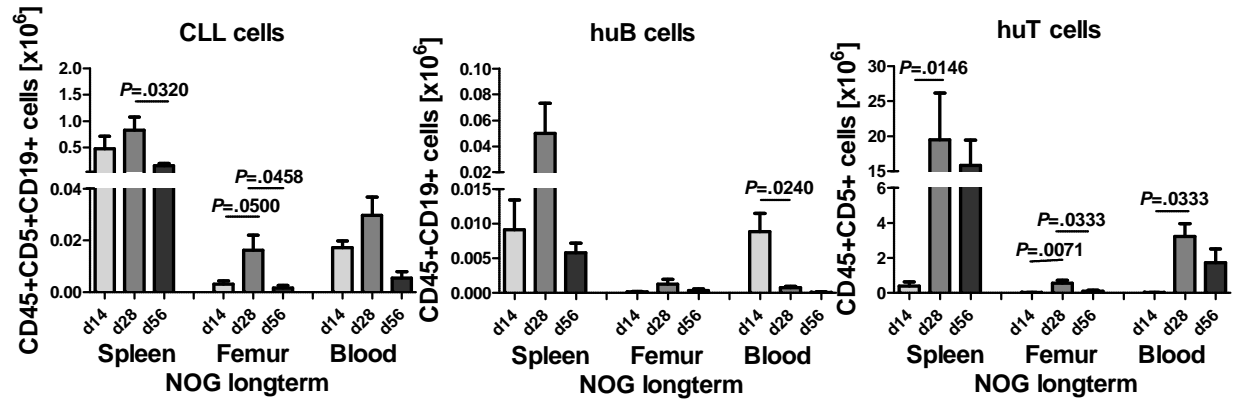


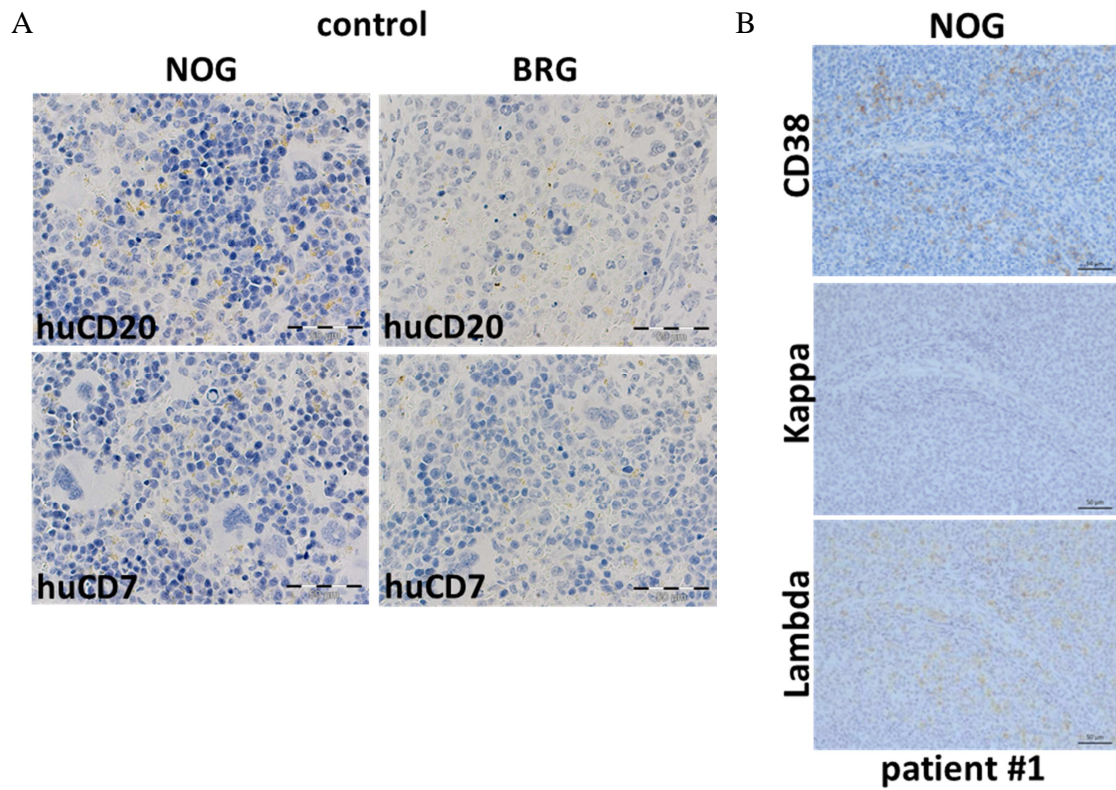
Figure S1

A



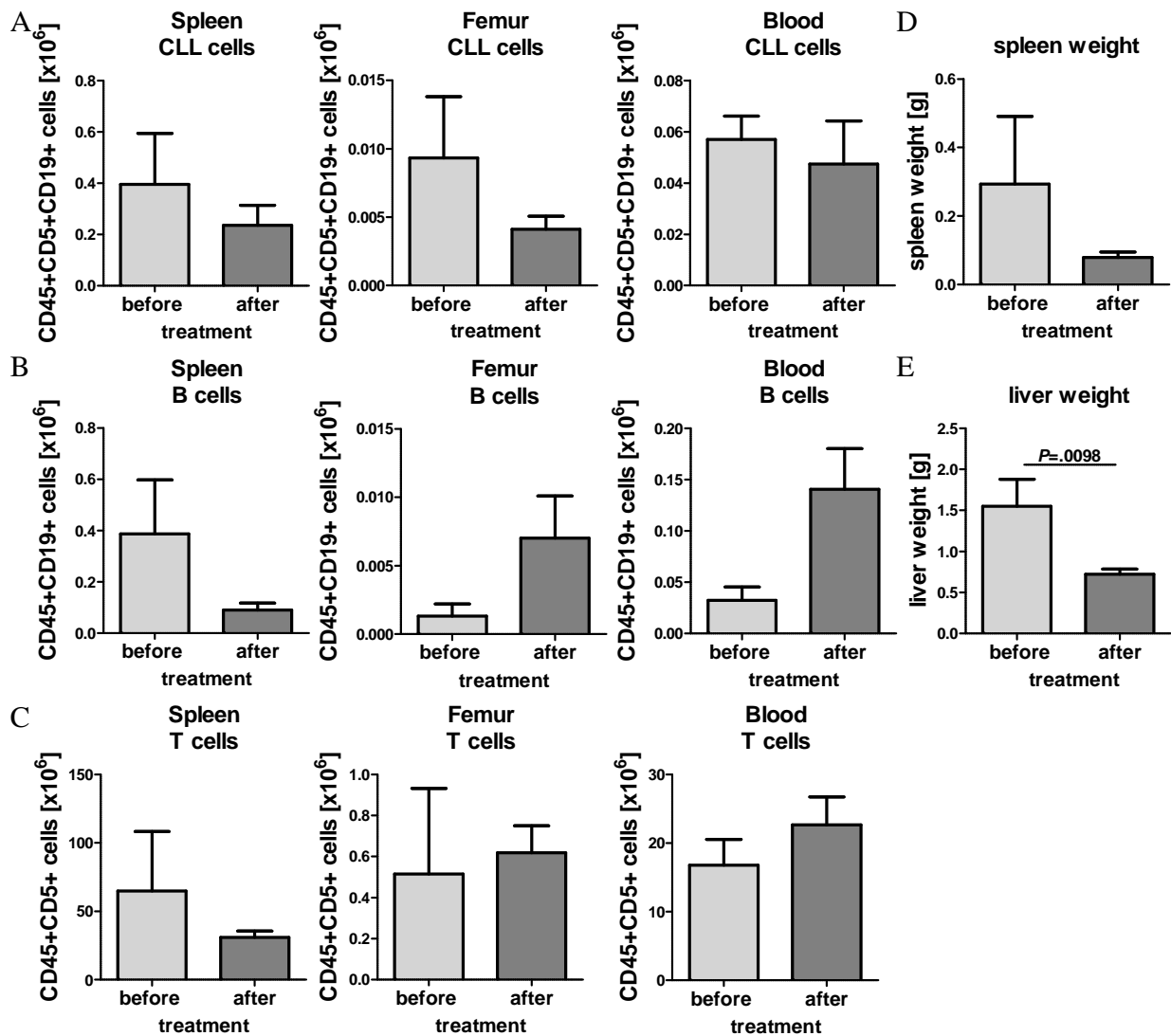
(A) Mean numbers of human CLL-, B- and T cells in the spleen, femur and PB of CLL-PBMC transplanted NOG mice at two, four and eight weeks after transplantation.

