This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Solid tumors	Phosphoinositide 3-kinase- δ (PI3K δ); phosphoinositide 3-kinase catalytic subunit δ -polypeptide (PI3KCD; p110 δ)	<p>Mouse studies suggest inhibitors of PI3Kδ could help treat solid tumors. In mice bearing breast, lung, melanoma or other solid tumor types, expression of <i>p110δ</i> with an inactivating mutation or use of a selective PI3Kδ inhibitor decreased tumor growth and metastasis and increased survival compared with expression of wild-type <i>p110δ</i> or use of vehicle. Planned work includes clinical testing of a selective PI3Kδ inhibitor in patients with undisclosed solid tumor types. Gilead Sciences Inc. has idelalisib, a small molecule inhibitor of PI3Kδ, in registration to treat chronic lymphocytic leukemia (CLL) and non-Hodgkin's lymphoma (NHL). Takeda Pharmaceutical Co. Ltd. and Infinity Pharmaceuticals Inc. have IPI-145, an oral inhibitor of PI3Kδ and PI3Kγ, in Phase III trials to treat CLL and in Phase II testing to treat NHL, lymphoma, rheumatoid arthritis (RA) and inflammation. Rhizen Pharmaceuticals S.A. and TG Therapeutics Inc. have the PI3Kδ inhibitor RP-5264 (TGR-1202) in Phase II trials to treat CLL, B cell lymphoma and hematological malignancies.</p> <p><i>SciBX</i> 7(26); doi:10.1038/scibx.2014.765 Published online July 10, 2014</p>	Unpatented; unlicensed	<p>Ali, K. <i>et al. Nature</i>; Published online July 11, 2014; doi:10.1038/nature13444 Contact: Bart Vanhaesebroeck, University College London, London, U.K. e-mail: bart.vanh@ucl.ac.uk</p>