

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Autoimmune disease</b>				
Rheumatoid arthritis (RA)	Tumor necrosis factor (ligand) superfamily, member 13b (TNFSF13B; BLYS; BAFF)	<p>Studies in mice suggest that antagonizing BAFF in local joint tissue could be useful for treating RA. In a mouse model of collagen-induced arthritis, intra-articular injection of a lentivirus vector expressing small hairpin RNA for BAFF lowered the incidence and clinical severity of arthritis compared with what was seen using saline buffer or a lentiviral control vector expressing <math>\beta</math>-actin shRNA. Compared with those controls, shRNA BAFF knockdown improved ankle synovitis, cartilage degradation and joint erosion. Next steps include further investigating the safety of the lentivirus vector.</p> <p>AMG 623, a peptide fusion protein that antagonizes BAFF from Amgen Inc. and Anthera Pharmaceuticals Inc., is in Phase I testing to treat lupus.</p> <p>Belimumab (LymphoStat-B), a human anti-BAFF mAb from Human Genome Sciences Inc. and GlaxoSmithKline plc, is in Phase III testing to treat lupus and Phase II testing to treat RA.</p>	Not patented; licensing status unknown	<p>Lam, Q. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Sept. 15, 2008; doi:10.1073/pnas.0806044105</p> <p><b>Contact:</b> Liwei Lu, University of Hong Kong, Hong Kong, China e-mail: <a href="mailto:liweilu@hkucc.hku.hk">liweilu@hkucc.hku.hk</a></p>