

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Autoimmune disease; lupus	S100 calcium binding protein A8 (S100A8; calgranulin A; MRP8); S100A9 (calgranulin B; MRP14)	<p>Studies in mice and in humans suggest that inhibition of MRP8 and MRP14 could help treat CD8⁺ T cell-associated autoimmune diseases like lupus. Skin from patients with cutaneous lupus erythematosus had <i>MRP8</i>- and <i>MRP14</i>-expressing epidermal cells, whereas such cells were not detected in skin from healthy patients. In a mouse model of systemic autoimmunity, mice receiving CD8⁺ T cells from donors with deficient <i>Mrp8</i> and <i>Mrp14</i> signaling had less severe autoimmunity symptoms than mice receiving cells from donors with functional <i>Mrp</i> signaling. Next steps include studying the phenotype of T cells from patients being treated with MRP14 inhibitors.</p> <p>Laquinimod, an immune-modulating compound targeting MRP14 from Active Biotech AB and Teva Pharmaceutical Industries Ltd., is in Phase II testing to treat lupus.</p> <p>Active Biotech also has paquinimod, a quinoline-3-carboxamide targeting MRP14, in Phase I testing for the same indication.</p> <p>SciBX 3(20); doi:10.1038/scibx.2010.609 Published online May 20, 2010</p>	Work unpatented; available for licensing	<p>Loser, K. <i>et al. Nat. Med.</i>; published online May 9, 2010; doi:10.1038/nm.2150</p> <p>Contact: Karin Loser, University of Muenster, Muenster, Germany e-mail: loserk@uni-muenster.de</p>