

## Haploidentical allogeneic hematopoietic cell transplantation in adults using CD3/CD19 depletion and reduced intensity conditioning: a phase II study

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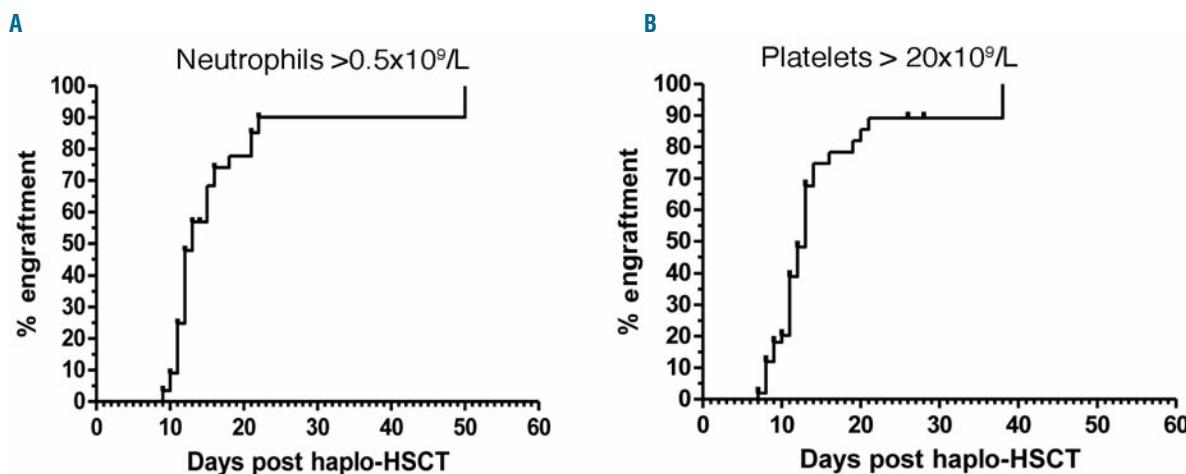
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**Online Supplementary Table S1.** Graft composition after CD3/CD19 depletion. Values were determined by flow cytometry pre and post each immunomagnetic selection/depletion procedure. Numbers present medians of all evaluable procedures. Detailed analysis of patients treated in Tuebingen (n=26).

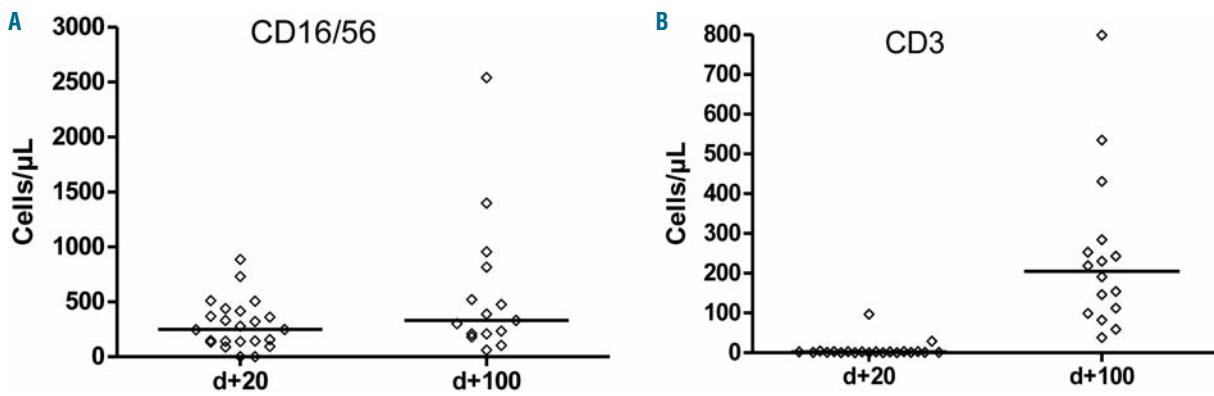
Graft characteristics (n=26)	Median (range)
NK cells/ kg BW x10 <sup>6</sup>	2.9 (0.0-37.3)
CD3 <sup>+</sup> cells/ kg BW x10 <sup>4</sup>	2.4 (0.56-44.0)
CD34 <sup>+</sup> cells/ kg BW x10 <sup>6</sup>	8.6 (3.2-21.8)
CD19 <sup>+</sup> cells/ kg BW x10 <sup>4</sup> (n=24)	0.7 (0.1-5.8)
Monocytes/ kg BW x10 <sup>6</sup>	47.4 (0.6-364.7)
Granulocytes/ kg BW x10 <sup>6</sup>	105.5 (0.5-213.5)
Results of CD3/CD19 depletion	
Total cells pre depletion x10 <sup>10</sup>	6.10 (2.25-10.55)
Post column : total cells x10 <sup>10</sup>	1.23 (0.51-2.77)
CD3 <sup>+</sup> cells (%)	0.009 (0.0009-0.07)
T-cell depletion log	4.09 (3.23-4.81)
CD19 <sup>+</sup> cells (%)	0.003 (0.0004-0.01)
CD34 <sup>+</sup> cells (%)	1.48 (0.28-3.34)
CD34 recovery (%)	59.14 (33.43-87.99)

