

**Supplemental Table S1.** Distribution of HLA alleles in patients with chronic lymphoproliferative disorders and the control group. Comparison of the most important HLA alleles at the 4-digit level between patients and the control group.

Allele	Cases n1=76	Control s n2=100	P-value	OR	95% Confidence interval	
	number	number	Chi-square or Fisher's test		Low	Upper
HLA-A*01:01	9	14	0.674	1.182	0.541	2.585
HLA-A*02:01	21	24	0.584	0.869	0.525	1.438
HLA-A*02:02	0	2	0.506	0.980	0.953	1.008
HLA-A*02:05	1	0	0.432	1.013	0.987	1.040
HLA-A*02:17	1	0	0.432	1.013	0.987	1.040
HLA-A*03:01	4	12	0.185	2.280	0.765	6.792
HLA-A*03:02	1	0	0.432	1.013	0.987	1.040
HLA-A*11:01	9	2	0.010	0.169	0.038	0.759
HLA-A*23:01	1	0	0.432	1.013	0.987	1.040
HLA-A*24:02	11	6	0.059	0.415	0.160	1.071
HLA-A*24:03	1	0	0.432	1.013	0.987	1.040
HLA-A*25:01	2	4	0.700	1.520	0.286	8.082
HLA-A*26:01	4	3	0.467	0.570	0.131	2.471
HLA-A*29:01	0	1	1.000	0.990	0.971	1.010
HLA-A*29:02	0	4	0.135	0.960	0.922	.999
HLA-A*30:01	2	4	0.700	1.520	0.286	8.082
HLA-A*30:02	0	1	1.000	0.990	0.971	1.010
HLA-A*30:04	0	1	1.000	0.990	0.971	1.010
HLA-A*31:01	3	5	1.000	1.267	0.312	5.136
HLA-A*32:01	2	1	0.579	0.380	0.035	4.113
HLA-A*33:01	1	2	1.000	1.520	0.140	16.454
HLA-A*33:03	1	0	0.432	1.013	0.987	1.040
HLA-A*66:01	1	1	1.000	0.760	0.048	11.957
HLA-A*66:01	0	2	0.506	0.980	0.953	1.008

HLA-A*68:01	1	0	0.432	1.013	0.987	1.040
HLA-A*68:02	0	5	0.071	0.950	0.908	0.994
HLA-B*07:02	10	5	0.055	0.380	0.135	1.066
HLA-B*08:01	3	8	0.354	2.027	0.556	7.384
HLA-B*13:02	7	4	0.211	0.434	0.132	1.430
HLA-B*14:01	0	1	1.000	0.990	0.971	1.010
HLA-B*14:02	3	1	0.317	0.253	0.027	2.388
HLA-B*15:01	1	1	1.000	0.760	0.048	11.957
HLA-B*15:10	0	1	1.000	0.990	0.971	1.010
HLA-B*18:01	3	8	0.354	2.027	0.556	7.384
HLA-B*18:03	0	1	1.000	0.990	0.971	1.010
HLA-B*18:04	0	1	1.000	0.990	0.971	1.010
HLA-B*18:05	0	2	0.506	0.980	0.953	1.008
HLA-B*27:02	0	1	1.000	0.990	0.971	1.010
HLA-B*27:05	1	2	1.000	1.520	0.140	16.454
HLA-B*35:01	6	3	0.177	0.380	0.098	1.471
HLA-B*35:02	0	6	0.037	0.940	0.895	0.988
HLA-B*35:03	6	3	0.177	0.380	0.098	1.471
HLA-B*35:08	2	0	1.027	.990	1.066	1.027
HLA-B*37:01	0	1	1.000	0.990	0.971	1.010
HLA-B*38:01	3	1	0.315	0.250	0.027	2.356
HLA-B*39:01	4	1	0.167	0.190	0.022	1.666
HLA-B*39:06	1	0	0.432	1.013	0.987	1.040
HLA-B*40:02	1	4	0.391	3.040	0.347	26.650
HLA-B*40:06	0	1	1.000	0.990	0.971	1.010
HLA-B*41:01	1	3	0.635	2.280	0.242	21.490
HLA-B*41:02	1	2	1.000	1.520	0.140	16.454
HLA-B*44:02	0	4	0.135	0.960	0.922	.999
HLA-B*44:03	2	6	0.469	2.280	0.473	10.984
HLA-B*49:01	0	3	0.260	0.970	0.937	1.004
HLA-B*50:01	2	0	0.185	1.027	0.990	1.066

