This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Myocardial infarction (MI)	Prostaglandin E ₂ receptor EP2 subtype (prostanoid EP2 receptor; PTGER2)	<p>Mouse studies suggest activating PTGER2 with prostaglandin E₂ (PGE₂) could help replenish cardiomyocytes following MI. In a mouse model of MI, cardiomyocytes naturally repopulated the infarct border zone and a remote region up to 10 days post-MI. The process could be blocked with a pan-cyclooxygenase (COX) inhibitor or COX-2-specific inhibitor up to five days post-MI. In the mouse model, the COX-2 downstream effector PGE₂ increased stem cell-mediated cardiomyocyte repopulation compared with vehicle. In an aged mouse model of MI, injection of PGE₂ increased stem cell-mediated cardiomyocyte repopulation at the infarct border zone compared with no treatment. Next steps include optimizing the delivery method for PGE₂.</p> <p>SciBX 7(9); doi:10.1038/scibx.2014.257 Published online March 6, 2014</p>	Patent application filed; available for licensing	<p>Hsueh, Y.-C. <i>et al. EMBO Mol. Med.</i>; published online Jan. 21, 2014; doi:10.1002/emmm.201303687</p> <p>Contact: Patrick C.H. Hsieh, National Cheng Kung University, Tainan, Taiwan e-mail: phsieh@mail.ncku.edu.tw</p>