This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Dermatology				
Wounds	Sphingosine 1-phosphate receptor 3 (S1PR3; S1P3; EDG3)	Cell culture and mouse studies suggest S1PR3 agonists could help treat wound healing. In human umbilical vein endothelial cells, the S1PR1 (S1P1; EDG1) and S1PR3 agonist Gilenya fingolimod increased the secretion of proregenerative cytokines compared with no treatment. In mice surgically implanted with subdermal, thin polymer films, embedding Gilenya in the polymer increased microvascular growth and the recruitment of anti-inflammatory monocytes around the implant compared with what was seen using control polymer films. In a mouse model of muscle ischemia, Gilenya-coated, thin polymer films inserted next to the damaged muscle tissue increased recruitment of anti-inflammatory monocytes to ischemic vessels and arteriogenesis compared with uncoated films. Next steps could include optimizing S1PR3 agonists and testing them in preclinical models of wound healing. Mitsubishi Tanabe Pharma Corp. and Novartis AG market Gilenya to treat multiple sclerosis (MS).	Patent and licensing information unavailable	Awojoodu, A.O. *et al. Proc. Natl. Acad. Sci. USA*; published online Aug. 5, 2013; doi:10.1073/pnas.1221309110 **Contact:** Edward Botchwey, Georgia Institute of Technology, Atlanta, Ga. e-mail: edward.botchwey@gmail.com

SciBX 6(35); doi:10.1038/scibx.2013.961
Published online Sept. 12, 2013