This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Epidermal growth factor receptor 3 (EGFR3; HER3; ErbB3); HER2 (EGFR2; ErbB2; neu); EGFR	<p>Studies in patient samples and cell culture suggest inhibiting mutant proteins in the ErbB signaling pathway could help treat gallbladder cancer (GBC). In matched tumor and normal tissue samples from 57 individuals with GBC, exome sequencing and ultra-deep sequencing revealed ErbB signaling-associated mutations in 36.8% of GBC samples with <i>ErbB3</i> mutations, accounting for 11.8% of the cases. Patients with <i>ErbB</i> pathway mutations had significantly lower overall survival than those without such mutations ($p < 0.012$). In GBC cell lines, siRNA against <i>EGFR</i>, <i>ErbB2</i> or <i>ErbB3</i> decreased growth and motility compared with control siRNA. Ongoing studies include assessing the effect of wild-type and patient-derived mutant variants of targets in the ErbB pathway on GBC cells <i>in vitro</i> and <i>in vivo</i>.</p> <p>SciBX 7(30); doi:10.1038/scibx.2014.889 Published online Aug. 7, 2014</p>	Unpatented; licensing status not applicable	<p>Li, M. <i>et al. Nat. Genet.</i>; published online July 6, 2014; doi:10.1038/ng.3030</p> <p>Contact: Yingbin Liu, Shanghai Jiao Tong University, Shanghai, China e-mail: liuybphd@126.com</p>