This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Neuroinflammation	Cannabinoid CB ₂ receptor (CNR2)	Tissue, cell culture and mouse studies suggest agonizing CNR2 could help treat brain inflammation. Brain endothelial tissue from patients with HIV-1-associated brain inflammation and cultured human brain endothelial cells treated with proinflammatory cytokines had higher CNR2 levels than healthy and vehicle-treated controls, respectively. In a mouse model of brain inflammation, a selective CNR2 agonist decreased leukocyte adhesion to brain blood vessels and increased blood brain barrier integrity compared with vehicle. Next steps include screening and optimizing CNR2 agonists and testing them in mouse models of neurodegenerative disease, stroke and viral encephalitis. Discovery stage CNR2 agonists from Organix Inc. were used in this study. At least six other companies have CNR2 agonists in Phase I testing or earlier to treat pain, autoimmunity and inflammatory indications. SciBX 5(13); doi:10.1038/scibx.2012.343 Published online March 29, 2012	Unpatented; licensing status not applicable	Ramirez, S.H. <i>et al. J. Neurosci.</i>; published online March 21, 2012; doi:10.1523/JNEUROSCI.4628-11.2012 Contact: Yuri Persidsky, Temple University School of Medicine, Philadelphia, Pa. e-mail: yuri.persidsky@tuhs.temple.edu