

Title: Epstein – Barr virus and Cytomegalovirus reactivation after allogeneic hematopoietic cell transplantation in patients with non-Hodgkin lymphoma: the prevalence and impacts on outcomes

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Table S3.Variables influencing Survival Outcomes in Univariate Analysis

	OS			PFS			CIR			TRM			GRFS		
	HR	95% CI	P	HR	95% CI	P	HR	95% CI	P	HR	95% CI	P	HR	95% CI	P
EBV: positive vs negative	1.958	0.997-3.846	0.051	1.559	0.907-2.679	0.108	1.551	0.772-3.114	0.217	1.392	0.590-3.282	0.450	1.708	1.018-2.866	0.043
CMV: positive vs negative	1.861	0.978-3.543	0.059	0.861	0.478-1.551	0.619	0.263	0.081-0.855	0.026	2.205	1.038-4.683	0.040	1.935	1.166-3.208	0.011
Sex: female vs male	0.740	0.399-1.372	0.339	0.859	0.674-1.094	0.217	0.874	0.633-1.207	0.413	0.857	0.594-1.237	0.410	1.185	0.809-1.735	0.385
Age: <40 vs ≥40	1.591	0.886-2.858	0.120	1.01	0.783-1.302	0.936	0.817	0.558-1.198	0.301	1.261	0.890-1.789	0.192	0.771	0.501-1.186	0.236
Autologous HCT before allo-HCT: yes vs no	1.654	0.595-4.602	0.335	1.323	0.575-3.044	0.510	0.877	0.212-3.627	0.856	2.233	0.786-6.341	0.132	1.118	0.520-2.407	0.775
CAR-T cell therapy before allo-HCT: yes vs no	1.238	0.299-5.119	0.768	1.225	0.385-3.895	0.732	0.724	0.099-5.273	0.750	1.821	0.435-7.630	0.412	1.063	0.434-2.607	0.893
Disease status: advanced status vs CR	2.315	1.31-4.092	0.004	1.279	1.025-1.596	0.029	1.1	0.818-1.481	0.528	1.564	1.106-2.212	0.011	1.034	0.862-1.242	0.716
Donors type: HLA-mismatched donors vs HLA-matched donors	0.926	0.529-1.620	0.787	0.963	0.771-1.204	0.743	0.906	0.670-1.225	0.521	1.07	0.767-1.483	0.690	1.06	0.881-1.275	0.536

