This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Transplantation				
Graft rejection	Complement 3 (C3); C5a	<p>Mouse studies suggest a combination of C3 and C5a inhibition could be useful for preventing graft rejection. In a mouse model for tracheal transplant, C3 knockout animals treated with NOX-D19, an aptamer antagonist of C5a, had decreased thrombin activation, vascular abnormalities and fibrosis and increased oxygenation and blood perfusion to engrafted tissue compared with wild-type or untreated controls. Next steps could include preclinical optimization of C3 and C5a inhibitors. Noxxon Pharma AG's NOX-D19 is in preclinical development for liver and kidney failure.</p> <p>AstraZeneca plc's MEDI-7841, a mAb against C5a and C5, is in Phase I testing for chronic obstructive pulmonary disease (COPD).</p> <p>Novo Nordisk A/S's anti-C5aR-151 (NN8209), an anti-C5a mAb, is in Phase I testing for rheumatoid arthritis (RA).</p> <p>Potentia Pharmaceuticals Inc. and partner Novartis AG are developing compstatin (APL-1; POT-4), a C3 inhibitor that is in Phase II testing for age-related macular degeneration (AMD).</p> <p>SciBX 6(18); doi:10.1038/scibx.2013.443 Published online May 9, 2013</p>	NOX-D19 is patented by Noxxon Pharma; licensing status undisclosed	<p>Khan, M.A. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 25, 2013; doi:10.1073/pnas.1217991110</p> <p>Contact: Mark R. Nicolls, Stanford University School of Medicine, Stanford, Calif. e-mail: mnicolls@stanford.edu</p>