

**Supplemental Table II. Associations of HLA homozygosity and HED with the best objective response.**

	<b>OR†</b>	<b>95% CI</b>	<b><i>p</i> Value</b>	<b>1-β</b>
<b>Homozygosity of HLA allele</b>				
HLA-A	1.37	0.68–2.74	0.38	0.109
HLA-B	0.90	0.35–2.30	0.82	NA
HLA-C	1.55	0.69–3.47	0.29	0.136
HLA-DQB1	0.37	0.13–1.03	0.058	0.399
HLA-DRB1	0.54	0.19–1.60	0.27	0.111
<b>At least 1 homozygosity of HLA</b>				
HLA-I	1.61	0.90–2.91	0.11	0.314
HLA-II	0.34	0.12–0.96	0.042	0.461
<b>HED high of HLA allele</b>				
HLA-A	0.86	0.51–1.47	0.59	0.047
HLA-B	0.67	0.39–1.15	0.15	0.225
HLA-C	1.23	0.72–2.10	0.44	0.087
HLA-DQB1	1.12	0.66–1.91	0.68	0.047
HLA-DRB1	1.29	0.76–2.20	0.35	0.114

CI, confidence interval; HED, HLA evolutionary divergence; OR, odds ratio.

†Reference is SD/PD.

**Supplemental Table III. Associations of HLA homozygosity and HED with radiographic progression-free survival.**

	<b>HR</b>	<b>95% CI</b>	<b><i>p</i> Value</b>
<b>Homozygosity of HLA allele</b>			
HLA-A	0.92	0.58–1.45	0.71
HLA-B	1.01	0.57–1.79	0.97
HLA-C	1.15	0.69–1.91	0.60
HLA-DQB1	1.06	0.61–1.84	0.84
HLA-DRB1	1.00	0.71–1.40	0.99
<b>At least 1 homozygosity of HLA</b>			
HLA-I	0.98	0.67–1.43	0.92
HLA-II	1.13	0.66–1.93	0.66
<b>HED high of HLA allele</b>			
HLA-A	1.09	0.78–1.53	0.62
HLA-B	1.09	0.77–1.52	0.63
HLA-C	0.72	0.51–1.02	0.06
HLA-DQB1	1.13	0.80–1.58	0.49
HLA-DRB1	1.00	0.71–1.40	0.99

CI, confidence interval; HED, HLA evolutionary divergence; HR, hazard ratio.

**Supplemental Table IV. Associations of HLA homozygosity and HED with severe adverse events.**

	<b>OR†</b>	<b>95% CI</b>	<b><i>p</i> Value</b>
<b>Homozygosity of HLA allele</b>			
HLA-A	0.67	0.26–1.72	0.41
HLA-B	0.41	0.09–1.84	0.25
HLA-C	0.46	0.13–1.59	0.22
HLA-DQB1	0.86	0.28–2.69	0.80
HLA-DRB1	1.23	0.38–3.97	0.73
<b>At least 1 homozygosity of HLA</b>			
HLA-I	0.78	0.37–1.65	0.51
HLA-II	0.81	0.26–2.52	0.72
<b>HED high of HLA allele</b>			
HLA-A	1.48	0.77–2.87	0.24
HLA-B	1.09	0.57–2.11	0.79
HLA-C	0.93	0.48–1.79	0.82
HLA-DQB1	0.87	0.45–1.67	0.67
HLA-DRB1	0.87	0.45–1.67	0.67

CI, confidence interval; HED, HLA evolutionary divergence; OR, odds ratio.

†Reference is no severe adverse event.

**Supplemental Table V. Association of HLA supertype combination with cancer specific survival.**

	Frequency, n (%)	HR	95% CI	<i>p</i> Value
<b>Combination of HLA-A supertype (<i>n</i> = 222)</b>				
A01 or A02	127 (57.2%)	0.99	0.50–1.97	0.98
A01 or A03	149 (67.1%)	0.89	0.45–1.76	0.73
A01 or A24	171 (77.0%)	1.38	0.57–3.32	0.48
A02 or A03	159 (71.6%)	0.61	0.25–1.50	0.28
A02 or A24	185 (83.3%)	0.87	0.41–1.82	0.70
A03 or A24	193 (86.9%)	1.60	0.56–4.55	0.38
<b>Combination of HLA-B supertype (<i>n</i> = 222)</b>				
B07 or B27	143 (64.4%)	0.68	0.35–1.35	0.27
B07 or B44	189 (85.1%)	1.11	0.46–2.68	0.83
B07 or B58	129 (58.1%)	0.58	0.29–1.14	0.11
B07 or B62	188 (84.7%)	0.92	0.35–2.37	0.86
B27 or B44	115 (51.8%)	1.53	0.77–3.03	0.22
B27 or B58	25 (11.3%)	1.64	0.68–3.97	0.27
B27 or B62	117 (52.7%)	1.31	0.64–2.65	0.46
B44 or B58	103 (46.4%)	1.15	0.58–2.28	0.69
B44 or B62	166 (74.8%)	0.77	0.36–1.65	0.50
B58 or B62	103 (46.4%)	0.99	0.50–1.94	0.97

CI, confidence interval; HR, hazard ratio.

Reference is a non-carrier of each HLA supertype combination.