This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Multiple sclerosis (MS)	Sphingosine 1-phosphate lyase (S1P lyase)	<p>SAR and rat studies suggest S1P lyase antagonists could help treat MS. <i>In vitro</i> screening identified S1P lyase inhibitors, and subsequent optimization yielded an orally available compound with high selectivity that inhibited the enzyme with an IC_{50} value of 210 nM. In rats with experimental autoimmune encephalomyelitis (EAE), the optimized S1P lyase inhibitor decreased neuroinflammation compared with vehicle control. Researchers did not disclose next steps, which could include further optimization of the lead inhibitor and evaluating the compound in additional animal models of MS.</p> <p>Lexicon Pharmaceuticals Inc. has the indirect S1P lyase antagonist LX2931 in Phase II testing to treat rheumatoid arthritis (RA) and in preclinical development for Duchenne muscular dystrophy (DMD).</p> <p>SciBX 7(24); doi:10.1038/scibx.2014.697 Published online June 19, 2014</p>	Patent and licensing status undisclosed	<p>Weiler, S. <i>et al. J. Med. Chem.</i>; published online May 8, 2014; doi:10.1021/jm500338n</p> <p>Contact: Sven Weiler, Novartis Institutes for BioMedical Research, Basel, Switzerland e-mail: sven.weiler@novartis.com</p>