

## Association between single nucleotide polymorphism-genotype and outcome of patients with chronic lymphocytic leukemia in a randomized chemotherapy trial

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**Online Supplementary Table S1.** Comparison of patients' characteristics and details of drug treatment received by CLL-4 patients genotyped and those excluded from study.

	CLL-4 patients genotyped		CLL-4 patients excluded		P value*
	N	%	N	%	
Sex					
Male	265	74.4	308	73.2	
Female	91	25.6	113	26.8	0.7
Age					
Less than 60 years	107	30.1	147	34.9	
60 to 69 years	147	41.3	142	33.7	
Over 70 years	102	28.6	132	31.4	0.09
Stage					
A	93	26.1	98	23.3	
B	156	43.8	196	46.5	
C	107	30.1	127	30.2	0.6
Died					
Yes	174	48.9	181	43	
No	182	51.1	240	57	0.1
Treatment					
Chlorambucil	171	48	216	51.3	
Fludarabine	91	25.6	103	24.5	
Fludarabine & cyclophosphamide	94	26.4	102	24.2	0.6

\*Chi-squared test for heterogeneity.

**Online Supplementary Table S2.** SNP showing significant genotypic association with lymphocyte mRNA expression levels.

SNP	Minor allele	Minor allele frequency	Gene	Expression P value*
rs1949733	A	0.29	ACOX3	0.000272
rs2631731	T	0.28	ACOX3	0.000121
rs747580	T	0.37	ACOX3	0.00000108
rs940136	G	0.34	ACOX3	0.00934
rs1012145	A	0.17	PPP2R5E	0.015
rs3783741	A	0.17	PPP2R5E	0.015

\* based on an extension of Wilcoxon's rank-sum test for trend across ordered groups.

**Online Supplementary Table S3.** SNP showing significant interaction between genotype and treatment Hazard ratios [HR] for trend test across genotypes, by treatment.

SNP	Treatment	HR	95% CI
rs3103078	Chlorambucil	1.40	1.13-1.73
	Fludarabine	0.97	0.70-1.33
	FC	1.90	1.35-2.67
rs6457160	Chlorambucil	1.37	1.09-1.71
	Fludarabine	2.02	1.44-2.84
	FC	0.96	0.66-1.40
rs215702	Chlorambucil	1.53	1.20-1.95
	Fludarabine	1.79	1.31-2.44
	FC	1.01	0.71-1.44
rs2061450	Chlorambucil	1.84	1.42-2.38
	Fludarabine	1.45	1.02-2.08
	FC	0.98	0.64-1.50

FC. fludarabine + chlorambucil.

**Online Supplementary Table S4.** SNP association with progression free-survival in the replication phase of the study.

SNP	Minor allele	HR	95% LCI	95% UCI	P value
rs438034	T	1.100	0.831	1.456	0.5
rs2228671	T	1.173	0.749	1.837	0.490
rs11158493	T	1.005	0.732	1.381	0.970
rs2255235	T	0.847	0.494	1.452	0.550
rs1949733	A	1.078	0.805	1.444	0.610
rs9883654	T	0.838	0.622	1.129	0.240
rs10504154	T	1.140	0.873	1.488	0.330
rs10990381	G	1.192	0.910	1.562	0.200
rs1342899	A	1.139	0.869	1.493	0.340
rs1168987	A	1.157	0.736	1.820	0.530