

Supplemental Table 1: Characteristics of the patients at time of decision (TD)

	N	Median {IQR}
	116	
Age	116	60.74 [49.17;67.61]
≥65	42	36.2%
Male sex	75	64.7%
B symptoms	20	17.2%
Lymphoma		
DLBCL	93	80.2%
PMBL	6	5.2%
Transformed FL	17	14.7%
BCL2 expression > 70%	20/37	54.0%
MYC expression >40%	21/44	47.7%
>80%	11/44	25.0%
Primary refractory	77/106	66.4%
Number of prior lines	116	3 [2;4]
Number prior lines ≥ 4	34	29.3%
Prior autograft ; Prior allograft	33 ; 3	28.4% ; 2.6%
ECOG Performance Status		
0	52	44.8%
1	52	44.8%
2	12	10.3%
Ann Arbor stage III/IV	89	76.7%
ExtraNodal sites	116	1 [0 ;2]
0	42	36.2%
1	41	35.3%
≥ 2	33	28.4%
LDH level	101	462 [386 ; 609]
Elevated LDH	55/116	47.4%
IPI		
Low	35	30.2%
Low-Intermediate	36	31.0%
High-Intermediate	28	24.1%
High	17	14.6%

Revised IPI very good	10	8.6%
good	61	52.6%
poor	45	38.8%

DLBCL: diffuse large B cell lymphoma – PMBL: primary B cell lymphoma –
Transformed FL : transformed follicular lymphoma – IPI international prognostic index

Supplemental data Table 2. Supplemental data – Univariate analysis for progression or relapse, early progression or relapse, and death

Hazards ratios (HR) of events are reported with 95% confidence intervals (95%CI) and p-value from Wald test. Note that for continuous variables, to let the estimated HR more relevant, we modified the scale to estimate the hazard ratio of events for two patients differing by 100 units of LDH, and by 10 units of CRP or of albumin. Underlying log-linearity assumptions were checked using splines, and Grambsch and Therneau test.

GC Germinal center; PS : performance status; LDH lactico-deshydrogenase; IPI: international prognostic index; L: Low Low - int: Low intermediate; High-int: High – intermediate; H: high; ECOG PS: Performance status

		No patients	PROGRESSION or RELAPSE			EARLY PROGRESSION or RELAPSE < 1 month			SURVIVAL		
			HR	95%CI	p-value	OR	95%CI	p-value	HR	95%CI	p-value
Age, years	≥ 65	42	0.87	(0.50 ; 1.52)	0.63	0.68	(0.27-1.73)	0.42	0.63	(0.27 ; 1.47)	0.28
Sex	M	75	1.62	(0.91 ; 2.9)	0.10	2.27	(0.83-6.18)	0.11	3.16	(1.2 ; 8.28)	0.020
GC/ nGC	GC	39	0.78	(0.39 ; 1.54)	0.47	1.10	(0.34-3.55)	0.87	1.09	(0.36 ; 3.24)	0.88
	nGC	33	1.48	(0.69 ; 3.17)	0.31	0.64	(0.19-2.11)	0.46	1.42	(0.46 ; 4.35)	0.54
Lymphoma subtype	DLBCL	89	1.00			1.00			1.00		
	PMBL	8	0.78	(0.28 ; 2.17)	0.63	0.96	(0.18-5.08)	0.96	0.78	(0.18 ; 3.3)	0.73
	tFL	19	0.41	(0.16 ; 1.04)	0.06	0.34	(0.07-1.57)	0.17	0.60	(0.18 ; 2.01)	0.41
At.time of decision (TD)											
ECOG PS	>1	14	1.98	(1.00 ; 3.93)	0.049	2.02	(0.61-6.65)	0.25	3.27	(1.16 ; 9.22)	0.03
Ann Arbor stage	III / IV	89	2.89	(1.31 ; 6.39)	0.009	10.7)	(1.38-83.3)	0.023	9.43	(1.28 ; 69.3)	0.028
Nb of ExtraN.sites	≥ 2	116	1.51	(1.23 ; 1.85)	<0.0001	1.94	(1.32-2.83)	0.0007	1.8	(1.37 ; 2.35)	<0.0001
LDH, /100		101	1.21	(1.13; 1.3)	<0.0001	1.42	(1.16-1.73)	0.0006	1.16	(1.08 ; 1.24)	<0.0001

