

Table S1. Characteristics of patients treated with CHOP only

	FcγRIIa					FcγRIIIa				
	R/R n=33 (13.3%)	R/H n=114 (45.8%)	H/H n=102 (41.0%)	total	p-value	V/V n=69 (27.7%)	V/F n=131 52.6%	F/F n=49 (19.7%)	total	p-value
Male Female	20 (61%) 13 (39%)	64 (56%) 50 (44%)	47 (46%) 55 (54%)	131 118	0.212	40 (58%) 29 (42%)	69 (53%) 62 (47%)	22 (45%) 27 (55%)	131 118	0.371
Age, median [range]	67 [61-77]	68 [61-80]	68 [61-79]		0.256	68 [61-78]	70 [61-80]	67 [61-79]		0.048
LDH > UNV	13 (39%)	65 (57%)	48 (47%)	126	0.133	31 (45%)	68 (52%)	27 (55%)	126	0.510
ECOG > 1	1 (3%)	18 (16%)	14 (14%)	33	0.155	6 (9%)	15 (11%)	12 (24%)	33	0.038
Stage III/IV	14 (42%)	65 (57%)	51 (50%)	130	0.288	38 (55%)	65 (50%)	27 (55%)	130	0.709
Extranodal sites >1	3 (9%)	21 (18%)	12 (12%)	36	0.290	9 (13%)	19 (15%)	8 (16%)	36	0.862
IPI 1 2 3 4, 5	14 (42%) 10 (30%) 6 (18%) 3 (9%)	23 (20%) 36 (32%) 38 (33%) 17 (15%)	35 (34%) 26 (25%) 26 (25%) 15 (15%)	72 72 70 35	0.125	21 (30%) 23 (33%) 15 (22%) 10 (14%)	42 (32%) 33 (25%) 39 (30%) 17 (13%)	9 (18%) 16 (33%) 16 (33%) 8 (16%)	72 72 70 35	0.446
Bulky disease	9 (27%)	61 (54%)	35 (34%)	105	0.003	25 (36%)	54 (41%)	26 (53%)	105	0.181
B symptoms	8 (24%)	41 (36%)	39 (38%)	88	0.348	18 (26%)	47 (36%)	23 (47%)	88	0.063
BM involvement	1 (3%)	2 (2%)	7 (7%)	10	0.133	2 (3%)	6 (5%)	2 (4%)	10	0.913

Table S2. Characteristics of patients treated with R-CHOP

FcγRIIa

FcγRIIIa

	R/R n=31 (11.8%)	R/H n=121 (46.0%)	H/H n=111 (42.2%)	total	p-value	V/V n=76 (28.9%)	V/F n=140 (53.2%)	F/F n=47 (18.9%)	total	p-value
Male	16 (52%)	67 (55%)	58 (52%)	141	0.881	41 (54%)	70 (50%)	30 (64%)	141	0.261
Female	15 (48%)	54 (45%)	53 (48%)	122		35 (46%)	70 (50%)	17 (36%)	122	
Age, median (range)	67 [61-80]	69 [61-80]	68 [61-80]		0.681	69 [61-80]	68 [61-80]	67 [61-78]		0.501
LDH > UNV	15 (48%)	60 (50%)	49 (44%)	124	0.705	35 (46%)	69 (49%)	20 (43%)	124	0.706
ECOG > 1	8 (26%)	14 (12%)	12 (11%)	34	0.093	10 (13%)	22 (16%)	2 (4%)	34	0.114
Stage III/ IV	15 (48%)	63 (52%)	50 (45%)	128	0.574	35 (46%)	72 (51%)	21 (45%)	128	0.647
Extranodal sites >1	5 (16%)	23 (19%)	20 (18%)	48	0.949	16 (21%)	28 (20%)	4 (9%)	48	0.149
IPI					0.587					0.210
1	8 (26%)	40 (33%)	44 (40%)	92		27 (36%)	45 (32%)	20 (43%)	92	
2	11 (35%)	29 (24%)	23 (21%)	63		21 (28%)	32 (23%)	10 (21%)	63	
3	6 (19%)	30 (25%)	28 (25%)	64		13 (17%)	37 (26%)	14 (30%)	64	
4, 5	6 (19%)	22 (18%)	16 (14%)	44		15 (20%)	26 (19%)	3 (6%)	44	
Bulky disease	14 (45%)	42 (35%)	45 (41%)	101	0.448	27 (36%)	57 (41%)	17 (36%)	101	0.714
B symptoms	8 (26%)	45 (37%)	31 (28%)	84	0.259	20 (26%)	47 (34%)	17 (36%)	84	0.449
BM involvement	3 (10%)	8 (7%)	7 (6%)	18	0.741	5 (7%)	10 (7%)	3 (6%)	18	1.000

