This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Liver cancer	IL-17A	<p>Mouse studies suggest IL-17A inhibitors could help treat hepatocellular carcinoma (HCC). Elevated tumor levels of IL-17A are associated with poor prognosis in patients with HCC. In mice with HCC tumors, <i>Il-17a</i> deficiency decreased tumor growth compared with unmodified <i>Il-17a</i> expression. In mice with HCC, recombinant IL-17a recruited tumor-infiltrating, myeloid-derived suppressor cells that secreted proinflammatory cytokines, which in turn induced IL-17a production in $\gamma\delta$ T cells in a feed-forward loop that drove tumor growth. Future studies could include testing anti-IL-17A antibodies in the HCC models.</p> <p>Novartis AG's secukinumab (AIN457), a human IgG1 mAb targeting IL-17A, is under regulatory review to treat psoriasis. It also is in Phase III testing to treat rheumatoid arthritis (RA), psoriatic arthritis and ankylosing spondylitis and in Phase II trials to treat multiple sclerosis (MS).</p> <p>Eli Lilly and Co.'s ixekizumab (LY2439821), a humanized mAb against IL-17A, is in Phase III testing to treat psoriasis and psoriatic arthritis and in Phase I trials to treat RA.</p> <p>Novimmune S.A., Roche and its Genentech Inc. unit have NI-1401 (MCAF5352A; RG7624), a human mAb that binds IL-17A and IL-17F, in Phase I testing to treat autoimmune disease.</p> <p>SciBX 7(10); doi:10.1038/scibx.2014.282 Published online March 13, 2014</p>	Patent and licensing status unavailable	<p>Ma, S. <i>et al. Cancer Res.</i>; published online Feb. 13, 2014; doi:10.1158/0008-5472.CAN-13-2534 Contact: Haiyan Liu, Soochow University, Suzhou, China e-mail: hliu@suda.edu.cn</p>