

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Infectious disease				
HCV	Epidermal growth factor receptor (EGFR); EGFR1 (HER1; ERBB1); EPH receptor A2 (EPHA2)	<p><i>In vitro</i> and mouse studies suggest that antagonizing receptor tyrosine kinases such as EGFR or EPHA2 could help treat HCV infection. In an RNAi-based kinase screen, EGFR and EPHA2 were identified as cofactors for HCV entry. In virus particle-transfected liver cells, small interfering RNA knockdown of EGFR or EPHA2 inhibited entry of HCV strains. In mice with HCV-infected human livers, the EGFR1 kinase inhibitor Tarceva erlotinib decreased HCV RNA levels by more than 90% compared with placebo. Next steps this year include running a Phase I trial of an undisclosed receptor tyrosine kinase antagonist to treat HCV.</p> <p>Tarceva is marketed by Roche and Astellas Pharma Inc. to treat non-small cell lung cancer (NSCLC) and pancreatic cancer.</p> <p>More than 18 other companies have EGFR inhibitors or antibodies in development stages from preclinical to marketed for cancer.</p> <p>SciBX 4(18); doi:10.1038/scibx.2011.515 Published online May 5, 2011</p>	Patented; available for licensing through the Institut National de la Santé et de la Recherche Médicale (INSERM)	<p>Lupberger, J. <i>et al. Nat. Med.</i>; published online April 24, 2011; doi:10.1038/nm.2341</p> <p>Contact: Thomas F. Baumert, University of Strasbourg, Strasbourg, France e-mail: thomas.baumert@unistra.fr</p>