This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Epilepsy; seizures	Brain-derived neurotrophic factor (BDNF); fibroblast growth factor 2 (FGF2; FGF-2)	<p>A study in rats suggests that localized hippocampal delivery of FGF-2 and BDNF may be useful for decreasing seizure frequency. In a rat model of epilepsy, hippocampal delivery of a vector containing BDNF and FGF-2 decreased the incidence of spontaneous recurrent seizures, the number of seizures per day and seizure severity compared with what was seen using a control vector. The vector also increased hippocampal volume and neurogenesis compared with that seen using the control vector. Next steps include evaluating the approach in other epilepsy models and developing better delivery methods.</p> <p>BrainStorm Cell Therapeutics Inc. has glial cell-derived neurotrophic factor-expressing and BDNF-expressing stem cells in preclinical testing to treat amyotrophic lateral sclerosis (ALS) and Parkinson's disease (PD).</p> <p>Enkam Pharmaceuticals A/S's Defakin 1, an FGF receptor activator, is in preclinical testing to treat Huntington's disease (HD).</p> <p>SciBX 2(15); doi:10.1038/scibx.2009.634 Published online April 16, 2009</p>	Work unpatented; licensing status not applicable	<p>Paradiso, B. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online April 6, 2009; doi:10.1073/pnas.0810710106</p> <p>Contact: Michele Simonato, University of Ferrara, Ferrara, Italy e-mail: michele.simonato@unife.it</p>