A Good Manufacturing Practice procedure to engineer donor virus-specific T cells into potent anti-leukemic effector cells

Marleen M. van Loenen,¹ Renate de Boer,¹ Ellis van Liempt,¹ Pauline Meij,² Inge Jedema,¹ J.H. Frederik Falkenburg,¹ and Mirjam H.M. Heemskerk¹

¹Department of Hematology, Leiden University Medical Center; and ²Department of Clinical Pharmacy and Toxicology, Leiden University Medical Center, the Netherlands

©2014 Ferrata Storti Foundation. This is an open-access paper. doi:10.3324/haematol.2013.093690 Manuscript received on June 21, 2013. Manuscript accepted on December 11, 2013. Correspondence: M.M.van_Loenen@lumc.nl

Supporting online information

Supplementary material and methods

For FACS-analyses, mAbs directed against CD4 or CD8 FITC-conjugated (Beckton Dickinson [BD], San Diego, CA, USA), CD14 PE-conjugated (Bio-connect, Huissen, The Netherlands), TCRαβ PeCy7-conjugated [BD], CD8 APC-conjugated [BD], CD3 APC-conjugated [BD], or NGF-R PE-conjugated [BD] or APC-conjugated (Cedarlane Laboratories, Hornby, Ontario, Canada) were used.

For combinatorial coding FACS-analyses, T-cells were stained with an antibody-mixture consisting of CD8-Alexa700 (Caltag) and CD4-, CD14-, CD16-, CD19- and CD40-FITC (BD; dump channel) in combination with either PE- and APC-conjugated pp65^{A2} tetramers or PE- and APC-conjugated BMLF-1^{A2} tetramers.