This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Alzheimer's disease (AD); Parkinson's disease (PD)	Not applicable	A small molecule screen identified a compound that induced differentiation of mesenchymal stem cells into neuron-like cells that could be useful cell therapies for AD, PD and other neurological diseases. A screen of 20,000 small molecules in neuronal precursor–like cells identified a quinoxaline-based compound that increased expression of neuronal markers tubulin β3 (TUBB3) and neuron-specific enolase (NSE). The compound induced differentiation of rat mesenchymal stem cells into neuron-like cells with >95% efficiency. The resulting neuron-like cells had electrophysical and cholinergic properties. Ongoing efforts involve optimizing the lead compound.	Patent and licensing status unavailable	Kim, N. *et al. J. Med. Chem.*; published online Dec. 17, 2009; doi:10.1021/jm9015558 **Contact**: Kwang Rok Kim, Korea Research Institute of Chemical Technology, Daejeon, South Korea e-mail: kkrok@krict.re.kr **Contact:** Jin Hee Ahn, same affiliation as above e-mail: jhahn@krict.re.kr

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