This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Stroke; Parkinson's disease (PD)	Glucagon-like peptide-1 (GCG; GLP-1); GLP-1 receptor (GLP1R; GLP-1R)	<p>Studies in mice suggest that GLP-1R agonists could prevent neuronal degeneration resulting from stroke and PD. In a mouse model of stroke, Glp-1 or the Glp-1r agonist exenatide decreased brain damage and improved motor function compared with that seen in controls or <i>Glp-1r</i> knockouts. In a mouse model of PD, each compound protected dopaminergic neurons from degeneration, preserved dopamine levels and improved motor function compared with what was seen in controls. Ongoing work is exploring the utility of GLP-1R agonists in other neurological conditions such as Alzheimer's disease (AD), Huntington's disease (HD) and peripheral neuropathy.</p> <p>Partners Amylin Pharmaceuticals Inc. and Eli Lilly & Co. market Byetta exenatide to treat type 2 diabetes.</p> <p>Novo Nordisk A/S's Victoza liraglutide, a GLP-1R agonist, is in registration to treat type 2 diabetes and in a Phase III trial to treat obesity.</p> <p>GLP-1R agonists in Phase III trials to treat type 2 diabetes include taspoglutide from partners Ipsen Group and Roche, and sanofi-aventis Group's AVE0010.</p> <p>Rose Pharma A/S has GLP-1 analogs in early clinical development to treat dyspepsia and irritable bowel syndrome (IBS).</p> <p>SciBX 2(3); doi:10.1038/scibx.2009.111 Published online Jan. 22, 2009</p>	Patented; available for licensing	<p>Li, Y. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Jan. 12, 2009; doi:10.1073/pnas.0806720106</p> <p>Contact: Nigel H. Greig, National Institute on Aging, Baltimore, Md. e-mail: greign@grc.nia.nih.gov</p>