This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Non-small cell lung cancer (NSCLC)	Epidermal growth factor receptor 1 (EGFR1; HER1; ErbB1)	<p><i>In vitro</i> studies suggest diaminopyrimidine inhibitors of mutant EGFR1 could help treat NSCLC. The T790M mutation in EGFR1 is associated with acquired resistance to Tarceva erlotinib and Iressa gefitinib. High throughput library screening, medicinal chemistry and <i>in vitro</i> testing identified several diaminopyrimidine analogs that exhibit low nanomolar inhibitory activity against T790M EGFR1 but not wild-type EGFR1 or other kinases. Next steps could include evaluating the lead EGFR1 inhibitors in mouse models of NSCLC.</p> <p>Astellas Pharma Inc., Chugai Pharmaceutical Co. Ltd., Roche and its Genentech Inc. unit market Tarceva, a small molecule EGFR1 inhibitor, to treat NSCLC and pancreatic cancer. AstraZeneca plc markets Iressa, an EGFR1 inhibitor, to treat NSCLC.</p> <p>SciBX 7(47); doi:10.1038/scibx.2014.1375 Published online Dec. 11, 2014</p>	Patent and licensing status unavailable	<p>Hanan, E.J. <i>et al. J. Med. Chem.</i>; published online Nov. 10, 2014; doi:10.1021/jm501578n</p> <p>Contact: Emily J. Hanan, Genentech Inc., South San Francisco, Calif. e-mail: hanan.emily@gene.com</p>