**Online Supplementary Table S2.** The distribution of infections related to the reconstitution of CD3<sup>+</sup> T cells. Data of patients treated in Tuebingen: 8 of the patients died from infections, 7 patients are still alive.

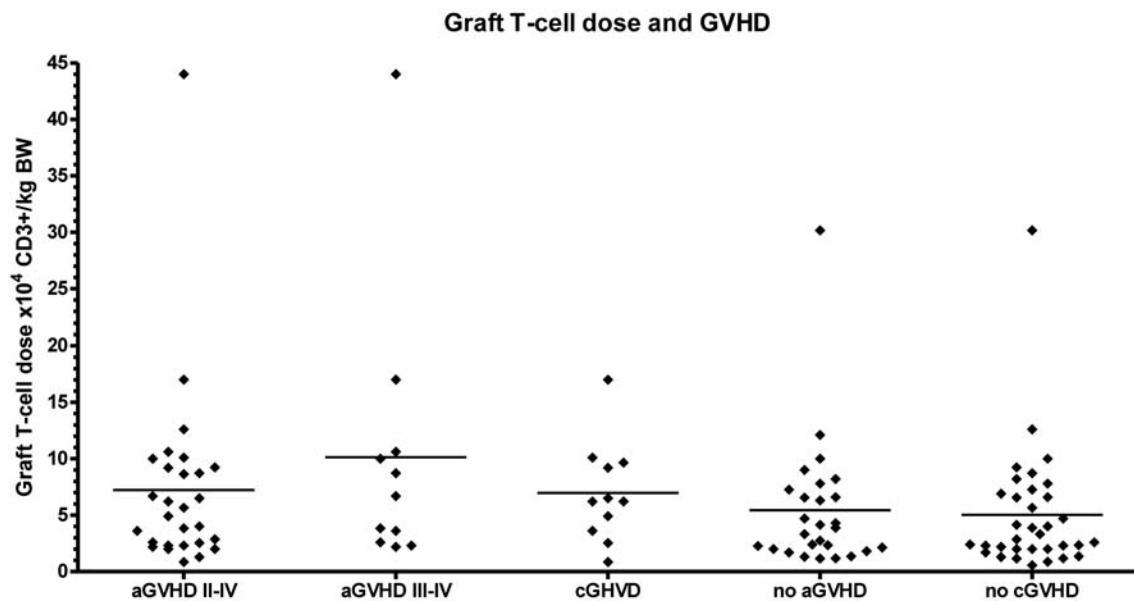
Cause of death	Death on Day+	CD3 <sup>+</sup> T cells Day +50	CD3 <sup>+</sup> T cells Day +100	CD3 <sup>+</sup> T cells Day +250
Pneumonia	83	0	-	-
Toxoplasmosis	178	148	112	-
CMV	100	2	535	-
PML	144	6	-	-
Pneumonia	375	361	191	283
IPS	68	0	-	-
Aspergillosis	268	14	154	358
Meningitis	595	73	71	26
Alive		434	431	407
Alive		10	111	200
Alive		65	284	723
Alive		3	452	607
Alive		54	146	195
Alive		522	252	211
Alive		5	59	899



