This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Bone repair; wounds	Bone morphogenetic protein 2 (BMP2); platelet-derived growth factor BB (PDGFBB); placental growth factor (PGF; PlGF); VEGF receptor 2 (KDR/Flk-1; VEGFR-2)	Rodent studies suggest improving extracellular matrix (ECM) binding of growth factors could improve wound healing and bone repair. In a mouse model of diabetic wound healing, engineered VEGFR-2 or PDGFBB fused to the heparin-binding 123–144 fragment of PlGF showed faster wound closure and better binding to ECM proteins than unfused VEGFR-2 and PDGFBB. In the model, the $PlGF_{123–144}$-fused VEGFR-2 also induced less vascular permeability and leakage than the unfused growth factor. In a rat bone defect model, $PlGF_{123–144}$-fused PDGFBB or BMP2 increased bone healing compared with unfused growth factors. Next steps could include modifying additional growth factors. *SciBX* 7(12); doi:10.1038/scibx.2014.351 Published online March 27, 2014	Patent and licensing status unavailable	Martino, M.M. *et al. Science*; published online Feb. 21, 2014; doi:10.1126/science.1247663 **Contact:** Jeffrey A. Hubbell, Swiss Federal Institute of Technology Lausanne, Lausanne, Switzerland e-mail: jeffrey.hubbell@epfl.ch