

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Autoimmune disease</b>				
Multiple sclerosis (MS); rheumatoid arthritis (RA); lupus	S100 calcium binding protein A9 (S100A9; calgranulin B; MRP14)	<p><i>In vitro</i> and mouse studies suggest that immunomodulatory quinoline-3-carboxamide (Q) compounds target a cell-surface receptor called S100A9 and could help treat autoimmune diseases. On biosensor chips, Q compounds disrupted S100A9 binding to two proinflammatory receptors, toll-like receptor 4 (TLR4) and receptor for advanced glycation endproducts (RAGE), compared with that seen in untreated controls. In a mouse model of MS, Q compounds with the highest affinity for S100A9 had better efficacy than compounds with lower S100A9 affinity. Next steps include developing more selective S100A9 inhibitors.</p> <p>Laquinimod (SAIK-MS), a Q compound from Active Biotech AB and Teva Pharmaceutical Industries Ltd., is in Phase III testing for MS.</p> <p><b>SciBX 2(19); doi:10.1038/scibx.2009.778</b> Published online May 14, 2009</p>	Patent pending for screening technology to identify S100A9 modulators; compounds identified with this technology available for licensing from Active Biotech	<p>Björk, P. <i>et al. PLoS Biol.</i>; published online April 28, 2009; doi:10.1371/journal.pbio.1000097</p> <p><b>Contact:</b> Tomas Leanderson, Lund University, Lund, Sweden e-mail: <a href="mailto:Tomas.Leanderson@med.lu.se">Tomas.Leanderson@med.lu.se</a></p>