Truncated form of human CD19 antigen as a suicide gene to control T-cell alloreactivity: $\triangle CD19$

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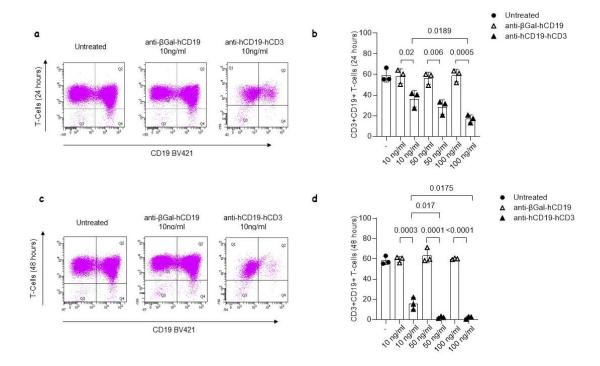
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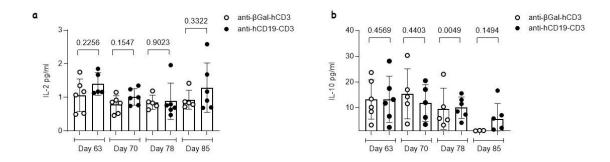
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Supplementary Figure 1



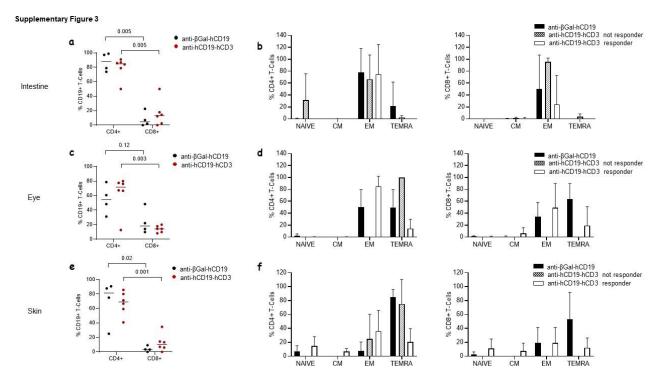
Supplementary Figure 1. Effect of different concentrations of the anti-hCD19-hCD3 monoclonal antibody on the kinetics of elimination of h Δ CD19 T-cells. h Δ CD19 T-cells plated at $0.5X10^6$ cells/cm² in the presence of 10ng/ml of either anti- β Gal-hCD19 or anti-hCD19-hCD3 for 24 hours [exemplicative plot of one single donor (a)] and for 48 hours [exemplicative plot for one single donor (c)]. Percentage of living h Δ CD19 T-cells from 3 HDs in the presence of different concentrations of either anti- β Gal-hCD19 or anti-hCD19-hCD3 antibodies at the same timepoints (panel b 24 hours and panel d 48 hours). Data from 3 HDs are expressed as individual values \pm SD.

Supplementary Figure 2



Supplementary Figure 2. GvHD monitoring in mouse PB. IL-2 (a) and IL-10 (b) levels were measured in peripheral blood of anti- β Gal-hCD19 and anti-hCD19-hCD3 treated cohorts at Day+63 and Day+70 (corresponding to day 3 and 10 following the end of the first drug administration cycle) and at Day+78 and Day+85 (corresponding to day 3 and 10 following the end of the second drug administration cycle). Data are expressed as individual values \pm SD. All data above described were compared by a two-tailed Student t-test and a p-value < 0.05 was considered to be statistically significant.

Supplementary Figure 3



Supplementary Figure 3. T-cell subset composition in responder and non-responder mice to anti-hCD19-hCD3. Mice were euthanized and FACS analysis was performed on intestine (a), eye (b) and skin (e) in the control mice treated with anti-βGal-hCD19 and anti-hCD19-hCD3 antibody to evaluate the CD4+CD19+ and CD8+CD19+ cell distribution. Data are expressed in percentage, as individual values. FACS analysis was performed to assess the T-cell subset profile on intestine (b), eye (d) and skin (f) in anti-βGal-hCD19 cohort and anti-hCD19-hCD3 responder or non-responder mice. In particular, for the definition of the memory T-cell subsets, the following analysis was applied: CD4+ or CD8+ Naïve (CD62L+/CD45RA+), Central Memory (CM; CD62L+/CD45RA-), Effector Memory (EM, CD62L-/CD45RA-), Terminal differentiated Effector memory (TEMRA, CD62L-/CD45RA+). Data are expressed in percentage, as mean ± SD. All data were compared by a two-tailed Student t-test and a p-value < 0.05 was considered to be statistically significant.