Supplementary Table 1. Response rate to second line treatment according to treatment arm for patients experiencing POD24

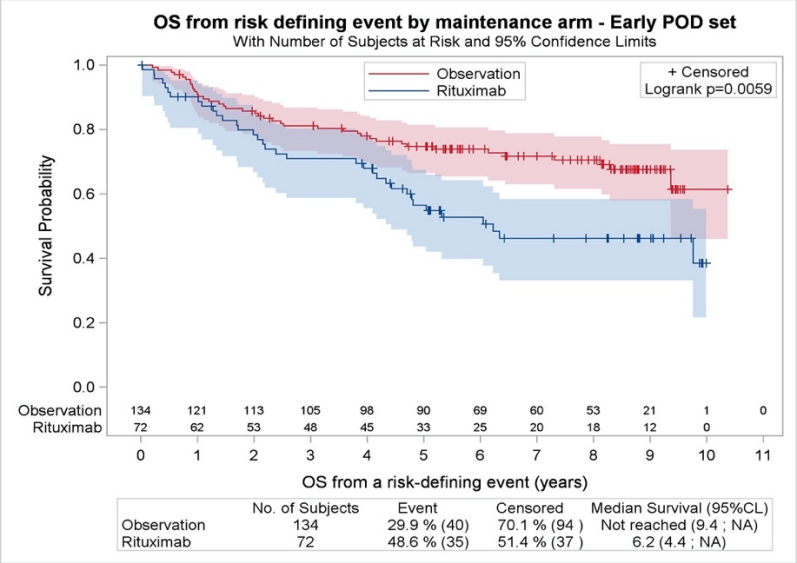
n (%)	**Observation** **N = 134**	**Rituximab Maintenance** **N = 72**	*P*¶
Number of patients with available data	n = 126	n = 61	
Complete response	42 (33.3)	19 (31.1)	0.029
Unconfirmed complete response	29 (23.0)	5 (8.2)	
Partial response	25 (19.8)	15 (24.6)	
Stable disease	12 (9.5)	7 (11.4)	
Progressive disease	18 (14.3)	15 (24.6)	

**24 months after registration (i.e. 18 months after randomization between rituximab maintenance or observation).*
¶for CR/CRu versus PR/SD/PD (chi-square test)

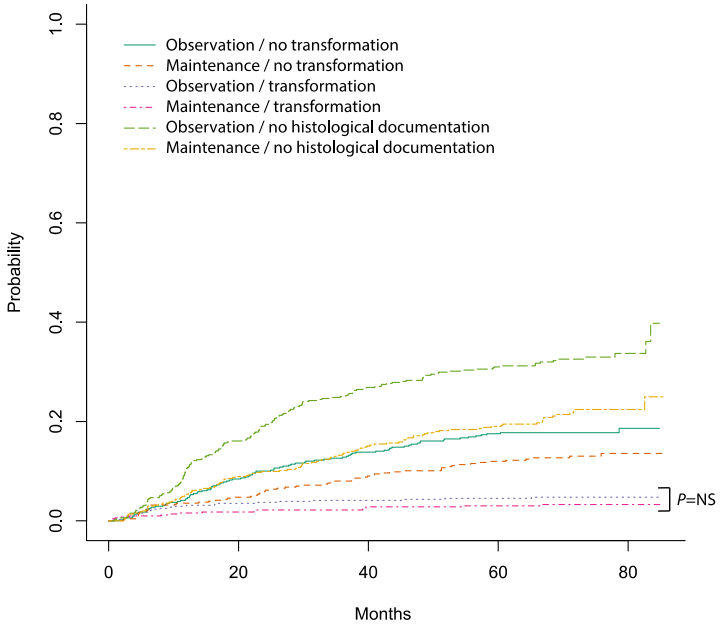
Supplementary Table 2. Patient characteristics at trial inclusion (*i.e.* before induction treatment) according to treatment arm for patients experiencing POD24

