Role of donor regulatory T-cell adoptive immunotherapy in B-cell immunity after hematopoietic cell transplantation

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Supplementary Table 1. Diagnosis and outcomes of HCT recipients

HCT Protocol	**Treg/Tcon haplo-HCT**	**T cell-depleted haplo-HCT**
Number of patients	44	7
Diagnosis		
Acute Myeloid Leukemia	32	3
Acute Lymphoblastic Leukemia	9	4
Multiple Myeloma	2	-
Myelodysplastic Syndrome	1	-
Outcomes		
Grade II-IV Acute GvHD	15	0
Chronic GvHD	1	0
Relapse	10	1
Non-relapse mortality	10	5

Supplementary Table 2. Diagnosis and outcomes of HCT recipients evaluated for SARS-CoV-2 vaccination or infection

HCT Protocol	**Treg/Tcon haplo-HCT**	**Treg/Tcon HLA identical-HCT**
Number of patients	16	13
Diagnosis		
Acute Myeloid Leukemia	13	12
Acute Lymphoblastic Leukemia	2*	1
Myelodysplastic Syndrome	1	0
Outcomes		
Grade II-IV Acute GvHD	4	3
Extensive Chronic GvHD	0	0
Relapse	1	0
Non-relapse mortality	0	0

Post-transplant anti-SARS-CoV-2 specific-IgG were evaluated in serum samples of patients who experienced SARS-CoV-2 infection or were vaccinated with two doses of Pfizer (New York, NY, USA)-BioNTech SE (Mainz, Germany) or Moderna (Cambridge, MA, USA) SARS-CoV-2 vaccine after Treg/Tcon HCT.

***** One of these patients was affected by a bilinear acute leukemia.

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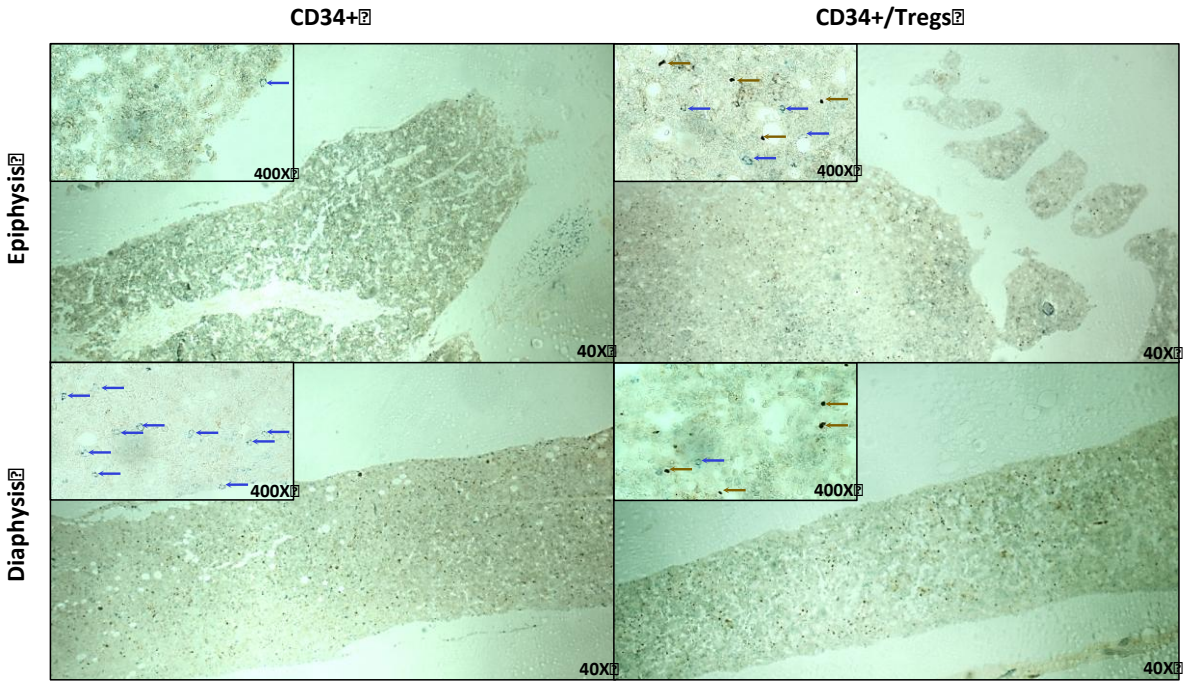
Supplementary Figures



Supplementary Figure 1. Representative immunohistochemical staining of diaphysis and epiphysis of femurs harvested from NSG mice 45 days after the infusion of CD34+ cells with (right) or without Tregs (left). Human hematopoietic progenitor cells have a blue cytoplasmic staining (blue arrows, anti-human antibody CD34 Class II, clone QBEnd 10, Agilent Dako, Santa Clara, CA, USA) and human Tregs have a brown nuclear staining (brown arrows, anti-human FOXP3 antibody, clone SP97, Thermo Fisher Scientific, Waltham, MA, USA). Target cells were detected with the REAL Detection System, Alkaline Phosphatase/RED (rabbit/mouse, Agilent Dako, Santa Clara, CA, USA) and the REAL Detection System, Peroxidase/DAB (rabbit/mouse, Agilent Dako, Santa Clara, CA, USA). 400X and 40X magnification fields are shown.