This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD)	Epidermal growth factor receptor (EGFR)	<p><i>Drosophila</i> and mouse studies suggest EGFR inhibitors could help treat AD. In transgenic flies expressing human β-amyloid 42, the EGFR inhibitors Iressa and Tarceva prevented memory loss as effectively as the approved AD drug memantine. In a transgenic mouse model of AD, Iressa decreased memory loss compared with vehicle. In both a mouse and fly behavioral screen of 2,000 synthetic compounds that modulate protein kinase activities, 3 compounds prevented memory loss and inhibited β-amyloid 42-mediated Egfr activity. Next steps include identifying more compounds for preclinical screening.</p> <p>Astellas Pharma Inc., Chugai Pharmaceutical Co. Ltd. and Roche market Tarceva erlotinib to treat pancreatic cancer and non-small cell lung cancer (NSCLC).</p> <p>AstraZeneca plc's Iressa is in Phase III testing to treat head and neck cancer.</p> <p>SciBX 5(40); doi:10.1038/scibx.2012.1058 Published online Oct. 11, 2012</p>	Patent application filed; available for licensing	<p>Wang, L. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Sept. 27, 2012; doi:10.1073/pnas.1208011109</p> <p>Contact: Yi Zhong, Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y. e-mail: zhongyi@cshl.edu</p>