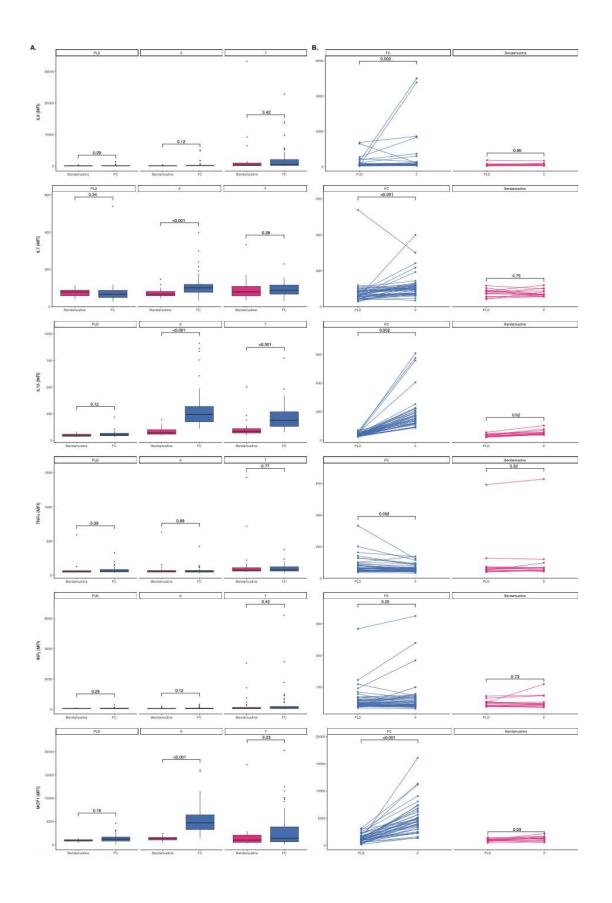
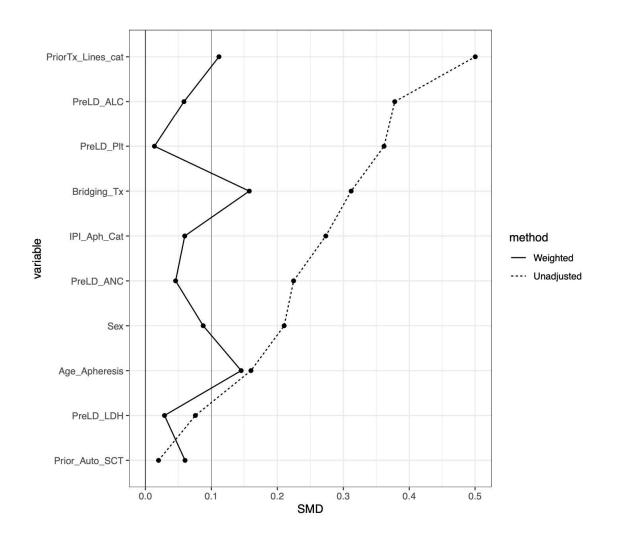


**Supplement Figure 1:** A. Heat maps of 48 cytokines levels measured on prelymphodepletion (PLD), Day 0, Day 7 in Fludarabine and Cytoxan (FC) cohort. B. Heat maps of 48 cytokines measured on PLD, Day 0, Day 7 in bendamustine cohort.



**Supplemental Figure 2:** Peak Mean fluorescence Intensity (MFI) (A) were compared using the unpaired Mann-Whitney U test (FC: n = 56, bendamustine: n = 26) A. Vertical panel showing cytokine levels of IL 6, IL 7, IL15, tumor necrosis factor alpha (TNFa), Interferon gamma (IFNg), and Monocyte Chemoattractant Protein-1 (MCP1) at pre lymphodepletion, Day 0 and Day 7 comparing FC (blue) and bendamustine group(pink).

B. Vertical panel showing Raw MFIs of IL 6, IL 7, IL15, tumor necrosis factor alpha (TNFa), Interferon gamma (IFNg), and Monocyte Chemoattractant Protein-1 (MCP1) at pre-lymphodepletion (PLD) and D0 were compared with the unpaired Mann-Whitney U test (FC (blue): n = 41, bendamustine (pink): n = 14). In panel B, only patients who had both a PLD and D0 sample were included. Lines connect cytokine levels for individual patients.



**Supplementary Figure 3:** Covariate balance as measured by standardized mean difference (SMD) before and after application of inverse probability of treatment weights (IPTW) to the study sample. Smaller SMD values, especially < 0.1, indicate a balance in the covariate between treatment groups.