

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Lung cancer	Anaplastic lymphoma kinase (ALK); epidermal growth factor receptor (EGFR); stem cell factor receptor tyrosine kinase (c-Kit; KIT; CD117)	<p>Patient and cell culture studies suggest targeting EGFR and KIT signaling pathways could help treat lung cancers resistant to ALK inhibitors. In samples from 18 patients resistant to Xalkori crizotinib, 17 showed EGFR activation and 2 samples showed KIT amplification. In Xalkori-resistant human lung cancer cell lines, Xalkori plus an EGFR or KIT inhibitor decreased proliferation compared with Xalkori alone. Next steps include identifying additional mechanisms of Xalkori resistance and determining how they influence resistance to next-generation ALK inhibitors.</p> <p>Pfizer Inc. markets Xalkori, a dual c-Met receptor tyrosine kinase and ALK inhibitor, to treat non-small cell lung cancer (NSCLC). At least four other companies have ALK inhibitors in Phase I/II testing or earlier to treat cancer.</p> <p>SciBX 5(6); doi:10.1038/scibx.2012.150 Published online Feb. 9, 2012</p>	Work unpatented; licensing status not applicable	<p>Katayama, R. <i>et al. Sci. Transl. Med.</i>; published online Jan. 25, 2012; doi:10.1126/scitranslmed.3003316</p> <p>Contact: Jeffrey A. Engelman, Massachusetts General Hospital Cancer Center, Boston, Mass. e-mail: jengelman@partners.org</p>