

Supplementary Table S2. HLA-DRB1 genotype frequency in the RA patients and the controls.

	YORA (n=89)			YORA vs. Control			MORA (n=714)			MORA vs. Control			EORA (n=329)			EORA vs. Control			Control (n=1026)	YORA vs. EORA			YORA vs. MORA			MORA vs. EORA		
	P	OR	95%CI	P	OR	95%CI	P	OR	95%CI	P	OR	95%CI	P	OR	95%CI	P	OR	95%CI		P	OR	95%CI	P	OR	95%CI	P	OR	95%CI
DRB1*01:01/DRB1*04:05	0 (0.0)	0.6142	0.45 (0.03-7.72)	22 (3.1)	0.0073	2.69 (1.32-5.46)	12 (3.6)	0.0064	3.20 (1.42-7.19)	12 (1.2)	0.0784	0.14 (0.01-2.42)	0.1585	0.17 (0.01-2.86)	0.7078	0.84 (0.41-1.72)												
DRB1*04:01/DRB1*04:05	2 (2.2)	0.0179	23.56 (2.12-262.47)	17 (2.4)	2.63X10 <sup>-6</sup>	25.00 (3.32-188.29)	6 (1.8)	0.0011	19.04 (2.28-158.74)	1 (0.1)	0.6803	1.24 (0.25-6.24)	1.0000	0.94 (0.21-4.15)	0.6559	1.31 (0.51-3.36)												
DRB1*04:03/DRB1*04:05	1 (1.1)	0.5663	1.28 (0.16-10.25)	7 (1.0)	0.8049	1.12 (0.41-3.02)	1 (0.3)	0.4665	0.34 (0.04-2.73)	9 (0.9)	0.3809	3.73 (0.23-60.19)	1.0000	1.15 (0.14-9.44)	0.4472	3.25 (0.40-26.50)												
DRB1*04:05/DRB1*04:05	2 (2.2)	0.6815	1.22 (0.28-5.32)	39 (5.5)	5.82X10 <sup>-5</sup>	3.06 (1.75-5.34)	16 (4.9)	0.0047	2.71 (1.38-5.33)	19 (1.9)	0.3852	0.45 (0.10-1.99)	0.3034	0.40 (0.09-1.68)	0.7667	1.13 (0.62-2.05)												
DRB1*04:05/DRB1*04:06	4 (4.5)	0.0155	5.32 (1.60-17.63)	12 (1.7)	0.1793	1.93 (0.81-4.61)	2 (0.6)	1.0000	0.69 (0.15-3.22)	9 (0.9)	0.0204	7.69 (1.39-42.72)	0.0906	2.75 (0.87-8.73)	0.2469	2.79 (0.62-12.56)												
DRB1*04:05/DRB1*04:10	1 (1.1)	0.3408	2.90 (0.32-26.26)	14 (2.0)	0.0026	5.11 (1.68-15.59)	4 (1.2)	0.1035	3.14 (0.78-12.64)	4 (0.4)	1.0000	0.92 (0.10-8.37)	1.0000	0.57 (0.07-4.37)	0.4553	1.63 (0.53-4.98)												
DRB1*04:05/DRB1*08:02	1 (1.1)	0.5283	1.45 (0.18-11.69)	13 (1.8)	0.0719	2.36 (0.97-5.72)	3 (0.9)	0.7340	1.17 (0.31-4.44)	8 (0.8)	1.0000	1.23 (0.13-12.02)	1.0000	0.61 (0.08-4.74)	0.4162	2.02 (0.57-7.12)												
DRB1*04:05/DRB1*08:03	1 (1.1)	1.0000	0.64 (0.08-4.82)	11 (1.5)	0.8498	0.88 (0.41-1.87)	6 (1.8)	1.0000	1.04 (0.41-2.64)	18 (1.8)	1.0000	0.61 (0.07-5.15)	1.0000	0.73 (0.09-5.69)	0.7938	0.84 (0.31-2.30)												
DRB1*04:05/DRB1*09:01	10 (11.2)	0.0028	3.38 (1.62-7.06)	57 (8.0)	9.14X10 <sup>-5</sup>	2.32 (1.52-3.55)	27 (8.2)	0.0014	2.39 (1.43-3.99)	37 (3.6)	0.4004	1.42 (0.66-3.05)	0.3079	1.46 (0.72-2.97)	0.9029	0.97 (0.60-1.56)												
DRB1*04:05/DRB1*10:01	1 (1.1)	0.2834	3.88 (0.40-37.65)	4 (0.6)	0.0282	13.00 (0.70-241.90)	5 (1.5)	0.0238	5.26 (1.25-22.14)	3 (0.3)	0.3809	3.73 (0.23-60.19)	0.4451	2.02 (0.22-18.25)	1.0000	1.85 (0.21-16.60)												
DRB1*04:05/DRB1*12:01	7 (7.9)	0.0004	7.21 (2.76-18.82)	12 (1.7)	0.4068	1.44 (0.65-3.23)	5 (1.5)	0.5774	1.30 (0.46-3.73)	12 (1.2)	0.0050	5.53 (1.71-17.88)	0.0027	4.99 (1.91-13.04)	1.0000	1.11 (0.39-3.17)												
DRB1*04:05/DRB1*12:02	2 (2.2)	0.0765	5.87 (1.06-32.52)	12 (1.7)	0.0086	4.37 (1.40-13.60)	3 (0.9)	0.3704	2.35 (0.52-10.56)	4 (0.4)	0.2890	2.50 (0.41-15.19)	0.6617	1.34 (0.30-6.11)	0.4127	1.86 (0.52-6.63)												
