

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Systemic lupus erythematosus (SLE), arthritis and certain other autoimmune diseases	Fc- γ receptor IIb (CD32B)	<p>A study in mice suggests that increasing the expression of CD32B on B cells might help treat autoimmune disease. In mouse models of collagen-induced arthritis (CIA), CD32B overexpression on B cells significantly reduced late-stage disease severity compared with that in control animals with normal expression of CD32B ($p < 0.05$). When CD32B was overexpressed on B cells in SLE mouse models, 85% of the transgenic mice survived at 34 weeks compared with none of the wild-type mice ($p < 0.0001$). In contrast, macrophage-specific overexpression of CD32B increased mortality in the mouse models after infection with <i>Streptococcus pneumoniae</i>. The researchers are examining the expression of CD32B in patients with various autoimmune diseases.</p> <p>SuppreMol GmbH's SM101 soluble form of CD32B is in preclinical testing to treat the autoimmune disease idiopathic thrombocytopenic purpura (ITP).</p>	Not applicable	<p>Brownlie, R. <i>et al. J. Exp. Med.</i>; published online March 24, 2008; doi:10.1084/jem.20072565</p> <p>Contact: Kenneth G.C. Smith, University of Cambridge School of Clinical Medicine, Cambridge, U.K. e-mail: kgcs2@cam.ac.uk</p>