Rapport d'analyses statistiques

Axelle Dupont, sbim, Hopital Saint Louis, Paris

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1 Objectives

The primary objective of the study was to assess the survival, the risk of relapse and GVHD of patients who underwent allogenic sterm-cell transplantation (alloSCT) for aggressive T-cell lymphomas. The second objective was to determine the variables associated with these outcomes.

2 Methods

A retrospective analysis was conducted. A descriptive analysis of the variables recorded was performed. Different endpoints were defined: death, relapse, Event-free survival (EFS), Progression free Survival (PFC). Relapse was only considered in patients who had a complete remission after allo SCT.

Survival curves were estimated using Kaplan-Meier product-limit estimator. Competing risk survival analysis methods were applied to estimate the cumulative incidence (CIF) of developing events over time from alloSCT. These methods allow for the fact that a patient may experience an event which is different from that of interest. These events are known as competing risk events, and may preclude the onset of the event of interest, or may modify the probability of the onset of that event. In particular, a transplanted patient may die before a relapse occurs.

Factors associated with overall sur-vival were analyzed using Cox proportional hazards models. The proportional hazards assumption was checked by examination of Schoenfeld residuals. For the different endpoints, univariable analyses were first carried out, then a multivariable analysis was used where all factors with P-value < 0.15 in the univariable analyses were considered. Factors where then sequentially removed from the adjusted model with a P-value cut- at 0.05. Survival is presented as estimate and 95% confidence interval (95% CI).

3 Results

3.1 Descriptive results

285 patients were initially selected. We excluded 1 patient that underwent two alloSCT. The final analysis was perfored on 284 patients and 284 grafts.

3.1.1 Patients characteristics

Parameters	Values	N	Statistics*
		284	
Patient sex	Female	93	32.75~%
	Male	191	67.25~%
Age at diagnostic		284	45.01(15;68)
Stage at diagnostic	I	13	6.47~%
	II	17	8.46~%
	III	45	22.39 %
	IV	126	62.69 %
	NA	83	
Stage at diagnostic	I-II	30	14.93 %
	III-IV	171	85.07 %
	NA	83	
Subtypes	AITL	82	28.87~%
	ALCL ALK-	20	7.04~%
	ALCL ALK?	2	0.7~%
	ALCL ALK+	21	7.39~%
	ATLL	16	5.63~%
	EATL	3	1.06~%
	HS	12	4.23~%
	LGL	1	0.35~%
	NK leukemia	1	0.35~%
	NK/T nasal	16	5.63~%
	NOS	110	38.73~%
Subtypes	NOS	110	38.73 %
	AITL	82	28.87~%
	ALCL	43	15.14 %
	ATLL	16	5.63~%
	NK/T nasal	16	5.63~%
	Others	17	5.99 %
Centres	angers	8	2.82~%
	Becquerel[941]	4	1.41~%
	C.H.R.U Brest[659]	2	0.7~%
	caen	4	1.41~%
	CHU clermond ferrand	7	2.46~%

Geneve	6	2.11 %
Gustave Roussy[666]	3	1.06~%
H A Michallon[270]	5	1.76 %
H Bretonneau[272]	3	1.06 %
H Charles Nicolle[932]	1	0.35~%
H Claude Huriez[277]	8	2.82~%
H de l'ARCHET I[523]nice	3	1.06~%
H E Herriot[671]	5	1.76 %
H Haut-Leveque[267]	31	10.92~%
H Hautepierre[672]	11	3.87~%
H Jean Minjoz[233]	5	1.76 %
H La Miletrie[264]	5	1.76 %
H Mondor Hematol[252]	4	1.41~%
H Necker[160]	9	3.17~%
H Percy[665]	4	1.41~%
H Purpan[624]	8	2.82~%
H Sud/Pontchaillou[661]	7	2.46~%
H Sud[955]	1	0.35~%
Hotel Dieu[253]	32	11.27~%
liege	8	2.82~%
limoges	3	1.06~%
montpellier	10	3.52~%
nancy	1	0.35~%
Paoli Calmettes[230]	39	13.73~%
Pellegrin-Enfants[978]	1	0.35~%
Pitie-Salpetrriere[262]	8	2.82~%
St Antoine[775]	10	3.52~%
St Etienne[250]	4	1.41~%
St Louis[207]	24	8.45 %