Type of graft			1.000				0.982		0.939		0.998				0.753
BM	1		1				1		1		1				
PB	1.018	0.349-2.970	0.974	0.868	0.401-1.882	0.721	0.808	0.301-2.166	0.672	0.979	0.281-3.410	0.973	0.843	0.436-1.630	0.612
BM+PB	1.018	0.354-2.924	0.975	0.853	0.398-1.827	0.683	0.733	0.276-1.946	0.534	1.054	0.310-3.583	0.933	0.979	0.514-1.863	0.948
dUCB	0.000	0.000	0.977	0	0.000	0.967	0	0.000	0.975	0	0.000	0.980	0.433	0.055-3.426	0.427
IPI stratification			0.656				0.492		0.147		0.172				0.020
Low risk	1		1				1		1		1				
Low-intermediate risk	1.170	0.529-2.586	0.689	1.605	0.850-3.032	0.145	1.906	0.838-4.332	0.124	1.192	0.433-3.282	0.734	1.656	0.993-2.763	0.053
High-intermediate risk	1.570	0.658-3.748	0.309	1.458	0.706-3.011	0.308	0.799	0.268-2.384	0.687	2.298	0.819-6.453	0.114	1.446	0.807-2.593	0.215
High risk	1.941	0.411-9.159	0.402	1.994	0.562-7.079	0.286	1.152	0.141-9.385	0.895	3.184	0.617-16.438	0.167	4.664	1.716-12.674	0.003
NCCN-IPI stratification			0.407				0.116		0.091		0.435				0.228
Low risk	1		1				1		1		1				
Low-intermediate risk	1.819	0.716-4.623	0.208	1.826	0.906-3.680	0.092	1.667	0.701-3.964	0.247	2.123	0.641-7.035	0.218	1.581	0.912-2.738	0.102
High-intermediate risk	1.404	0.445-4.425	0.562	1.12	0.455-2.756	0.806	0.509	0.127-2.041	0.341	2.303	0.595-8.911	0.227	1.28	0.638-2.566	0.487
Ann Arbor			0.389				0.536		0.542		0.280				0.639
I	1		1				1		1		1				
II	0.194	0.020-1.872	0.156	0.303	0.055-1.658	0.169	0.586	0.037-9.382	0.706	0.22	0.023-2.116	0.190	0.616	0.154-2.464	0.493
III	0.475	0.133-1.998	0.310	0.634	0.190-2.113	0.458	2.076	0.249-17.322	0.500	0.229	0.038-1.373	0.107	0.598	0.184-1.946	0.393
IV	0.399	0.123-1.294	0.126	0.556	0.203-1.533	0.257	1.219	0.167-8.905	0.845	0.343	0.104-1.130	0.079	0.873	0.321-2.374	0.791
Time from diagnosis to HCT: ≥8m vs <8m	1.56	0.889-2.737	0.121	1.089	0.874-1.356	0.446	0.903	0.672-1.214	0.500	1.436	1.013-2.037	0.042	1.029	0.859-1.233	0.753
Chemotherapy lines: ≥ 6 vs<6	1.569	0.890-2.765	0.119	1.434	0.920-2.237	0.112	1.428	0.789-2.584	0.239	1.385	0.708-2.709	0.342	1.14	0.950-1.367	0.158
Rituximab: yes vs no	1.371	0.756-2.484	0.299	1.179	0.726-1.914	0.506	0.73	0.351-1.515	0.398	1.969	1.000-3.875	0.050	1.183	0.791-1.771	0.413
Prophylactic therapy			0.532				0.159		0.374		0.323				0.753
Ganciclovir	1		1				1		1		1				
Foscarnet	1.393	0.747-2.597	0.297	1.611	0.989-2.625	0.056	1.553	0.819-2.947	0.178	1.676	0.787-3.566	0.181	1.168	0.778-1.754	0.453
Acyclovir	1.346	0.635-2.857	0.438	1.293	0.704-2.374	0.407	1.036	0.440-2.440	0.935	1.689	0.703-4.056	0.241	1.051	0.635-1.739	0.848

Neutrophil recovery: yes vs no	0.136	0.053-0.349	<0.001	0.194	0.083-0.451	<0.001	0.288	0.088-0.939	0.039	0.247	0.075-0.815	0.022	0.273	0.126-0.590	0.001
Platelet recovery: yes vs no	0.238	0.133-0.426	<0.001	0.312	0.193-0.504	<0.001	0.506	0.252-1.016	0.056	0.207	0.104-0.412	<0.001	0.65	0.429-0.983	0.041
ATG use: yes vs no	0.777	0.441-1.370	0.383	0.769	0.491 -1.206	0.253	0.696	0.384-1.263	0.233	0.868	0.436-1.728	0.686	0.805	0.553-1.170	0.255
TBI use: yes vs no	1.63	0.929-2.859	0.088	1.259	0.798-1.988	0.323	1.46	0.803-2.654	0.215	1.028	0.503-2.100	0.939	0.997	0.681-1.460	0.987
acute GVHD	0.817	0.467-1.430	0.480	0.985	0.791-1.226	0.891	0.989	0.738-1.325	0.941	0.982	0.705-1.369	0.913			
none,grade I vs grade II	1.061	0.602-1.871	0.837	0.968	0.771-1.214	0.777	0.841	0.613-1.154	0.283	1.145	0.821-1.598	0.425			
chronic GVHD	0.233	0.099-0.552	0.001	0.895	0.684-1.121	0.291	1.124	0.830-1.522	0.450	0.589	0.366-0.949	0.030			
none,limited vs extensive	0.393	0.141-1.102	0.076	0.616	0.306-1.238	0.174	0.741	0.312-1.756	0.495	0.464	0.140-1.534	0.208			

Abbreviations: NHL: non-Hodgkin lymphoma; EBV: Epstein – Barr virus; CMV: Human cytomegalovirus; CR: complete remission; BM: bone marrow; PB:peripheral blood; dUCB: double umbilical cord blood graft; IPI: the International Prognostic Index; ATG: antithymocyte globulin; TBI: total body irradiation; GVHD: graft-versus-host disease.