This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Diabetes	Not applicable	<p><i>In vitro</i> and mouse studies suggest that induced pluripotent stem (iPS) cells from type 1 diabetes patients could be used for cell-replacement therapy for the disease. Fibroblasts from type 1 diabetes patients engineered to express transcription factors <i>OCT4</i>, <i>SOX2</i> and <i>KLF4</i> generated iPS cells with gene and pluripotency marker expression profiles similar to those of embryonic stem cells. In mice, the iPS cells spontaneously differentiated into all three germ layer cell types. <i>In vitro</i>, the iPS cells differentiated into embryonic pancreatic lineage cells that expressed somatostatin, glucagon and insulin. Next steps could include testing the capacity of these iPS cells to generate pancreatic β-cells in animal models of type 1 diabetes.</p> <p>SciBX 2(35); doi:10.1038/scibx.2009.1343 Published online Sept. 10, 2009</p>	Patent and licensing status unavailable	<p>Maehr, R. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Aug. 31, 2009; doi:10.1073/pnas.0906894106 Contact: Douglas Melton, Harvard University, Cambridge, Mass. e-mail: dmelton@harvard.edu</p>