

Concomitant systemic and central nervous system non-Hodgkin lymphoma: the role of consolidation in terms of high dose therapy and autologous stem cell transplantation. A 60-case retrospective study from LYSA and the LOC network

Gandhi Damaj,¹ Sarah Ivanoff,² Diane Coso,³ Loïc Ysaebert,⁴ Sylvain Choquet,⁵ Caroline Houillier,⁶ Anne Parcelier,² Wajed Abarah,⁷ Zora Marjanovic,⁸ Rémy Gressin,⁹ Reda Garidi,¹⁰ Momar Diouf,¹⁰ Anne-Claire Gac,¹ Jehan Dupuis,¹² Xavier Troussard,¹ Franck Morschhauser,¹³ Hervé Ghesquières,¹⁴ and Carole Soussain^{15,16} on behalf of the LYSA and LOC network, France

¹Institut d'Hématologie de Basse Normandie, Centre Hospitalier Universitaire (CHU), Faculté de médecine, Caen; ²Hématologie, CHU, Amiens; ; ³Hématologie, Institut Paoli Calmettes, Marseille; ⁴Hématologie, CHU Purpan, Toulouse; ⁵Hématologie, Hôpital La Pitié-Salpêtrière, AP-HP, Paris; ⁶Neurologie, Hôpital La Pitié-Salpêtrière, AP-HP, Paris; ⁷Hématologie, Hôpital Général, Meaux; ⁸Hématologie, Hôpital St Antoine, AP-HP, Paris; ⁹Hématologie, CHU, Grenoble; ¹⁰Hématologie, Hôpital Général, St Quentin; ¹¹Bio-statistique et Centre de Recherche Clinique, CHU, Amiens; ¹²Unité d'Hémopathies Lymphoïdes, CHU Henri Mondor, AP-HP, Créteil; ¹³Hématologie, CHRU, Lille; ¹⁴Hématologie, Centre Léon Berard, Lyon; ¹⁵Hématologie, Centre René Huguenin- Institut Curie, Saint Cloud; and ¹⁶Collège de France, CNRS UMR 7241/INSERM U1050, Paris, France

©2015 Ferrata Storti Foundation. This is an open-access paper. doi:10.3324/haematol.2015.126110

Manuscript received on February 27, 2015. Manuscript accepted on July 3, 2015.

Correspondence: damaj-g@chu-caen.fr

Supplemental table 1: Univariate analysis by key subsets: 3-year overall and progression-free survival rates and *P*-values for the whole group of patients

	N° of patients	Overall Survival			Progression Free Survival		
		%	HR [95%CI]	<i>P</i> *	%	HR [95%CI]	<i>P</i> *
Gender				<i>0.07</i>			<i>0.03</i>
Male	35	53	1		53	1	
Female	25	33	1.19[0.49-3.89]		28	2.160 [1.07-4.36]	
Patient Age				<i>.063</i>			<i>0.11</i>
< 60	28	54	1		50	1	
≥ 60	32	35	2.01 [0.96-4.20]		35	1.79 [0.87-3.66]	
IPI				<i>0.096</i>			<i>0.22</i>
0-2	16	67	1		61	1	
3-5	41	37	2.27 (0.86-5.95)		37	1.74 [0.71-4.27]	
LDH				<i>0.29</i>			<i>0.47</i>
normal	23	38	1		38	1	
elevated	35	47	1.27 (0.72-3.03)		44	1.30 [0.60-2.63]	
ECOG				<i>0.29</i>			<i>0.42</i>
0	28	54	1		50	1	
≥ 1	30	34	1.47 (0.72-3.00)		34	1.33 [0.66-2.68]	
Number extranodal sites				<i>0.12</i>			<i>0.09</i>
1	15	67	1		67	1	
≥ 2	45	38	2.13 (0.82-5.55)		36	2.30 [0.89-5.99]	
Bone marrow involvement				<i>0.55</i>			<i>0.76</i>
no	35	45	1		41	1	
yes	25	43	1.26 (0.59-2.68)		43	1.12 [0.53-2.37]	
High dose therapy				<i>0.002</i>			<i>0.001</i>
yes	19	75	1		75	1	
no	41	29	5.38 [1.89-15.38]		26	5.81 [2.04-16.67]	

Abbreviations: HR: hazard ratio; CI: confidence interval; IPI: international prognostic index; LDH: lactate dehydrogenase; ECOG: Eastern cooperative oncology group.

The effect of high dose therapy on overall survival and progression-free survival was studied with a Cox model with time varying covariate to avoid time varying bias.

Supplemental table 2: Multivariate Analyses for the whole group of patients

Characteristics	Overall Survival			Progression Free Survival		
	HR	95% CI	<i>P</i> *	HR	95% CI	<i>P</i> *
High dose therapy						
No		1			1	
Yes	0.20	0.07-0.59	0.003	0.17	0.06-0.49	0.001

Abbreviations: HR: hazard ratio; CI: confidence interval,