This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Autoimmune	Tumor necrosis factor- α (TNF- α)	<p><i>In vitro</i> studies identified two small molecule TNF-α inhibitors that could be better at treating autoimmune diseases than existing inhibitors. An <i>in silico</i> screen of over 20,000 natural products and analogs identified indoloquinolizidine and quinuclidine compounds as potential TNF-α inhibitors. In dose-response assays, indoloquinolizidine had an IC_{50} of about 10 μm. In human cellular assays, quinuclidine had an IC_{50} value of about 5 μm. The two compounds were more potent than any previously reported small molecule TNF-α inhibitor. Next steps include optimizing both compounds and testing them in cell and animal disease models.</p> <p>At least 25 companies have TNF-α inhibitors in development stages ranging from preclinical to marketed.</p> <p>SciBX 3(13); doi:10.1038/scibx.2010.398 Published online April 1, 2010</p>	Findings unpatented; unavailable for licensing	<p>Shiu-Hin, D. <i>et al. Angew. Chem. Int. Ed.</i>; published online March 16, 2010; doi:10.1002/anie.200907360</p> <p>Contact: Dik-Lung Ma, The University of Hong Kong, Hong Kong, China e-mail: edmondma@hku.hk</p> <p>Contact: Chung-Hang Leung, same affiliation as above e-mail: duncanl@hku.hk</p>