This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	BRAF	<p><i>In vitro</i> and patient studies suggest combining BRAF inhibitors with autophagy inhibitors such as chloroquine could help treat <i>BRAF</i>-mutant cancers. In astrocytoma cells with the BRAF V600E activating mutation, autophagy was greater than that in cells with wild-type BRAF. In the <i>BRAF</i>-mutant cancer cells, chloroquine induced cell death and was synergistic with the BRAF inhibitor Zelboraf vemurafenib. In a patient who developed Zelboraf resistance, Zelboraf plus chloroquine led to stable disease for over 16 months and decreased tumor growth compared with Zelboraf alone or in combination with chemotherapy. Next steps include additional preclinical studies to understand the role of autophagy in <i>BRAF</i>-mutant cancers. Roche, Chugai Pharmaceutical Co. Ltd. and Daiichi Sankyo Co. Ltd. market Zelboraf to treat melanoma.</p> <p>SciBX 7(25); doi:10.1038/scibx.2014.729 Published online June 26, 2014</p>	Patent status not applicable; unlicensed	<p>Levy, J.M.M. <i>et al. Cancer Discov.</i>; published online May 13, 2014; doi:10.1158/2159-8290.CD-14-0049 Contact: Jean M. Mulcahy Levy, University of Colorado Denver, Aurora, Colo. e-mail: jean.mulcahy-levy@childrenscolorado.org</p>