Table 1: Patients characteristics

3.1.2 Treatments before alloSCT

Parameters	Values	N	Statistics*
		284	
Previous auto	No	191	67.25~%
	Yes	93	32.75~%
Programme auto allo	No	257	90.49~%
	Yes	27	9.51~%
First graft relapse	No	219	77.11~%
	Yes	65	22.89 %

Table 2: Treatments before alloSCT

${\bf 3.1.3}\quad {\bf Transplant\ conditions}$

Parameters	Values	N	Statistics*
		284	
Age at graft		284	46.97(16;69)
Age at graft	< 49 years	139	48.94~%
	> 49 years	145	51.06~%
Donor age		263	28.76(1;54)
Donor sex	Female	114	40.71~%
	Male	166	59.29 %
	NA	4	
Delay diagnosis and allo SCT		284	717(89;9684)
>12 months delay	NO	149	52.46~%
	Yes	135	47.54~%
Stage at diagnostic	I	13	6.47~%
	II	17	8.46~%
	III	45	22.39 %
	IV	126	62.69~%
	NA	83	
Disease status at transplant	CR/PR	251	88.69 %
	PD	32	11.31 %
	NA	1	
Disease status at transplant	CR	175	61.84~%
_	PD	32	11.31 %
	PR	76	26.86~%
	NA	1	
Disease status at transplant	CR(?)	7	2.47~%
_	CR1	94	33.22~%
	CR2	61	21.55~%
	CR3	13	4.59~%
	PD	32	11.31 %
	PR (?)	13	4.59~%
	PR1	39	13.78 %
	PR2	18	6.36~%
	PR3	5	1.77~%
	PR4	1	0.35~%
	NA	1	
Karnofsky score		263	89.24(40;100)
Karnofsky score	100	92	$34.98\ \%$
-	40	1	0.38~%
	50	4	1.52~%
	60	1	0.38~%
	70	9	3.42~%

