

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Autoimmune; multiple sclerosis (MS)	RAR-related orphan receptor A (RORA); RORC (ROR γ); ROR γ T; IL-17 (IL-17A)	<p>A study in cell culture and in mice identified inverse agonists of RORA and RORγT that could help treat autoimmune diseases. In cultured mouse Cd4⁺ T cells, the RORA and RORγT synthetic ligand SR1001 decreased both T cell differentiation to T helper type 17 (Th17) cells and proinflammatory Il-17 expression compared with vehicle control. In an experimental autoimmune encephalomyelitis (EAE) mouse model of MS, SR1001 lowered Il-17 expression, delayed disease onset and decreased disease severity compared with vehicle control. Ongoing work includes the medicinal optimization of SR1001 and RORγT-selective compounds.</p> <p>At least five companies have therapeutics that block IL-17 signaling in development stages from discovery to Phase II for autoimmune diseases.</p> <p>SciBX 4(17); doi:10.1038/scibx.2011.476 Published online April 28, 2011</p>	Patent application filed; available for licensing	<p>Solt, L.A. <i>et al. Nature</i>; published online April 17, 2011; doi:10.1038/nature10075</p> <p>Contact: Thomas P. Burris, Scripps Florida, Jupiter, Fla. e-mail: tburris@scripps.edu</p>