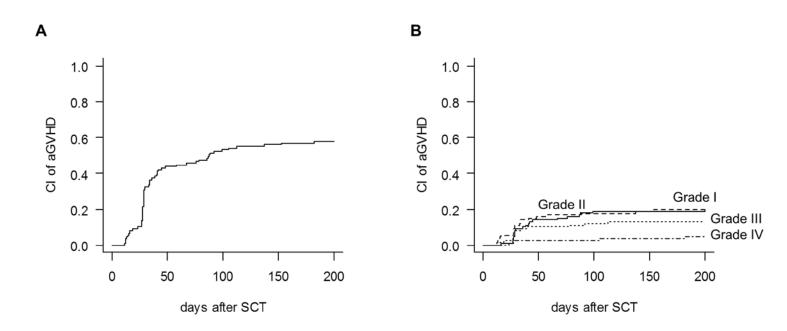
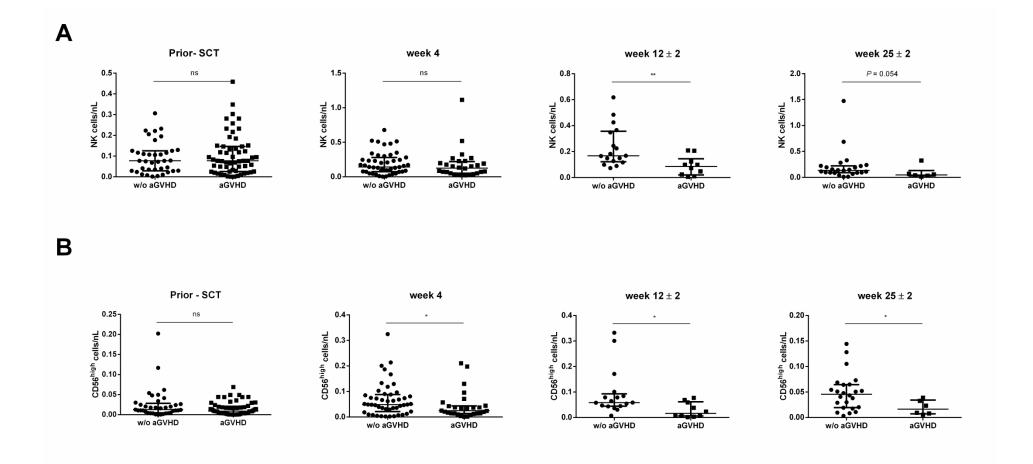
Relation between acute GVHD and NK cell subset reconstitution following allogeneic stem cell transplantation

Evelyn Ullrich, Emilia Salzmann-Manrique, Shahrzad Bakhtiar et al. 2016

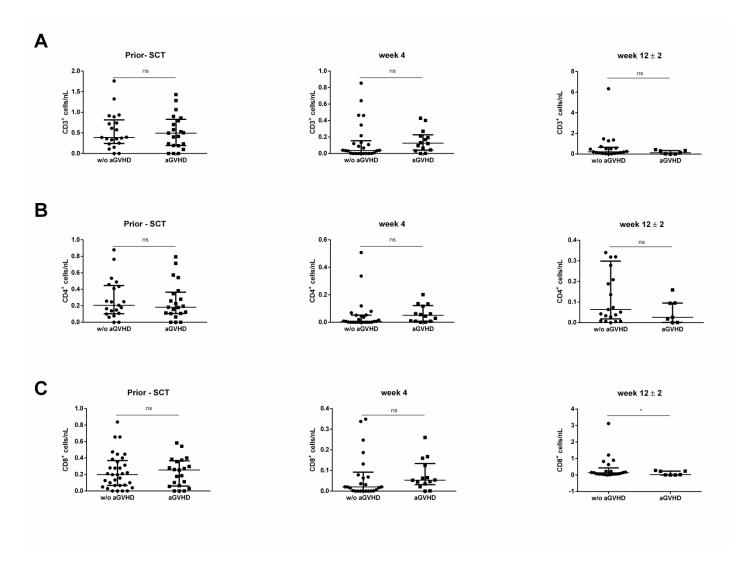


Supplementary Figure 1. Cumulative incidence of aGVHD.

The plot shows the cumulative incidence (CI) of developing any grade of aGVHD during the first 200 days after SCT (A) and the CI curve according to the severity of aGVHD (grade I-IV) (B).



Supplementary Figure 2. NK cell numbers at defined time points in patients after allo-SCT. The number of NK cells (A) or specific the CD56^{high} NK cell subset (B) in patients without (w/o) compared to patients with aGVHD is analysed by two-sided non-parametric Mann Whitney Wilcoxon Test prior to SCT and at given time points at the routinely performed outpatients visits around week 4, 12 and 25 after allo-SCT. * p <0.05; ** p<0.001; ns=not significant.



Supplementary Figure 3. T cell numbers at defined time points in patients after allo-SCT. The number of CD3 $^+$ T cells (A), CD4 $^+$ T cells (B) or CD8 $^+$ T cells (C) in patients without (w/o) compared to patients with aGVHD is analysed by two-sided non-parametric Mann Whitney Wilcoxon Test prior to SCT and at given time points at the routinely performed outpatients visits around week 4, and 12 after allo-SCT. * p <0.05; ns=not significant.

Supplementary Table 1.

Impact of steroids on NK cell subset distribution

The table shows the beta coefficients and corresponding P-values for each stage of disease at the given time point for all patients who developed aGVHD later during the observation period of 200 days after SCT. The beta coefficients are given in log10 scale due to previous log10-transformed NK cell subsets.

| | Beta (SE) | P-value |
|---------------------|----------------|---------|
| NK cells | | |
| before aGVHD, ST | -0.366 (0.17) | 0.032 |
| during aGVHD, no ST | -0.171 (0.14) | 0.220 |
| during aGVHD; ST | -0.436 (0.12) | <0.001 |
| CD56high | | |
| before aGVHD, ST | -0.412 (0.18) | 0.028 |
| during aGVHD, no ST | -0.241 (0.152) | 0.114 |
| during aGVHD; ST | -0.548 (0.13) | <0.001 |
| CD56 ^{dim} | | |
| before aGVHD, ST | -0.403 (0.18) | 0.030 |
| during aGVHD, no ST | -0.189 (0.15) | 0.215 |
| during aGVHD; ST | -0.423 (0.13) | 0.001 |

Abbreviations: NK cells, natural killer cells; CD56 high NK cells; CD56 high NK cells; CD56 nature CD14 CD3 CD56 CD16 NK cells; CD56 nature CD14 CD3 CD56 CD16 NK cells; aGVHD, acute graft-versus-host disease; Beta, beta coefficient; SE, standard error; ST, steroid treatment.