

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Thyroid cancer	BRAF; epidermal growth factor receptor 3 (EGFR3; HER3; ErbB3)	<p>Cell culture and mouse studies suggest Zelboraf vemurafenib plus Tykerb lapatinib could be used to treat BRAF-mutant thyroid cancer. In a thyroid cancer cell line, vemurafenib activated HER3, which could be blocked with lapatinib. In three BRAF-mutant thyroid cancer cell lines, vemurafenib plus lapatinib decreased cellular proliferation compared with either drug alone. In a genetic mouse model of thyroid tumorigenesis, combined treatment with the two drugs decreased tumor volume compared with either drug alone. Ongoing work includes clinical testing of the combination in individuals with metastatic thyroid cancer.</p> <p>Daiichi Sankyo Co. Ltd., Chugai Pharmaceutical Co. Ltd. and Roche market Zelboraf, an oral small molecule inhibitor of oncogenic BRAF V600E, to treat melanoma. The drug is in Phase II testing for thyroid cancer.</p> <p>GlaxoSmithKline plc markets Tykerb, a HER1 (EGFR1; ErbB1) and HER2 (EGFR2; ErbB2; neu) receptor kinase inhibitor, to treat breast cancer.</p> <p>SciBX 6(7); doi:10.1038/scibx.2013.161 Published online Feb. 21, 2013</p>	Unpatented; licensing status not applicable	<p>Montero-Conde, C. <i>et al. Cancer Discov.</i>; published online Jan. 29, 2013; doi:10.1158/2159-8290.CD-12-0531</p> <p>Contact: James A. Fagin, Memorial Sloan-Kettering Cancer Center, New York, N.Y. e-mail: faginj@mskcc.org</p>