Karnofsky score 90 86 32.7 % Karnofsky score Non normal activity 15 5.7 % Normal activities 248 94.3 % NA 21 1 Karnofsky score 100 92 34.98 % Unable to carry on normal activity 15 5.7 % 80 70 26.62 % 80 32.7 % 26.62 % 80 32.7 % 26.62 % 80 32.7 % 22 80 32.7 % 22 80 32.7 % 22 80 32.7 % 22 80 32.7 % 22 80 32.7 % 22.201(1;9) 80 32.7 % 32.7 % 80 32.2 % 32.2 % 80 32.2 % 32.2 % 80 32.2 % 32.2 % 80 32.2 % 32.2 % 80 32.2 % 32.2 % 80 32.2 % 32.2 %		80	70	26.62~%
Karnofsky score Non normal activities 25 5.7 % Karnofsky score 100 92 34.98 % Karnofsky score 100 92 34.98 % Unable to carry on normal activity 15 5.7 % 80 70 26.62 % 90 86 32.7 % NA 21 1 No of lines before alloSCT 1 73 28.74 % 1 3 65 25.59 % 3 65 25.59 % 2 36.22 %		90	86	32.7~%
Karnofsky score Normal activities 248 94.3 % Karnofsky score 100 20 34.98 % Unable to carry on normal activity 15 5.7 % 80 70 26.62 % 90 86 32.7 % No of lines before alloSCT 25 2201(1;9) No of lines before alloSCT 1 73 28.74 % 2 2 36.22 % 3 22.20 (1;9) 3 No of lines before alloSCT 1 73 28.74 % 2 201(1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 3 22.91 (1;9) 4 4 22.91 (1;9) 4 4 4 4 4 4 4 4 4 4 4 4 <td></td> <td>NA</td> <td>21</td> <td></td>		NA	21	
Karnofsky score NA 21 Karnofsky score 100 92 34.98 % 10able to carry on normal activity 15 5.7 % 80 90 86 32.7 % NA 21 1 No of lines before alloSCT 1 25 2.201(1;9) No of lines before alloSCT 1 3 28.74 % 1 2 3 65 25.59 % 2 3 65 25.59 % 2 3 65 25.59 % 2 3 65 25.59 % 2 3 7 8 NA 3 7 8 NA 135 47.54 % 4 HLA match Matched unrelated 13 47.89 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % HLA match 13 4.58 % Mismatched unrelated 13 4.58 % Others <td< td=""><td>Karnofsky score</td><td>Non normal activity</td><td>15</td><td>5.7~%</td></td<>	Karnofsky score	Non normal activity	15	5.7~%
Karnofsky score 100 92 34.98 % Unable to carry on normal activity 15 5.7 % 80 70 26.62 % 90 86 32.7 % NA 21 No of lines before alloSCT 73 28.74 % 2 92 36.22 % 3 36.22 % 36.22 % 3 36.22 % 36.22 % 3 36.22 % 36.22 % 3 36.22 % 36.22 % 3 36.22 % 36.22 % 3 36.22 % 36.22 % 3 36.22 % 36.22 % 3 36.22 % 36.22 % NA 30 52.46 % More More 149 52.46 % Mismatched unrelated 136 47.59 % Mismatched unrelated 13 45.88 % Mismatched unrelated 13 45.88 % Mismatched unrelated 13 15.86 % Wismatched unrelated 13 15.86 % <td>·</td> <td>Normal activities</td> <td>248</td> <td>94.3 %</td>	·	Normal activities	248	94.3 %
Unable to carry on normal activity 5 5 7 % 80 70 26.62 % 90 86 32.7 % 10 10 10 10 10 10 10		NA	21	
Unable to carry on normal activity	Karnofsky score	100	92	34.98~%
NA 21 No of lines before alloSCT 1 254 2.201(1;9) No of lines before alloSCT 2 2 36.22 % 3 2 2 36.22 % 3 65 25.59 % 2 2 36.22 % 3 65 25.59 % 2 2 36.22 % 3 65 25.59 % 2 2 36.22 % 3 3 3 3 3 3 3 3 3	•	Unable to carry on normal activity	15	5.7~%
No of lines before alloSCT 254 2.201(1;9) No of lines before alloSCT 1 73 28.74 % 1 2 92 36.22 % 2 3 65 25.59 % 5-4 24 9.45 % 10 NA 30 10 Yes 149 52.46 % 10 No 135 47.54 % 11 Matched 130 47.89 % 12 Mismatched 136 47.89 % 12 Mismatched unrelated 136 47.89 % 14 Mismatched unrelated 13 4.58 % 14 Mismatched unrelated 13 4.58 % 15 Mismatched unrelated 13 4.58 % 16 Mismatched unrelated 13 4.58 % 16 Wismatched u		80	70	26.62~%
No of lines before alloSCT 1 73 28.74 % No of lines before alloSCT 1 73 28.74 % 1 2 92 36.22 % 3 65 25.59 % >=4 24 9.45 % NA 30 Donnor related Yes 149 52.46 % HLA match Identical sibling 128 45.07 % HLA match Identical sibling 128 45.07 % Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Mismatched unrelated 13 4.58 % Mismatched relative 7 2.46 % Mismatched Unrelated 13 4.58 % Sex of donnor/patient F/M 7 2.46 % Sex of donnor/patient pos/neg 50 17.86 % Others 205 73.48 % Others 205 73.18 % NA		90	86	32.7~%
No of lines before alloSCT 1 73 28.74 % 2 36.22 % 36.24 % 36.24 % 36.24 % 36.24 % 36.24 % 36.24 % 36.24 % 36.24 % 36.27 %		NA	21	
2 36.22 % 16.50 % 17.50 %	No of lines before alloSCT		254	2.201(1;9)
Sex of donnor/patient F/M CM CM CM CM CM CM CM	No of lines before alloSCT	1	73	28.74~%
Sex of donnor/patient Sex of donnor/patient Piles Pile		2	92	36.22~%
Donnor related Yes 149 52.46 % HLA match Identical sibling 128 45.07 % HLA match Identical sibling 128 45.07 % Matched unrelated 136 47.89 % Mismatched relative 7 2.46 % Mismatched unrelated 13 45.8 % HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched unrelated 103 36.27 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 17.86 % CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 10 17.25 % CB 33 11.62 % 10 PB 202 71.13 % Pes		3	65	25.59~%
Donnor related Yes 149 52.46 % HLA match Identical sibling 128 45.07 % Matched unrelated 136 47.89 % Matched unrelated 136 47.89 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69		>=4	24	9.45~%
HLA match No 135 47.54 % HLA match Identical sibling 128 45.07 % Matched unrelated 136 47.89 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 17.86 % CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % Source of stem cells BM 4 17.25 % CB 33 11.62 % 16 PB 202 71.13 % 16 TBI No 161 56.69 % Pes		NA	30	
HLA match Identical sibling 128 45.07 % Matched unrelated 136 47.89 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % VA 5 17.86 % CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 23 82.14 % Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Pes 123 43.31 % conditioning Intensity MAC 106	Donnor related	Yes	149	52.46~%
Matched unrelated 136 47.89 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 5 CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % NMA 27 9.71 % NMA 25.16 % <		No	135	47.54~%
HLA match Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 17.86 % Others 230 82.14 % Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %	HLA match	Identical sibling	128	45.07~%
HLA match Mismatched unrelated 13 4.58 % HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 50 17.86 % CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		Matched unrelated	136	47.89~%
HLA match Identical sibling 128 45.07 % Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 50 17.86 % CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 17.25 % CB 33 11.62 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % NMA 27 9.71 % RIC 145 52.16 %		Mismatched relative	7	2.46~%
Matched unrelated 103 36.27 % Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 50 17.86 % Others 230 82.14 % NA 4 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % NMA 27 9.71 % RIC 145 52.16 %		Mismatched unrelated	13	4.58~%
Mismatched relative 7 2.46 % Mismatched unrelated 13 4.58 % Unrelated CB 33 11.62 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 50 17.86 % Others 230 82.14 % NA 4 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %	HLA match	Identical sibling	128	45.07~%
Sex of donnor/patient Mismatched unrelated 13 4.58 % Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		Matched unrelated	103	36.27~%
Sex of donnor/patient Unrelated CB 33 11.62 % F/M 74 26.52 % Others 205 73.48 % NA 5 CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		Mismatched relative	7	2.46~%
Sex of donnor/patient F/M 74 26.52 % Others 205 73.48 % NA 5 CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		Mismatched unrelated	13	4.58~%
CMV serostatus of donnor/patient Others 205 73.48 % CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		Unrelated CB	33	11.62~%
CMV serostatus of donnor/patient NA 5 17.86 % CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %	Sex of donnor/patient	F/M	74	26.52~%
CMV serostatus of donnor/patient pos/neg 50 17.86 % Others 230 82.14 % NA 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %	·	Others	205	73.48~%
Others 230 82.14 % NA 4 Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		NA	5	
Source of stem cells NA 4 BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %	CMV serostatus of donnor/patient	pos/neg	50	17.86~%
Source of stem cells BM 49 17.25 % CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		Others	230	82.14~%
CB 33 11.62 % PB 202 71.13 % TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		NA	4	
TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %	Source of stem cells	BM	49	17.25~%
TBI No 161 56.69 % Yes 123 43.31 % conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		СВ	33	11.62~%
Yes 123 43.31 % MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %		PB	202	71.13~%
conditioning Intensity MAC 106 38.13 % NMA 27 9.71 % RIC 145 52.16 %	TBI	No	161	56.69~%
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Yes	123	43.31~%
RIC 145 52.16 %	conditioning Intensity	MAC	106	38.13~%
		NMA	27	9.71~%
NA 6		RIC	145	52.16~%
		NA	6	