HLA-B*51:01	6	8	0.980	1.013	0.367	2.798
HLA-B*52:01	4	4	0.728	0.760	0.196	2.942
HLA-B*55:01	1	4	0.391	3.040	0.347	26.650
HLA-B*56:01	1	0	0.432	1.013	0.987	1.040
HLA-B*57:01	2	1	0.579	0.380	0.035	4.113
HLA-B*58:01	3	1	0.317	0.253	0.027	2.388
HLA-B*58:02	0	1	1.000	0.990	0.971	1.010
HLA-B*59:01	0	1	1.000	0.990	0.971	1.010
HLA-B*81:01	0	6	0.037	0.940	0.895	0.988
HLA-C*01:02	4	7	0.759	1.330	0.404	4.379
HLA-C*02:02	7	0	0.002	1.101	1.025	1.183
HLA-C*03:03	1	2	1.000	1.520	0.140	16.454
HLA-C*03:04	1	1	1.000	0.760	0.048	11.957
HLA-C*04:01	10	18	0.414	1.368	0.670	2.791
HLA-C*05:01	0	2	0.506	0.980	0.953	1.008
HLA-C*06:02	9	7	0.268	0.591	0.231	1.516
HLA-C*07:01	7	15	0.358	1.629	0.699	3.796
HLA-C*07:02	11	5	0.036	0.345	0.125	0.952
HLA-C*07:04	0	1	1.000	0.990	0.971	1.010
HLA-C*08:02	4	2	0.405	0.380	0.071	2.021
HLA-C*12:02	7	0	0.002	1.101	1.025	1.183
HLA-C*12:03	7	8	0.791	0.869	0.329	2.290
HLA-C*12:12	0	1	1.000	0.990	0.971	1.010
HLA-C*14:02	1	0	0.432	1.013	0.987	1.040
HLA-C*15:02	4	2	0.405	0.380	0.071	2.021
HLA-C*15:04	1	0	0.432	1.013	0.987	1.040
HLA-C*15:05	1	0	0.432	1.013	0.987	1.040
HLA-C*15:13	0	2	0.506	0.980	0.953	1.008
HLA-C*16:01	0	4	0.135	0.960	0.922	0.999
HLA-C*16:02	0	1	1.000	0.990	0.971	1.010
HLA-C*16:04	0	1	1.000	0.990	0.971	1.010

HLA-C*17:01	0	2	0.506	0.980	0.953	1.008
HLA-C*17:03	1	3	0.635	2.280	0.242	21.490
HLA-C*18:01	0	1	1.000	0.990	0.971	1.010
HLA-DPB1*01:01	1	9	0.045	6.840	0.886	52.833
HLA-DPB1*02:01	4	14	0.078	2.660	0.912	7.758
HLA-DPB1*02:02	0	1	1.000	0.990	0.971	1.010
HLA-DPB1*03:01	6	10	0.793	1.267	0.482	3.332
HLA-DPB1*04:01	19	31	0.404	1.240	0.762	2.018
HLA-DPB1*04:02	12	15	1.000	0.950	0.473	1.909
HLA-DPB1*05:01	0	4	0.135	0.960	0.922	0.999
HLA-DPB1*09:01	2	2	1.000	0.760	0.110	5.274
HLA-DPB1*10:01	0	3	0.260	0.970	0.937	1.004
HLA-DPB1*13:01	2	1	0.579	0.380	0.035	4.113
HLA-DPB1*14:01	0	1	1.000	0.990	0.971	1.010
HLA-DPB1*17:01	0	3	0.260	0.970	0.937	1.004
HLA-DPB1*18:01	0	1	1.000	0.990	0.971	1.010
HLA-DPB1*23:01	0	1	1.000	0.990	0.971	1.010
HLA-DPB1*104:01	0	3	0.260	0.970	0.937	1.004
HLA-DPB1*105:01	0	1	1.000	0.990	0.971	1.010
HLA-DQB1*02:01	7	12	0.555	1.303	0.539	3.151
HLA-DQB1*02:02	7	10	1.000	1.086	0.433	2.721
HLA-DQB1*03:01	18	21	0.716	0.887	0.509	1.544
HLA-DQB1*03:02	5	3	0.294	0.456	0.112	1.849
HLA-DQB1*03:03	1	0	0.432	1.013	0.987	1.040
HLA-DQB1*03:19	0	1	1.000	0.990	0.971	1.010
HLA-DQB1*04:02	2	3	1.000	1.140	0.195	6.654
HLA-DQB1*05:01	7	9	0.962	0.977	0.381	2.506
HLA-DQB1*05:02	12	14	0.740	0.887	0.435	1.805
HLA-DQB1*05:03	1	5	0.237	3.800	0.453	31.856
HLA-DQB1*05:04	0	1	1.000	0.990	0.971	1.010

