

SUPPLEMENTAL DATA

Table A. Variables used in Propensity Score Matching

Patient-related variables:

Age at transplant: continuous

Karnofsky performance status at transplant: $\geq 90\%$ vs $< 90\%$

Sex: male vs female

Disease-related:

Disease stage at diagnosis: I or II vs. III or IV

Chemosensitive disease at transplant: Sensitive vs resistant

B symptoms at diagnosis: present vs absent

Time from diagnosis to transplant: continuous

Extranodal disease or splenic involvement at diagnosis: yes vs no

Marrow involvement at diagnosis: yes vs no

Treatment-related:

Source of stem cells: bone marrow vs peripheral blood

Year of transplant: continuous

Table B. Patient characteristics among matched pairs.

Variable	Autologous		Allogeneic		P-value
	N	N (%)	N	N (%)	
Number of patients		232		69	
Age, median (range), years	232	48 (20 - 60)	69	46 (21 - 59)	0.25
Male sex	232	144 (62)	69	42 (61)	0.86
Karnofsky score pre-transplant, <90	232	97 (42)	69	28 (41)	0.83
Disease stage at diagnosis	232		69		0.88
I		20 (9)		8 (12)	
II		31 (13)		8 (12)	
III		49 (21)		14 (20)	
IV		132 (57)		39 (57)	
B Symptoms at diagnosis	232	121 (52)	69	37 (54)	0.98
Marrow involvement at diagnosis	232	79 (34)	69	22 (32)	0.94
Extranodal disease or splenic involvement at diagnosis	232	154 (66)	69	44 (64)	0.92
Number of prior chemotherapy regimens	232		69		0.93
1		30 (13)		6 (9)	
2		98 (42)		30 (43)	
3		70 (30)		21 (30)	
4		28 (12)		10 (14)	
5		6 (3)		2 (3)	
Chemosensitive disease at transplant	232	161 (69)	69	42 (61)	0.18
Time from diagnosis to transplant, median (range), months	232	11.0 (2.0 - 190.7)	69	10.4 (2.0 - 156.2)	0.27
Graft source	232		69		0.17
BM		52 (22)		21 (30)	
PB		180 (78)		48 (70)	
Year of transplant	232		69		0.71
1995-1997		103 (44)		29 (42)	
1998-2000		70 (30)		19 (27)	
2001-2003		59 (25)		21 (30)	
Median follow-up of survivors, months	107	56.5 (0.5 - 128.6)	17	66.9 (14.0 - 120.4)	0.29

Table C. Multivariate analysis for treatment-related mortality after autologous and HLA-identical sibling Allogeneic HCTs for diffuse large B-cell lymphoma

Variables:	N	Relative Risk (95% CI)	P-value
Transplant type^a:			$P^b_{\text{overall}} = <0.001$
Within first 12 months after transplant			
Autologous	834	1.00	
Allogeneic	79	4.88 (3.21 - 7.40)	<0.001
Beyond first 12 months after transplant			
Autologous	441	1.00	
Allogeneic	23	1.09 (0.34 - 3.49)	0.89
<u>Other significant covariates:</u>			
Age at transplant			
18-30 years	120	1.00 ^c	$P^b_{\text{overall}} = 0.001$
31-50 years	468	0.97 (0.60 - 1.56)	0.89
51-60 years	325	1.73 (1.07 - 2.80)	0.025
Karnofsky performance status at transplant			
≥90%	560	1.00 ^c	$P^b_{\text{overall}} = 0.001$
<90%	331	1.66 (1.24 - 2.24)	0.001
Unknown	22	2.35 (1.08 - 5.13)	0.032
Chemosensitive disease at transplant			
Sensitive	752	1.00	
Resistant	161	1.76 (1.22 - 2.53)	0.003
Year of transplant			
2001-2003	174	1.00	
1995-2000	739	1.67 (1.08 - 2.60)	0.022

Abbreviations: CI = confidence interval.

* Comparison was restricted to chemo sensitive and resistant patients only.