	Maintenance arm		Early POD set	*P*
	Rituximab N=72	Observation N=134	N=206	
Age groups at baseline				
<= 60	44 (61.1%)	90 (67.2%)	134 (65.0%)	0.258
]60;70]	16 (22.2%)	32 (23.9%)	48 (23.3%)	
>70	12 (16.7%)	12 (9.0%)	24 (11.7%)	
Gender				
Female	31 (43.1%)	61 (45.5%)	92 (44.7%)	0.734
Male	41 (56.9%)	73 (54.5%)	114 (55.3%)	
Ann Arbor Stage in group				
I-II	2 (2.8%)	8 (6.0%)	10 (4.9%)	0.499
III-IV	70 (97.2%)	126 (94.0%)	196 (95.1%)	
Bone marrow involvement				
Not involved	29 (40.3%)	39 (29.1%)	68 (33.0%)	0.138
Involved	43 (59.7%)	91 (67.9%)	134 (65.0%)	
Unspecified	0 (0.0%)	3 (2.2%)	3 (1.5%)	
Not done	0 (0.0%)	1 (0.7%)	1 (0.5%)	
B symptoms				
No	41 (56.9%)	87 (64.9%)	128 (62.1%)	0.260
Yes	31 (43.1%)	47 (35.1%)	78 (37.9%)	
ECOG				
0	36 (50.0%)	79 (59.0%)	115 (55.8%)	0.419
1	31 (43.1%)	46 (34.3%)	77 (37.4%)	
2	5 (6.9%)	9 (6.7%)	14 (6.8%)	
LDH groups				
=<Upper Normal limit	37 (51.4%)	84 (63.2%)	121 (59.0%)	0.102
>Upper Normal limit	35 (48.6%)	49 (36.8%)	84 (41.0%)	
Missing	0	1	1	
Hemoglobin groups				
<12 g/dL	23 (31.9%)	34 (25.4%)	57 (27.7%)	0.315
>=12 g/dL	49 (68.1%)	100 (74.6%)	149 (72.3%)	
Beta2 microglobulin groups				
<3 mg/L	34 (50.0%)	76 (62.3%)	110 (57.9%)	0.100
>=3 mg/L	34 (50.0%)	46 (37.7%)	80 (42.1%)	
Missing	4	12	16	
Number of nodal areas				
=<4	13 (18.1%)	35 (26.1%)	48 (23.3%)	0.192
>4	59 (81.9%)	99 (73.9%)	158 (76.7%)	
FLIPI group				
0-2	28 (38.9%)	70 (52.2%)	98 (47.6%)	0.067
3-5	44 (61.1%)	64 (47.8%)	108 (52.4%)	

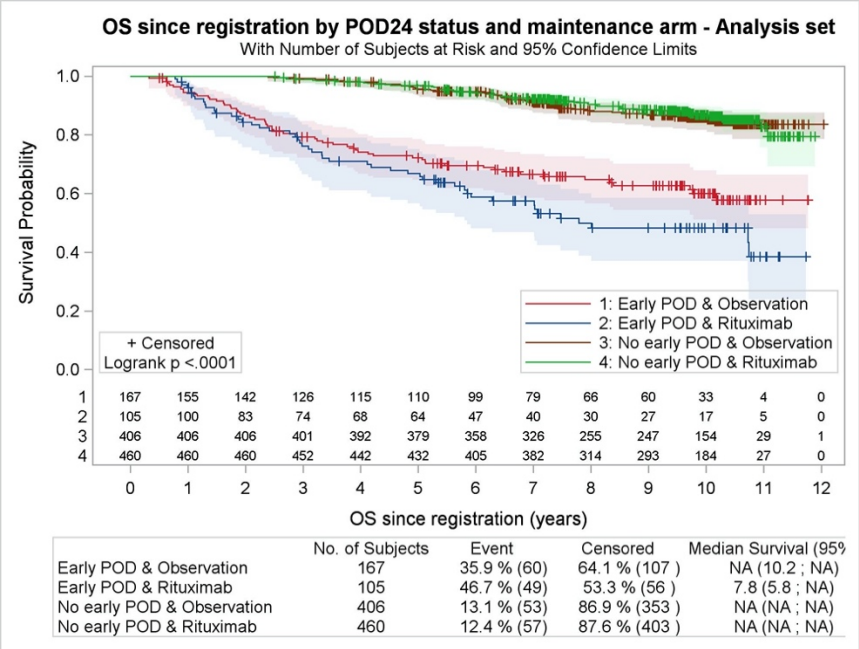
Supplementary Figure 1. OS from risk-defining event by treatment arm



Supplementary Figure 2. Cumulative incidence of histologic transformation (considering other events as competing risks) (reproduced from the supplementary material of reference 8).



Supplementary Figure 3. OS according to POD24 status by treatment arm in the sensitivity analysis where the 140 patients who did not undergo randomization in the PRIMA study were randomly assigned to a pseudo-arm at inclusion (70 in the maintenance arm and 70 in the observation arm; i.e. 33 in the “early POD & observation”, 33 in the “early POD and rituximab”, 37 in “the no early POD & observation” and 37 in the “no early POD & rituximab” groups respectively)



	No. of Subjects	Event	Censored	Median Survival (95%
Early POD & Observation	167	35.9 % (60)	64.1 % (107)	NA (10.2 ; NA)
Early POD & Rituximab	105	46.7 % (49)	53.3 % (56)	7.8 (5.8 ; NA)
No early POD & Observation	406	13.1 % (53)	86.9 % (353)	NA (NA ; NA)
No early POD & Rituximab	460	12.4 % (57)	87.6 % (403)	NA (NA ; NA)

Supplementary Figure 4. OS for patients experiencing POD24 according to treatment arm considering a 4-year median follow-up duration from registration in the PRIMA trial