This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Autoimmune disease				
Osteoarthritis (OA)	Complement 5 (C5)	<p>Mouse and human studies suggest inhibiting C5 could help treat OA. In the synovial fluid of patients with OA, levels of C5 and other complement system proteins were greater than those in the synovial fluid of healthy controls. In three mouse models of knee OA, C5 knockout or an anti-C5 mAb decreased signs of disease and increased joint function compared with wild-type C5 expression or inactive control mAbs. Ongoing work includes investigating the mechanisms by which the complement system becomes activated in OA and testing inhibitors of the mechanisms in animal models.</p> <p>Soliris eculizumab, a humanized mAb targeting C5 from Alexion Pharmaceuticals Inc., is approved to treat hemolytic uremic syndrome and paroxysmal nocturnal hemoglobinuria (PNH).</p> <p>ARC1905, an anti-C5 aptamer from Archemix Corp. and Ophthotech Corp., is in Phase I testing to treat age-related macular degeneration (AMD).</p> <p>SciBX 4(45); doi:10.1038/scibx.2011.1258 Published online Nov. 17, 2011</p>	Patented by Stanford University; available for licensing	<p>Wang, Q. <i>et al. Nat. Med.</i>; published online Nov. 6, 2011; doi:10.1038/nm.2543</p> <p>Contact: William H. Robinson, Stanford University School of Medicine, Stanford, Calif. e-mail: wrobins@stanford.edu</p>