This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Intimal hyperplasia	Interferon regulatory factor 9 (IRF9); sirtuin 1 (SIRT1)	Mouse studies suggest inhibiting IRF9 or activating SIRT1 could help prevent arterial intimal hyperplasia caused by vascular bypass surgery. In smooth vascular muscle cells from mice, Irf9 inhibited Sirt1 activity and promoted proliferation. In a mouse model of carotid artery surgery, *Irf9* knockout decreased proliferation and migration of neointima-forming vascular smooth muscle cells in injured arteries and overexpression of human *IRF9* in aortic vascular smooth muscle cells increased neointima formation compared with wild-type expression. In the same model, a SIRT1 activator decreased neointima formation and a SIRT1 inhibitor increased neointima formation compared with vehicle. Next steps could include evaluating SIRT1 agonists in additional models involving neointima formation. GlaxoSmithKline plc has four SIRT1 activators in clinical testing: GSK184072 is in Phase II testing to treat cancer and diabetes; GSK2245840 (SRT2104) is in Phase II testing to treat psoriasis; SRT501 is in Phase II trials for diabetes and Phase I testing for metabolic and mitochondrial diseases; and SRT2379 is in Phase I trials to treat diabetes. *SciBX* 7(45); doi:10.1038/scibx.2014.1317 Published online Nov. 20, 2014	Patent and licensing status not available	Zhang, S.-M. *et al. Nat. Commun.*; published online Oct. 16, 2014; doi:10.1038/ncomms6160 **Contact:** Hongliang Li, Wuhan University, Wuhan, China e-mail: ihl@whu.edu.cn **Contact:** De-Pei Liu, Peking Union Medical College, Beijing, China e-mail: liudp@pumc.edu.cn