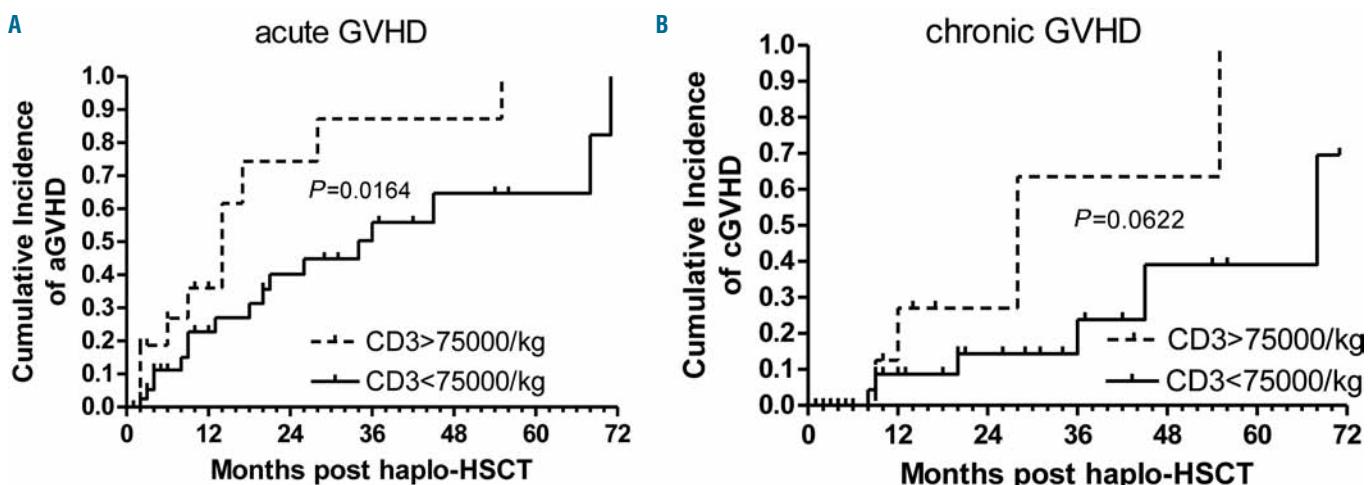
**Online Supplementary Figure S1.** Time to recovery of neutrophils and platelets. Percentage of patients engrafted by time from the day of transplantation in a cumulative curve. (A) Neutrophils > 0.5x10<sup>9</sup>/L. (B) Platelets > 20x10<sup>9</sup>/L.



**Online Supplementary Figure S2.** Immune reconstitution after haplo-HSCT. Absolute count on Days +50 and +100 in 21 evaluable patients on Days +50 and +100 ( $\pm 20$  days) after HCT. (A) CD16/56 $^{+}$  NK cells. (B) CD3 $^{+}$  T cells.



**Online Supplementary Figure S3.** GVHD in relation to graft T-cell dose. Scatter plot of acute and chronic GVHD in relation to the count of CD3 $^{+}$  T cells in the graft.



**Online Supplementary Figure S4.** Proportion of GVHD according to CD3 content. Log rank test between two groups, Cut off 75,000 CD3 $^{+}$  cells/kg. (A) acute GVHD. (B) chronic GVHD.