This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Non-small cell lung cancer (NSCLC)	Anaplastic lymphoma kinase (ALK); heat shock protein 90 (Hsp90)	Mouse and cell culture studies suggest that second-generation ALK inhibitors or Hsp90 inhibitors could help treat crizotinib-resistant NSCLC. In a crizotinib-resistant NSCLC cell line, the ALK inhibitor AP26113 or an Hsp90 inhibitor decreased both cell growth and ALK signaling compared with crizotinib. In xenograft mice with the cell line, AP26113 lowered tumor growth compared with crizotinib. Next steps include clinical testing of AP26113 or Hsp90 inhibitors in patients with crizotinib-resistant cancers. Crizotinib, a dual inhibitor of c-Met receptor tyrosine kinase and ALK from Pfizer Inc., is under review for ALK-positive NSCLC. AP26113, an ALK inhibitor from Ariad Pharmaceuticals Inc., is in preclinical development to treat cancer. At least four other companies have ALK inhibitors in stages from preclinical to Phase I/II to treat cancer. At least 14 companies have Hsp90 inhibitors in stages from preclinical to Phase III to treat cancer. SciBX 4(19); doi:10.1038/scibx.2011.539 Published online May 12, 2011	Patent and licensing status undisclosed	Katayama, R. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online April 18, 2011; doi:10.1073/pnas.1019559108 Contact: Alice T. Shaw, Massachusetts General Hospital Cancer Center, Boston, Mass. e-mail: ashaw1@partners.org Contact: Jeffrey A. Engelman, same affiliation as above e-mail: jengelman@partners.org