Conditioning	BEAM	1	0.36~%
0	BEAM + Campath	1	0.36~%
	BU CY	4	1.42 %
	BU CY + FLU + ATG	1	0.36~%
	BU CY ATG	1	0.36~%
	EDX ATG	0	0 %
	ENX TBI 2gray	1	0.36~%
	FLU ATG	3	1.07~%
	FLU BU 1+ ATG	3	1.07~%
	FLU BU 2	1	0.36~%
	FLU BU 2+ ATG	73	25.98~%
	FLU BU 3+ ATG	21	7.47~%
	FLU BU 4+ ATG	10	3.56~%
	FLU BU EDX	8	2.85~%
	FLU BU EDX +ATG	6	2.14~%
	FLU EDX	1	0.36~%
	FLU EDX ATG	3	1.07~%
	FLU EDX MEL	1	0.36~%
	FLU ENX TBI 2gray	24	8.54~%
	FLU ENX TBI 4gray	2	0.71~%
	FLU ENX TBI 6gray	1	0.36~%
	FLU ENX TBI 6gray + campath	1	0.36~%
	FLU MEL	12	4.27~%
	FLU MEL + campath	4	1.42~%
	FLU MEL + Campath	1	0.36~%
	FLU MEL ATG	1	0.36~%
	FLU MEL TBI 2gray	1	0.36~%
	FLU TBI 2gray	21	7.47~%
	FLU TBI 2gray ATG	1	0.36~%
	FLU Tbi 8 gray	1	0.36~%
	MEL 140 TBI 10 gray	1	0.36~%
	MEL TBI VP16	1	0.36~%
	TB2F	2	0.71~%
	TBI 12 gray	1	0.36~%
	TBI 2gray	1	0.36~%
	TBI EDX	49	17.44~%
	TBI EDX +ATG	11	3.91~%
	TBI EDX FLU	5	1.78~%
	Thiotepa etoposide TBI12 gray	1	0.36~%
	NA	3	
Cells manipulation	No	275	97.86~%
	Yes	6	2.14~%
	NA	3	

