MCL1 levels than those in wild-type controls. The antitubulin chemotherapies paclitaxel and vincristine induced less apoptosis in FBW7-deficient ovarian and colon cancer cell lines and in mice with FBW7-deficient xenograft ovarian tumors than in cell lines and tumors expressing wild-type FBW7. Inhibition of MCL1 restored the sensitivity of the FBW7-deficient cell lines and tumors to the generic antitubulin drugs. Ongoing work includes investigating whether the observed FBW7-MCL1 mechanism contributes to decreased sensitivity to antitubulin agents in other tumor types.</p> <p>SciBX 4(11); doi:10.1038/scibx.2011.307 Published online March 17, 2011</p>	Patent and licensing status undisclosed	<p>Wertz, I.E. <i>et al. Nature</i>; published online March 2, 2011; doi:10.1038/nature09779</p> <p>Contact: Ingrid E. Wertz, Genentech Inc., South San Francisco, Calif. e-mail: ingrid@gene.com</p>