Figure S2



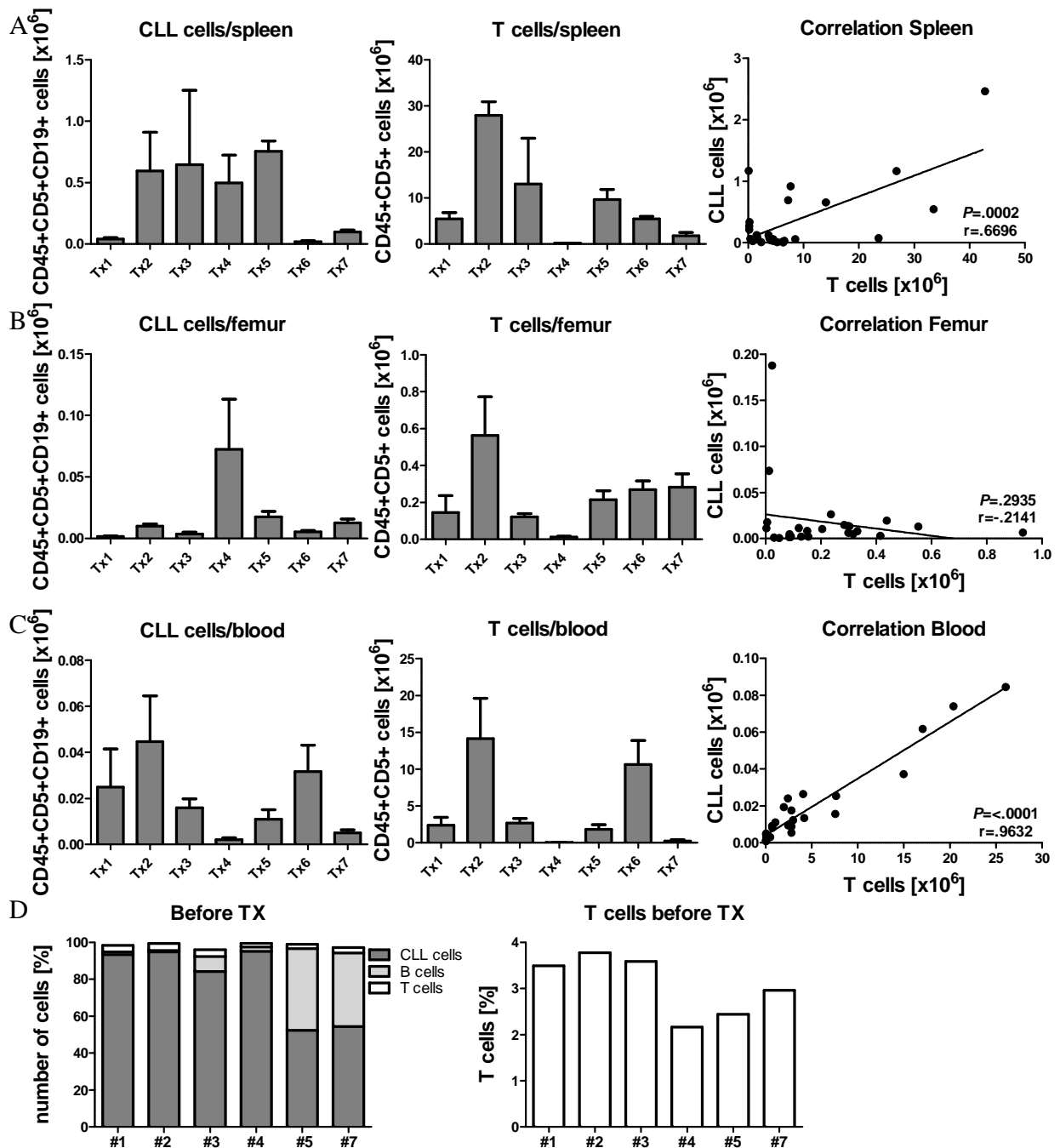
(A) IHC stainings of spleens of untransplanted NOG mice for human CD7 and CD20 at the age of 14 weeks. Image size: x400 original magnification for all images (Bar indicates 50µM). (B) IHC analysis of spleen samples from CLL-PBMC transplanted NOG mice stained for human CD38 and Kappa and Lambda light chain at day 28 after human cell injection (CLL patient #1). Image size: x200 original magnification for images (bar indicates 50µm).

Figure S3



(A) Mean number of CLL cells in the spleen, femur and blood of NOG mice transplanted with CLL-PBMCs before and after chlorambucil treatment (CLL patient #8, n=3) four weeks after transplantation. (B) Mean number of human B cells in the spleen, femur and blood of NOG mice (CLL patient #8, n=3) transplanted with CLL-PBMCs before and after chlorambucil treatment 28 days after transplantation. (C) Mean number of human T cells in the spleen, femur and blood of transplanted NOG mice (CLL patient #8, n=3) four weeks after transplantation with CLL-PBMCs before and after chlorambucil treatment. (D) Mean spleen and liver weights of NOG mice transplanted with CLL-PBMCs before (CLL patient #8, n=3) and after chlorambucil treatment (CLL patient #8, n=3).

Figure S4



(A-C) Mean number of CLL- and T cells in the spleen (A), femur (B) and blood (C) of transplanted NOG mice (CLL patients #1-#7, $n=4$) four weeks after transplantation, and correlation of engrafted CLL and T cells in the spleen, femur and blood. (D) Distribution of CLL-, B- and T cells in the PB of CLL patients #1-#5+#7 before transplantation into NOG mice.