This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Ophthalmic disease				
Diabetic retinopathy	Semaphorin 3A (SEMA3A); neuropilin 1 (NRP1)	<p>Mouse studies suggest inhibiting SEMA3A could help treat diabetic retinopathy. In vitreous fluid from patients with edema, SEMA3A expression was higher than that in subjects without edema. In mice, intravitreal injection of SEMA3A increased vascular permeability and leakage compared with vehicle injection. Conditional knockout of Sema3a's receptor, <i>Nrp1</i>, in the retinal vasculature or small hairpin RNA against <i>Sema3a</i> decreased permeability compared with no <i>Nrp1</i> knockout or control shRNA. Next steps include developing strategies to neutralize SEMA3A for ocular applications.</p> <p>SciBX 6(44); doi:10.1038/scibx.2013.1273 Published online Nov. 14, 2013</p>	Provisional patent application filed; available for licensing	<p>Cerani, A. <i>et al. Cell Metab.</i>; published online Oct. 1, 2013; doi:10.1016/j.cmet.2013.09.003 Contact: Przemyslaw Sapieha, University of Montreal, Montreal, Quebec, Canada e-mail: mike.sapieha@umontreal.ca</p>