No of donnors	1	261	91.9~%
	2	23	8.1~%

Table 3: Transplant conditions

3.1.4 Post-AlloSCT Response

Parameters	Values	N	Statistics*
		284	
Agvhd	No	141	49.65~%
	Yes	143	50.35~%
Agvhd grade	No aGvHD present (Grade 0)	141	49.65~%
	Grade I	49	17.25~%
	Grade II	46	16.2~%
	Grade III	24	8.45~%
	Grade IV	17	5.99~%
	Present, grade unknown	7	2.46~%
Cgvhd	No or early death	187	65.85~%
	Yes	97	34.15~%
Cgvhd grade	Early death (100D)	41	14.44~%
	Extensive	38	13.38 %
	Limited	55	19.37 %
	No cGvh	146	51.41~%
	grade unknown	4	1.41~%
Engrafted	Early death (30D)	5	1.76 %
	Engrafted	271	95.42~%
	Lost graft	2	0.7~%
	No engraftment	6	2.11~%
Cause of death	HSCT-GVHd	21	19.63~%
	HSCT- $GVHd + infection$	3	2.8~%
	HSCT-infection	27	25.23~%
	HSCT-toxicity	4	3.74~%
	HSCT related	3	2.8~%
	HSCT related ILD	1	0.93~%
	HSCT related MAT	1	0.93~%
	HSCT related MOF	2	1.87~%
	HSCT related MVO	1	0.93~%
	HSCT related pneumopathie interstititelle	2	1.87~%
	HSCT related PTLD	1	0.93~%
	HSCT related SDRA	1	0.93~%
	Other	1	0.93~%
	Relapse or progression of original disease	37	34.58~%
	Secondary malignancy	1	0.93~%
	Unknown	1	0.93~%
	NA	177	
Best reponse after SCT	CR	245	86.88 %
1	Not evaluable	4	1.42~%
	110t Cvardabic		1.14 /0

	PD	14	4.96~%
	PR	16	5.67~%
	NA	2	
Relapse/progression	Continuous progression	28	9.93~%
	No	217	76.95~%
	Non applicable	3	1.06~%
	Yes	34	12.06~%
	NA	2	
Death	Alive	177	62.32 %
	Dead	107	37.68~%

 ${\bf Table\ 4:\ Post-AlloSCT\ Response}$

3.2 Survival analysis

Median follow-up from the date of AlloSCT was 20.35 (range 0.03 to 113.77). OS at 1 year was 0.68 (95 % 0.63 - 0.74), was 0.64 (95 % 0.59 - 0.7) at 2 years.OS at 4 years was 0.57 (95 % 0.5 - 0.64).