IPI	Low IPI	36	0.22	(0.1 ; 0.48)	0.00	0.08	(0.015-0.47)	0.005	0.04	(0.01 ; 0.19)	0.000
	Low-int IPI	35	0.35	(0.17 ; 0.74)	0.01	0.30	(0.08-1.09)	0.067	0.18	(0.07 ; 0.48)	0.001
	High-int IPI	28	0.55	(0.26 ; 1.15)	0.11	1.07	(0.32-3.64)	0.91	0.3	(0.12 ; 0.75)	0.010
	High IPI	17	1.00			1.00			1.00		
Revised.IPI	other	71	1.00			1.00			1.00		
	poor	45	2.45	(1.45 ; 4.12)	0.0008	5.75	(2.24-14.8)	0.0003	4.53	(2.06 ; 9.98)	0.0002
At time of treatment (lymphodepletion and CAR T-cell infusion)											
Status at infusion	PR/SD PD	40 76	1.00 2.72	- (1.44-5.17)	0.00215	2.85	(0.99-8.23)	0.053	3.85	(1.34-11.07)	0.0125
Type of bridging	low high	38 78	1.00 2.22	(1.19-4.13)	0.0117	18.5	(2.4-142.46)	0 .0051	1.28	(1.25-10.36)	0.0174
ECOG PS	≥ 2	115	1.85	(1.40; 2.45)	<0.0001	2.91	(1.61; 5.26)	0.0004	3.46	(2.36; 5.08)	<0.0001
Ann Arbor stage	0-1-2	27	1.00			1.00			1.00		
	3-4	89	2.89	(1.31; 6.39)	0.009	10.7	(1.38; 83.3)	0.042	9.43	(1.28; 69.3)	0.028
Nb of ExtraN.sites			1.66	(1.34; 2.04)	<0.0001	2.54	(1.60; 4.04)	<0.0001	1.97	(1.49; 2.61)	<0.0001
Nb of ExtraN.sites	<2	72	1.00						1.00		
	≥ 2	44	3.01	(1.78; 5.09)	<0.0001	7.74	(2.90; 20.6)	<0.0001	5.72	(2.53; 12.96)	<0.0001
LDH D-6, /100		104	1.03	(1.02; 1.05)	0.0002	1.05	(0.99; 1.11)	0.11	1.05	(1.03; 1.08)	<0.0001
LDH D0, /100		110	1.01	(1.00; 1.01)	0.050	1.00	(0.99; 1.02)	0.62	1.01	(1.01; 1.02)	0.002
IPI	High IPI	19	1.00			1.00			1.00		
	High-int IPI	34	0.4	(0.21; 0.79)	0.008	0.30	(0.09; 0.98)	0.046	0.35	(0.15; 0.79)	0.012
	Low IPI	31	0.16	(0.07; 0.36)	1,00E-05	0.05	(0.009; 0.27)	0.0006	0.02	(0; 0.19)	0.000
	Low-int IPI	32	0.18	(0.08; 0.4)	2,00E-05	0.10	(0.026; 0.42)	0.001	0.14	(0.05; 0.4)	0.000
Revised.IPI	other	63	1.00						1.00		
	poor	53	3.13	(1.82; 5.38)	<0.0001	6.23	(2.28; 17.0)	0.0004	6.32	(2.57 ; 15.58)	<0.0001

CRP /10		113	1.14	(1.09; 1.18)	<0.0001	1.21	(1.08; 1.35)	0.0008	1.01	(1.01 ; 1.02)	<0.0001
Ferritin /1000		115	1.05	(1.01; 1.09)	0.009	1.06	(0.96; 1.18)	0.24	1.08	(1.03; 1.14)	0.002
Albumin./10		105	0.38	(0.24; 0.58)	<0.0001	0.18	(0.07; 0.44)	0.0002	0.85	(0.8 ; 0.9)	<0.0001
Lymphocyte count /1000		101	0.34	(0.14; 0.83)	0.018	0.30	(0.06; 1.42)	0.13	0.15	(0.03; 0.8)	0.027
Bulky > 5.cm		54	2.67	(1.56; 4.56)	0.0003	2.94	(1.19; 7.28)	0.019	3.3	(1.5; 7.26)	0.003
Bulky >10cm		15	1.88	(0.95; 3.72)	0.072	2.54	(0.81; 7.94)	0.11	2.51	(1.02; 6.21)	0.046
TMTV41% > 80.42ml		50	3.48	(2.02; 5.98)	<0.0001	7.12	(2.59; 19.6)	0.0001	5.26	(2.32; 11.9)	<0.0001
TMVTSUV4		115	1.11	(1.07; 1.16)	<0.0001	1.62	(1.26; 2.10)	0.0002	1.12	(1.07; 1.16)	<0.0001