**S6 Table.** BAGS assignment, clinical variables, and outcome

	1	2	3
	Hazard ratio (95 % CI) P	Hazard ratio (95 % CI) P	Hazard ratio (95 % CI) P
Gender			
Female			1
Male			1.033 (0.643 to 1.659)
			p < 0.895
BAGS subtype			
Memory	1	1	1
Pre-BI	1.562 (0.826 to 2.951)	2.230 (1.166 to 4.264)	1.709 (0.877 to 3.331))
	p = 0.170	p = 0.015*	p = 0.115
Pre-BII	2.732 (0.776 to 9.616)	8.836 (2.507 to 31.501)	4.210 (1.150 to 15.409)
	p = 0.118	p = 0.001*	p = 0.030*
Immature	1.458 (0.662 to 3.212))	1.098 (0.426 to 2.829)	1.412 (0.562 to 3.544)
	p = 0.349	p = 0.846	p = 0.463
Naive	1.392 (0.725 to 2.671)	1.786 (0.921 to 3.464)	1.636 (0.827 to 3.237)
	p = 0.320	p = 0.086	p = 0.158
Plasma cell	1.170 (0.405 to 3.378)	1.023 (0.353 to 2.966)	1.345 (0.453 to 3.988)
	p = 0.772	p = 0.967	p = 0.594
Unclassified	0.807 (0.415 to 1.568)	1.335 (0.663 to 2.692)	1.041 (0.506 to 2.140)
	p = 0.527	p = 0.419	p = 0.913
IgVH status			
ulgVH	1		1
mlgVH	0.222 (0.137 to 0.359)		0.280 (0.166 to 0.469)
	p < 0.001*		p < 0.001*
Cytogenetic status			
No marker/13q		1	1
Tri12/11q		3.173 (1.905 to 5.284)	2.103 (1.253 to 3.527)
		p < 0.001*	p = 0.005*
Del17p		2.702 (1.159 to 6.295)	2.150 (0.907 to 5.094)
		p = 0.021*	p = 0.082
Cohort			
IIDFCI			1
Munich			3.001 (1.739 to 5.180)
			< 0.001*
Observations	164	155	154

Note: BAGS assignments for individual BAGS subtypes and clinical variables were associated to outcome (time to treatment) using multivariate Cox proportional hazards regression analysis (7.5 events per variable). The Munich and IIDFCI cohorts were used. Hazards ratios are shown in the stepwise multivariate model: 1) BAGS subtypes and IgVH status, observations N = 164. 2) BAGS subtypes and cytogenetic status, observations N = 155. 3) All variables (gender, BAGS subtypes, IgVH, cytogenetic status), observations N = 154. The Munich cohort and IIDFCI cohorts was used.