

SUPPLEMENTAL MATERIALS

Supplemental Table 1. Clinical courses of 6 patients who did not receive systemic treatment within 3 months after diagnosis

Patient No. Age/Sex	Site of initial involvement	Initial treatment	Response after Initial treatment	Relapse after Initial treatment (relapse site)	Secondary treatment	Response after secondary treatment	Outcome (cause of death) (follow-up duration)
1 57/M	Pericardial	No therapy	-	No	-	-	CR (147 months)
2 98/F	Pleural Pericardial	Drainage	PR	Yes (4 months) (Pleural)	Drainage	CR	Died (unknown cause other than lymphoma) (22 months)
3 85/M	Pleural Pericardial	Drainage	CR	Yes (29 months) (Pleural, ascites, adrenal mass)	Chemotherapy (R-THP-COP)	PR	Died (lymphoma) (43 months)
4	Pleural	Drainage	CR	No	-	-	CR

87/M							(5 months)
5 78/F	Pleural	Drainage	CR	No	-	-	CR (24 months)

Pleural, pleural effusion; Pericardial, pericardial effusion; Drainage, effusion drainage; PD, progressive disease; R-THP-COP, rituximab, pirarubicin, cyclophosphamide, vincristine, and prednisolone; CR, complete response; PR, partial response

Supplemental table 2. Univariate and Multivariate Analysis of Clinical Characteristics for PFS

Variable	No.	Univariate Analysis		Multivariate Analysis	
		Hazard ratio (95% CI)	P-value	Hazard ratio (95% CI)	P-value
Age			0.062		0.033
< 70 y	12	1.00		1.00	
≥ 70 y	52	4.18 (0.93-18.76)		5.26 (1.15-24.12)	
Sex			0.106		
Male	40	1.00			
Female	24	2.13 (0.85-5.33)			
PS			0.025		0.008
0, 1	33	1.00		1.00	
2-4	29	3.04		4.19	

		(1.15-8.03)		(1.46-12.01)	
B symptom			0.120		
No	53	1.00			
Yes	8	2.42 (0.80-7.35)			
Serum LDH level			0.798		
Not elevated	21	1.00			
Elevated	42	1.14 (0.43-2.99)			
Hb concentration			0.472		
≥ 12 g/dl	30	1.00			
< 12 g/dl	34	1.40 (0.56-3.45)			
IPI			0.122		
0-2	13	1.00			

≥ 3	48	4.94 (0.65-37.37)			
Underlying medical condition leading to fluid retention			0.428		
No	34	1.00			
Yes	30	1.44 (0.58-3.56)			
Pleural effusion			0.495		
No	15	1.00			
Yes	49	0.72 (0.28-1.85)			
Pericardial effusion			0.246		
No	26	1.00			
Yes	38	0.57 (0.22-1.47)			

Ascites			0.022		0.001
No	57	1.00		1.00	
Yes	7	3.73 (1.21-11.5)		7.31 (2.16-24.68)	
Number of sites of involvement			0.519		
Single lesion	38	1.00			
Multiple lesion	26	0.73 (0.29-1.88)			
Year of diagnosis			0.837		
2011-2014	33	1.00			
1998-2010	31	1.12 (0.39-3.16)			
CD20 expression			0.509		
Negative	2	1.00			
Positive	62	0.50			

		(0.07-3.86)			
Cell-of-origin			0.384		
GC phenotype	8	1.00			
Non-GC phenotype	30	1.79 (0.48-6.63)			
<i>MYC break apart</i> (FISH)			0.696		
Negative	29	1.00			
Positive	7	0.74 (0.16-3.40)			

PS, performance status; LDH lactate dehydrogenase; Hb, hemoglobin; IPI, international prognostic index; GC, germinal center; FISH, fluorescent *in situ* hybridization; PFS, progression free survival