This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Acute myelogenous leukemia (AML)	FMS-like tyrosine kinase 3 (FLT3; CD135)	<p>Patient sample studies identified resistance-causing mutations in FLT3 that could be targeted to treat AML. FLT3 inhibitors can lead to disease relapse in patients with AML. In a screen of AML samples from relapsed patients, mutations in residues of the FLT3 kinase domain were identified that were associated with treatment resistance. Next steps include identifying small molecules or biologics that interact with the resistant mutants.</p> <p>Ambit Biosciences Corp. and Astellas Pharma Inc. are developing quizartinib, a FLT3 inhibitor in Phase II testing to treat AML.</p> <p>At least nine other companies have FLT3 inhibitors in clinical and preclinical testing to treat cancer.</p> <p>SciBX 5(18); doi:10.1038/scibx.2012.460 Published online May 3, 2012</p>	Patent application filed; available for licensing	<p>Smith, C.C. <i>et al. Nature</i>; published online April 15, 2012; doi:10.1038/nature11016</p> <p>Contact: Neil P. Shah, University of California, San Francisco, Calif. e-mail: nshah@medicine.ucsf.edu</p>