DRB1*04:05/DRB1*13:02	2 (2.2)	1.0000	0.92 (0.21-3.95)	27 (3.8)	0.1161	1.57 (0.91-2.73)	7 (2.1)	0.8377	0.87 (0.37-2.03)	25 (2.4)	1.0000	1.06 (0.22-5.18)	0.7614	0.58 (0.14-2.50)	0.1914	1.81 (0.78-4.20)												
DRB1*04:05/DRB1*14:03	1 (1.1)	0.4423	1.93 (0.23-16.23)	1 (0.1)	0.2512	0.24 (0.03-1.98)	2 (0.6)	1.0000	1.04 (0.21-5.18)	6 (0.6)	0.5134	1.86 (0.17-20.73)	0.2095	8.10 (0.50-130.69)	0.2355	0.23 (0.02-2.54)												
DRB1*04:05/DRB1*14:05	0 (0.0)	1.0000	0.54 (0.03-9.31)	5 (0.7)	0.6083	0.72 (0.24-2.11)	3 (0.9)	1.0000	0.93 (0.26-3.42)	10 (1.0)	1.0000	0.52 (0.03-10.18)	1.0000	0.72 (0.04-13.14)	0.7125	0.77 (0.18-3.23)												
DRB1*04:05/DRB1*14:06	2 (2.2)	0.0765	5.87 (1.06-32.52)	6 (0.8)	0.3338	2.17 (0.61-7.70)	5 (1.5)	0.0430	3.94 (1.05-14.77)	4 (0.4)	0.6440	1.49 (0.28-7.81)	0.2192	2.71 (0.54-13.65)	0.3372	0.55 (0.17-1.81)												
DRB1*04:05/DRB1*14:54	0 (0.0)	1.0000	0.60 (0.03-10.37)	19 (2.7)	0.0057	3.09 (1.39-6.87)	8 (2.4)	0.0418	2.82 (1.08-7.36)	9 (0.9)	0.2116	0.21 (0.01-3.70)	0.2541	0.20 (0.01-3.33)	1.0000	1.10 (0.48-2.53)												
DRB1*04:05/DRB1*15:01	10 (11.2)	1.09X10 <sup>-6</sup>	11.68 (4.81-28.34)	25 (3.5)	0.0009	3.35 (1.64-6.85)	12 (3.6)	0.0049	3.49 (1.53-7.99)	11 (1.1)	0.0124	3.34 (1.39-8.02)	0.0030	3.49 (1.62-7.53)	1.0000	0.96 (0.48-1.93)												
DRB1*04:05/DRB1*15:02	8 (9.0)	0.0170	2.80 (1.26-6.23)	42 (5.9)	0.0173	1.77 (1.12-2.80)	16 (4.9)	0.2441	1.45 (0.79-2.65)	35 (3.4)	0.1948	1.93 (0.80-4.67)	0.2458	1.58 (0.72-3.48)	0.5630	1.22 (0.68-2.21)												
DRB1*01/DRB1*04	1 (1.1)	0.7147	0.47 (0.06-3.55)	33 (4.6)	0.0094	2.02 (1.19-3.45)	15 (4.6)	0.0555	1.99 (1.03-3.85)	24 (2.3)	0.2114	0.24 (0.03-1.83)	0.1632	0.23 (0.03-1.74)	1.0000	1.01 (0.54-1.89)												
DRB1*04/DRB1*04	12 (13.5)	0.0089	2.65 (1.36-5.15)	99 (13.9)	3.97X10 <sup>-9</sup>	2.74 (1.95-3.85)	34 (10.3)	0.0050	1.96 (1.26-3.06)	57 (5.6)	0.4447	1.35 (0.67-2.73)	1.0000	0.97 (0.51-1.84)	0.1337	1.40 (0.92-2.11)												
DRB1*04/DRB1*12	9 (10.1)	0.0014	4.16 (1.89-9.15)	28 (3.9)	0.1630	1.51 (0.88-2.59)	12 (3.6)	0.3450	1.40 (0.70-2.80)	27 (2.6)	0.0244	2.97 (1.21-7.30)	0.0151	2.76 (1.26-6.05)	1.0000	1.08 (0.54-2.15)												
DRB1*04/DRB1*15	18 (20.2)	0.0002	3.12 (1.77-5.51)	85 (11.9)	0.0025	1.67 (1.20-2.30)	38 (11.6)	0.0301	1.61 (1.07-2.43)	77 (7.5)	0.0520	1.94 (1.05-3.60)	0.0417	1.88 (1.07-3.30)	0.9180	1.03 (0.69-1.55)												
SE/not SE	59 (66.3)	3.35X10 <sup>-10</sup>	4.70 (2.81-7.86)	392 (54.9)	6.25X10 <sup>-29</sup>	3.31 (2.67-4.11)	177 (53.8)	2.65X10 <sup>-14</sup>	2.88 (2.18-3.79)	364 (35.5)	0.0845	1.63 (0.94-2.85)	0.2061	1.42 (0.84-2.40)	0.3606	1.15 (0.86-1.55)												
SE/SE	9 (10.1)	0.0007	4.92 (2.15-11.29)	124 (17.4)	9.95X10 <sup>-30</sup>	7.20 (5.02-10.31)	49 (14.9)	2.18X10 <sup>-13</sup>	5.47 (3.52-8.50)	53 (5.2)	1.0000	0.90 (0.38-2.11)	0.4334	0.68 (0.30-1.54)	0.2199	1.32 (0.88-1.98)												

Genotype frequencies are shown in parenthesis (%). Association was tested with the control by Fisher's exact test using 2X2 contingency tables. RA: rheumatoid arthritis, YORA: younger age onset RA, MORA: moderate age onset RA, EORA: elder age onset RA, OR: odds ratio, CI: confidence interval.