SciBX
Science-Business eXchange

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Non–small cell lung cancer (NSCLC)	MEK; epidermal growth factor receptor (EGFR)	Cell culture studies suggest antagonizing MEK or EGFR could be useful for treating *BRAF* mutation–positive NSCLC. About 6%–8% of NSCLC tumors have activating mutations in *BRAF*. In cultured NSCLC cells and human tissue samples with activating *BRAF* mutations, acquired resistance to BRAF inhibitors was associated with elevated MEK activation or constitutive EGFR signaling. In cell culture, small molecule MEK or EGFR inhibitors decreased treatment-acquired BRAF inhibitor resistance compared with vehicle controls. Next steps could include testing combinations of MEK or EGFR inhibitors with BRAF inhibitors in animal models of NSCLC. Tafinlar dabrafenib from GlaxoSmithKline plc and Zelboraf vemurafenib from Roche and Daiichi Sankyo Co. Ltd. are BRAF inhibitors marketed to treat BRAF-mutant melanoma. Tafinlar is also in Phase II testing for NSCLC. GSK also markets Mekinist trametinib, a small molecule MEK inhibitor, to treat BRAF-mutant melanoma. At least 12 companies have MEK inhibitors in Phase III or earlier testing to treat various cancers. More than a dozen EGFR inhibitors are marketed or in late-stage clinical development for a range of cancers. *SciBX* 7(9); doi:10.1038/scibx.2014.253 Published online March 6, 2014	Patent and licensing status undisclosed	Lin, L. *et al. Proc. Natl. Acad. Sci. USA*; published online Feb. 3, 2014; doi:10.1073/pnas.1320956111 **Contact:** Trever G. Bivona, University of California, San Francisco, Calif. e-mail: trever.bivona@ucsf.edu