

THE DISTILLERY

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Spinal cord injury (SCI)	Histone deacetylase (HDAC)	In vitro and mouse studies suggest that the HDAC inhibitor valproic acid could improve outcomes of neural stem cell (NSC) transplantation to treat SCI. In mouse models of SCI, NSC transplantation plus valproic acid increased neuronal differentiation of transplanted cells and improved recovery of hind limb motor function compared with NSC transplantation plus saline control. Planned work includes testing valproic acid in SCI mice that receive transplants of human NSCs, human embryonic stem cells (hESCs) and induced pluripotent stem (iPS) cell-derived neural cells. Valproic acid is segneric HDAC inhibitor marketed to treat epileptic seizures, migraine and mania. NeuralStem Inc. and StemCells Inc. separately have human NSCs in preclinical testing to treat SCI.	Unpatented; unavailable for licensing	Abematsu, M. <i>et al. J. Clin. Invest.</i> ; published online Aug. 16, 2010; doi:10.1172/JCI42957 Contact: Kinichi Nakashima, Nara Institute of Science and Technology, Ikoma, Japan e-mail: kin@bs.naist.jp

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