

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Melanoma	BRAF; epidermal growth factor receptor 3 (EGFR3; HER3; ERBB3)	<p>Cell culture and mouse studies suggest inhibiting EGFR3 and BRAF could help treat <i>BRAF</i>-mutant melanomas resistant to BRAF inhibitors. In mutant <i>BRAF</i> melanoma cell lines stimulated with an EGFR3 ligand—which confers resistance to BRAF inhibitors—a humanized anti-EGFR3 mAb plus a mutant BRAF inhibitor increased cell death compared with either agent alone. In a xenograft mouse model of melanoma, the combination induced complete tumor regression in 4 of 8 animals, whereas the mutant BRAF inhibitor alone induced regression in 1 of 8 cases. Next steps could include testing the combination strategy in clinical trials.</p> <p>GlaxoSmithKline plc markets the BRAF inhibitor Tafinlar dabrafenib to treat melanoma. Daiichi Sankyo Co. Ltd., Chugai Pharmaceutical Co. Ltd. and Roche market Zelboraf vemurafenib to treat melanoma. At least four additional companies have BRAF inhibitors in clinical testing to treat melanoma.</p> <p>At least 14 companies have small molecules or antibodies targeting EGFR3 in Phase II or earlier testing to treat various cancers.</p> <p>SciBX 7(33); doi:10.1038/scibx.2014.983 Published online Aug. 28, 2014</p>	Patent and licensing status unavailable	<p>Kugel, C.H. III <i>et al. Cancer Res.</i>; published online July 17, 2014; doi:10.1158/0008-5472.CAN-14-0464 Contact: Andrew E. Aplin, Thomas Jefferson University, Philadelphia, Pa. e-mail: andrew.aplin@jefferson.edu</p>