^a Time dependant covariates. The effect of transplant type differs with the length of time after transplant.

^b Two degrees of freedom

^c Reference group

Table D. Multivariate analysis comparing relapse/progression

Variables:	N	Relative Risk (95% CI)	P-value
Transplant type^a:			$P^b_{\text{overall}} = 0.77$
Within first 12 months after transplant			
Autologous	834	1.00	
Allogeneic	79	1.12 (0.73 - 1.72)	0.59
Beyond first 12 months after transplant			
Autologous	441	1.00	
Allogeneic	23	0.70 (0.17 - 2.89)	0.62
<u>Other significant covariates:</u>			
Age at transplant			
18-30 years	120	1.00 ^c	$P^b_{\text{overall}} = 0.001$
31-50 years	468	1.57 (1.07 - 2.29)	0.02
51-60 years	325	2.06 (1.40 - 3.04)	<0.001
Chemosensitive disease at transplant			
Sensitive	752	1.00	
Resistant	161	2.74 (2.13 - 3.52)	<0.001

Abbreviations: CI = confidence interval.

* Comparison was restricted to chemo sensitive and resistant patients only.

^a Time dependant covariates. The effect of transplant type differs with the length of time after transplant.

^b Two degrees of freedom

^c Reference group

Table E. Multivariate analysis for treatment failure (progression-free survival)

Variables:	N	Relative Risk (95% CI)	P-value
Transplant type^a:			$P_{\text{overall}}^b = <0.001$
Within first 12 months after transplant			
Autologous	834	1.00	
Allogeneic	79	2.06 (1.54 - 2.75)	<0.001
Beyond first 12 months after transplant			
Autologous	441	1.00	
Allogeneic	23	0.86 (0.35 - 2.12)	0.74
<u>Other significant covariates:</u>			
Age at transplant			
18-30 years	120	1.00 ^c	$P_{\text{overall}}^b = <0.001$
31-50 years	468	1.32 (0.98 - 1.77)	0.07
51-60 years	325	1.95 (1.44 - 2.63)	<0.001
Chemosensitive disease at transplant			
Sensitive	752	1.00	
Resistant	161	2.39 (1.94 - 2.94)	<0.001
Year of transplant			
2001-2003	174	1.00	
1995-2000	739	1.45 (1.13 - 1.86)	0.004

Abbreviations: CI = confidence interval.

* Comparison was restricted to chemo sensitive and resistant patients only.

^a Time dependant covariates. The effect of transplant type differs with the length of time after transplant.

^b Two degrees of freedom

^c Reference group

Table F. Multivariate analysis for survival (mortality)

Variables:	N	Relative Risk (95% CI)	P-value
Transplant type^a:			$P^b_{\text{overall}} = <0.001$
Within first 12 months after transplant			
Autologous	837	1.00	
Allogeneic	79	2.75 (2.03 - 3.72)	<0.001
Beyond first 12 months after transplant			
Autologous	523	1.00	
Allogeneic	26	0.93 (0.43 - 1.99)	0.84
<u>Other significant covariates:</u>			
Age at transplant			
18-30 years	120	1.00 ^c	$P^b_{\text{overall}} = <0.001$
31-50 years	470	1.10 (0.81 - 1.49)	0.56
51-60 years	326	1.72 (1.26 - 2.35)	0.001
Karnofsky performance status at transplant			
≥90%	562	1.00 ^c	$P^b_{\text{overall}} = 0.006$
<90%	332	1.35 (1.12 - 1.63)	0.001
Unknown	22	1.22 (0.67 - 2.25)	0.51
Chemosensitive disease at transplant			
Sensitive	755	1.00	
Resistant	161	2.31 (1.86 - 2.86)	<0.001
Year of transplant			
2001-2003	174	1.00	
1995-2000	742	1.55 (1.18 - 2.03)	0.002

Abbreviations: CI = confidence interval.

* Comparison was restricted to chemo sensitive and resistant patients only.

^a Time dependant covariates. The effect of transplant type differs with the length of time after transplant.

^b Two degrees of freedom

^c Reference group