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This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Expansion of CD19-specific chimeric antigen receptor (CAR) T memory stem cells to improve adoptive T cell therapy	Studies in patient samples and mice suggest increasing the subpopulation of T memory stem cells could help improve the efficacy of CAR-based T cell therapy. In populations of transplanted CD19-specific CAR T cells, a high frequency of cells resembling T memory stem cells correlated with increased expansion and persistence of the CAR T cells. In *ex vivo*, cultured CAR T cells, IL-7 and IL-15 increased the population of the T memory stem cells compared with IL-2. In tumor-bearing mice, adoptive therapy with IL-7- and IL-15-expanded CAR T cells delayed disease progression and resulted in increased survival compared with therapy using IL-2-expanded CAR T cells. Researchers did not disclose next steps, which could include optimizing CAR T cell culturing conditions to further boost the T memory stem cell subpopulation. *SciBX* 7(22); doi:10.1038/scibx.2014.659 Published online June 5, 2014	Patent and licensing status undisclosed	Yang, X. *et al. Blood*; published online April 29, 2014; doi:10.1182/blood-2014-01-552174 **Contact:** Gianpietro Dotti, Baylor College of Medicine, Houston, Texas e-mail: gdotti@bcm.edu

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