This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Multiple sclerosis (MS)	Muscarinic acetylcholine receptor (CHRM; HM)	<p><i>In vitro</i> and mouse studies suggest CHRM antagonists could help treat MS. In rat oligodendrocyte precursor cells, benztropine induced differentiation into cells expressing oligodendrocyte markers and increased remyelination of axons when cocultured with neurons compared with vehicle. In a mouse model of experimental autoimmune encephalomyelitis (EAE), benztropine prevented relapse and decreased disease severity compared with vehicle, and its effects were similar to those of the immunosuppressant MS treatments interferon-β (IFNβ; IFN-β) and Gilenya fingolimod. In a mouse model of remyelination, benztropine accelerated remyelination, whereas vehicle did not. Next steps include testing benztropine in patients with MS.</p> <p>Generic benztropine is marketed to treat symptoms of Parkinson's disease (PD). Novartis AG markets the sphingosine 1-phosphate receptor agonist Gilenya to treat relapsing forms of MS.</p> <p>SciBX 6(43); doi:10.1038/scibx.2013.1214 Published online Nov. 7, 2013</p>	Patent application filed; available for licensing	<p>Deshmukh, V.A. <i>et al. Nature</i>; published online Oct. 9, 2013; doi:10.1038/nature12647</p> <p>Contact: Peter G. Schultz, The Scripps Research Institute, La Jolla, Calif. e-mail: schultz@scripps.edu</p>