HLA-DQB1*06:01	4	2	0.405	0.380	0.071	2.021
HLA-DQB1*06:02	6	7	0.822	0.887	0.311	2.531
HLA-DQB1*06:03	5	5	0.654	0.760	0.228	2.531
HLA-DQB1*06:04	1	3	2.280	0.242	21.490	2.280
HLA-DQB1*06:09	0	1	1.000	0.990	0.971	1.010
HLA-DRB1*01:01	4	7	0.759	1.330	0.404	4.379
HLA-DRB1*01:02	1	0	0.432	1.013	0.987	1.040
HLA-DRB1*03:01	7	13	0.481	1.411	0.592	3.366
HLA-DRB1*03:02	0	1	1.000	0.990	0.971	1.010
HLA-DRB1*04:01	1	3	2.280	0.242	21.490	2.280
HLA-DRB1*04:02	1	0	0.432	1.013	0.987	1.040
HLA-DRB1*04:04	3	0	0.079	1.041	0.995	1.090
HLA-DRB1*04:05	0	1	1.000	0.990	0.971	1.010
HLA-DRB1*04:07	1	0	0.432	1.013	0.987	1.040
HLA-DRB1*07:01	8	13	1.235	0.539	2.829	1.235
HLA-DRB1*08:01	1	2	1.000	1.520	0.140	16.454
HLA-DRB1*10:01	0	2	0.506	0.980	0.953	1.008
HLA-DRB1*11:01	8	2	0.021	0.190	0.042	.869
HLA-DRB1*11:02	0	2	0.506	0.980	0.953	1.008
HLA-DRB1*11:03	1	1	1.000	0.760	0.048	11.957
HLA-DRB1*11:04	7	11	0.804	1.194	0.486	2.936
HLA-DRB1*12:01	1	2	1.000	1.520	0.140	16.454
HLA-DRB1*13:01	6	5	0.534	0.633	0.201	1.998
HLA-DRB1*13:02	0	6	0.037	0.940	0.895	0.988
HLA-DRB1*13:03	2	3	1.000	1.140	0.195	6.654
HLA-DRB1*13:05	0	1	1.000	0.990	0.971	1.010
HLA-DRB1*14:01	0	1	1.000	0.990	0.971	1.010
HLA-DRB1*14:04	0	1	1.000	0.990	0.971	1.010
HLA-DRB1*14:54	1	4	0.391	3.040	0.347	26.650
HLA-DRB1*15:01	6	7	0.822	0.887	0.311	2.531
HLA-DRB1*15:02	4	3	0.467	0.570	0.131	2.471

<b>HLA-DRB1*16:01</b>	11	7	0.105	0.484	0.197	1.189
<b>HLA-DRB1*16:02</b>	2	1	0.579	0.380	0.035	4.113

\* Statistical significance was determined after calculating the  $p$ -value, OR (odds ratio), and CI (confidence interval). The chi-square test or Fisher's test was used to estimate the differences between the patient and control groups;  $n$ : number of alleles in the patient and control groups