Table S3. Characteristics of patients of the RICOVER-60 with and without DNA

	DNA available n=512 (42%)	DNA missing n=710 (58%)	RICOVER-60 all n=1222 (100%)	p-value
Male Female	272 (53%) 240 (47%)	378 (53%) 332 (47%)	650 (53%) 572 (47%)	1.000
Age, median [range]	68 [61-80]	68 [61-80]	68 [61-80]	0.830
LDH > UNV	250 (49%)	354 (50%)	604 (49%)	0.728
ECOG > 1	67 (13%)	109 (15%)	176 (14%)	0.284
Stage III/IV	258 (50%)	361 (51%)	619 (51%)	0.908
Extranodal sites >1	84 (16%)	132 (19%)	216 (18%)	0.362
IPI 1 2 3 4, 5	164 (32%) 135 (26%) 134 (26%) 79 (15%)	208 (29%) 204 (29%) 179 (25%) 119 (17%)	372 (30%) 339 (28%) 313 (26%) 198 (16%)	0.624
Bulky disease	206 (40%)	257 (36%)	463 (38%)	0.152
B symptoms	172 (34%)	227 (32%)	399 (33%)	0.578
BM involvement	28 (5%)	45 (6%)	73 (6%)	0.544
Treatment arm: 6xChop-14 8xChop-14 6xChop-14+8xR 8xChop-14+8xR	127 (25%) 122 (24%) 124 (24%) 139 (27%)	180 (25%) 183 (26%) 182 (26%) 165 (23%)	307 (25%) 305 (25%) 306 (25%) 304 (25%)	0.469

Table S4. Frequency of genotypes in CHOP and R-CHOP

		CHOP (n=249)	R-CHOP (n=263)	all (n=512)
FcγRIIa	R/R	33 (13.3%)	31 (11.8%)	64 (12.5%)
	R/H	114 (45.8%)	121 (46.0%)	235 (45.9%)
	H/H	102 (41.0%)	111 (42.2%)	213 (41.6%)
FcγRIIIa	F/F	49 (19.7%)	47 (17.9%)	96 (18.8%)
	V/F	131 (52.6%)	140 (53.2%)	271 (52.9%)
	V/V	69 (27.7%)	76 (28.9%)	145 (28.3%)

FcγRII a R-CHOP vs. CHOP: Fishers exact test: p-value=0.863
 FcγRIIIa R-CHOP vs. CHOP: Fishers exact test: p-value=0.873

Table S5. Number of events in the various subgroups**a) Event-free survival**

		CHOP	R-CHOP
FcγRIIa	H/H	52 (50.98%)	29(26.13%
	R/H	54 (47.37%)	42 (34.71%)
	R/R	19 (57.58%)	9 (29.03%)
FcγRIIIa	F/F	22 (44..90%)	17 (36.17%)
	V/F	69 (52.67%)	42 (30.00%)
	V/V	34 (49.28%)	21 (27.63%)

b) Progression-free survival

FcγRIIa	H/H	48 (47.06%)	23 (20.72%)
	R/H	48 (42.11%)	35 (28.93%)
	R/R	16 (48.49%)	8 (25-81%)
FcγRIIIa	F/F	20 (40.82%)	15 (31.92%)
	V/F	60 (45.80%)	33 (24.57%)
	V/V	32 (46.38%)	18 (23.68%)

c) Overall survival

FcγRIIa	H/H	38 (37.26%)	21 (18.92%)
	R/H	36 (31.58%)	34 (28.10%)
	R/R	11 (33.33%)	7 (22.58%)
FcγRIIIa	F/F	18 (36.74%)	12 (25.53%)
	V/F	41 (31.30%)	31 (22.14%)
	V/V	26 (37.68%)	18 (25.00%)