

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Induced pluripotent stem (iPS) cell-derived, chimeric antigen receptor (CAR)-expressing T cells for immunotherapy	<p>iPS cell-derived, CAR-expressing T cells could be used for immunotherapy in patients when suitable autologous or allogeneic T cells are unavailable. In peripheral blood T lymphocytes, viral vector-mediated expression of four factors reprogrammed the cells into iPS cells. These iPS cells were then transduced with a viral vector encoding a CD19-specific CAR and differentiated into highly cytotoxic T lymphocytes. In a mouse model of Burkitt's lymphoma, expanded, iPS cell-derived, CD19-specific CAR T lymphocytes conferred a survival advantage comparable to that of parent CD19-specific CAR T lymphocytes. Next steps include further optimization of the method for generating iPS cell-derived, CAR-expressing T cells for autologous or allogeneic therapies.</p> <p>SciBX 6(36); doi:10.1038/scibx.2013.1014 Published online Sept. 19, 2013</p>	Patent application filed; available for licensing	<p>Themeli, M. <i>et al. Nat. Biotechnol.</i>; published online Aug. 11, 2013; doi:10.1038/nbt.2678 Contact: Michel Sadelain, Memorial Sloan-Kettering Cancer Center, New York, N.Y. e-mail: sadelain@mskcc.org</p>