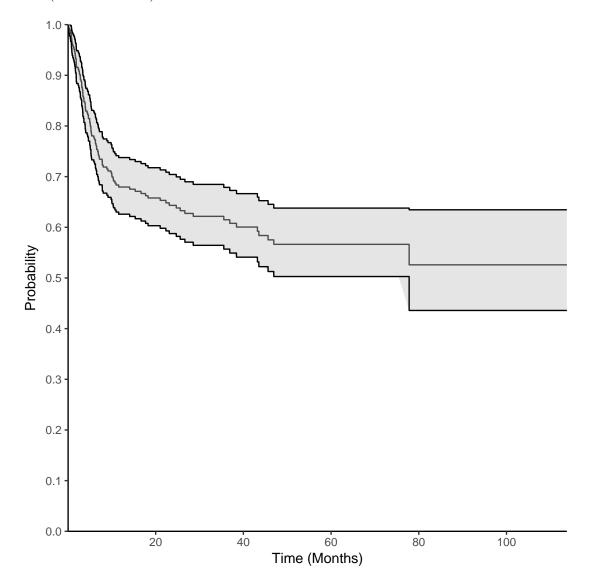


Figure 1: Overall survival

EFS at 1 year was 0.54 (95 % 0.48 - 0.61), was 0.49 (95 % 0.43 - 0.55) at 2 years. EFS at 4 years was 0.42 (95 % 0.36 - 0.5).

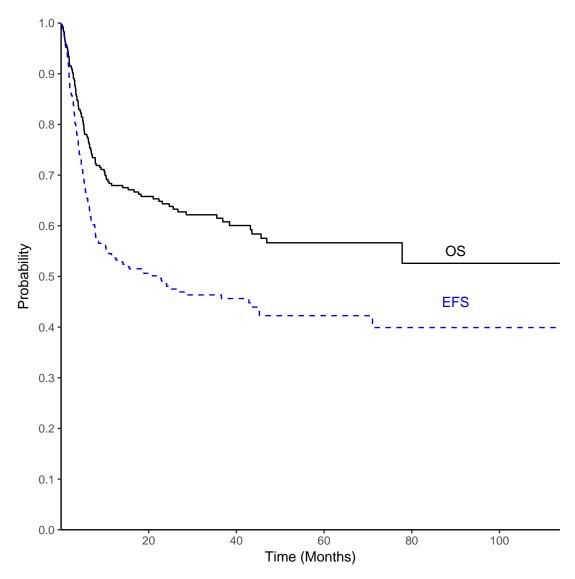


Figure 2: Event-free survival

PFS at 1 year was 0.75 (95 % 0.67 - 0.84), was 0.68 (95 % 0.59 - 0.78) at 2 years. PFS at 4 years was 0.66 (95 % 0.56 - 0.77).

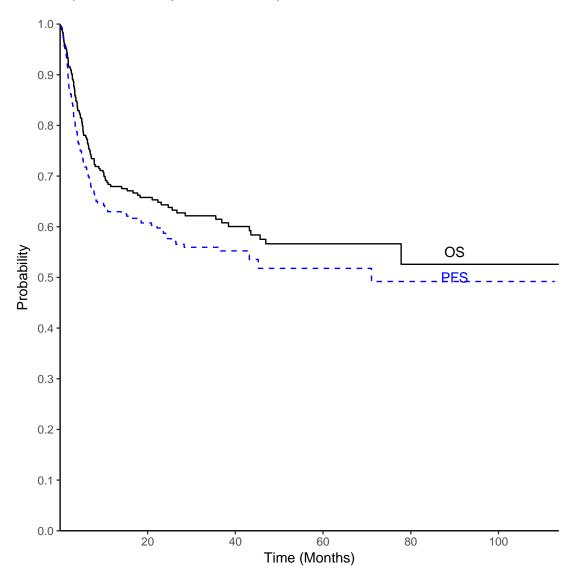


Figure 3: Progression-free survival

Relapse at 1 year was 0.87 (95 % 0.83 - 0.92), was 0.85 (95 % 0.8 - 0.9) at 2 years. Relapse at 4 years was 0.83 (95 % 0.77 - 0.89).

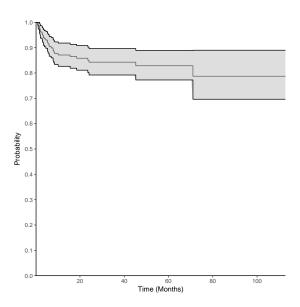


Figure 4: Relapse in patients with a complete remission post alloSCT

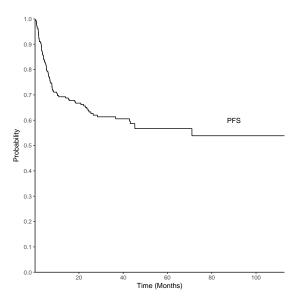


Figure 5: PFS in patients with a complete remission post alloSCT

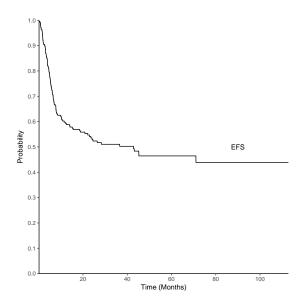


Figure 6: EFS in patients with a complete remission post alloSCT $\,$

CIF for related HSCT death at 1 years was 0.2, at 2 years 0.22. CIF for non-related HSCT Death at 1 year was 0.12, at 2 years 0.13.

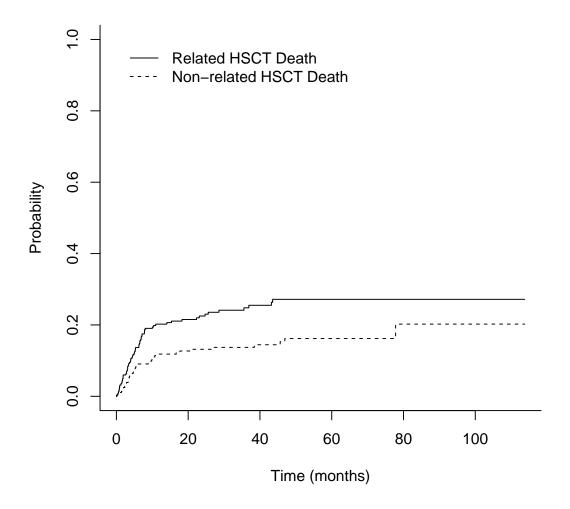


Figure 7: CIF of Related HSCT Death and Non-related HSCT Death

CIF for relapse/progression at 1 years was 0.18 (95 % 0.13 - 0.23), at 2 years 0.19 (95 % 0.15 - 0.24). CIF for death without relapse or progression at 1 year was 0.19 (95 % 0.14 - 0.24), at 2 years 0.22 (95 % 0.17 - 0.27).

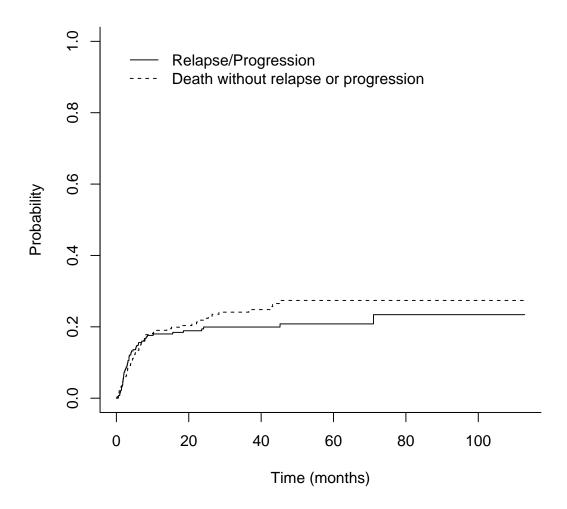


Figure 8: CIF of relapse or progression and death without relapse or progression

CIF for relapse at 1 year was 0.12 (95 % 0.07 - 0.16), at 2 years 0.13 (95 % 0.09 - 0.18). CIF for death without relapse at 1 year was 0.19 (95 % 0.14 - 0.24), at 2 years 0.22 (95 % 0.17 - 0.28).

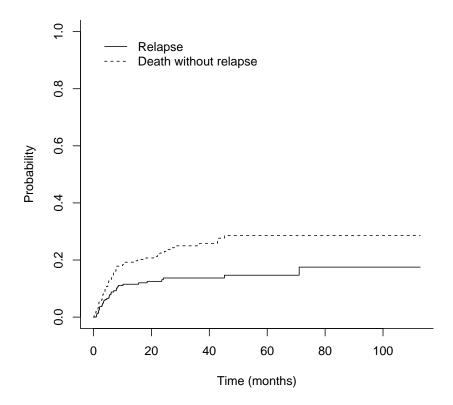


Figure 9: CIF of relapse and death without relapse (in patients with a complete remission post alloSCT)