

Logistic regression and stratified analyses for rs3789327

Logistic regression of the SNP

Rs3789327	OR (95% CI)	P
CC vs. Carrier of T	1.13 (0.89-1.44)	0.30

SNP adjusted by sex, HLA and clinical form

Rs3789327	OR (95% CI)	P
CC vs. Carrier of T	1.06 (0.77-1.47)	0.71
Sex male	1.52 (1.13-2.03)	0.005
Sex female	4.13 (1.06-16.11)	0.041
HLA-DRB1*1501	3.10 (2.23-4.31)	<0.001
Clinical form	--	--

Analysis stratified by sex

ARNTL rs3789327	FemaleMS		FemaleControls		p
	N	%	N	%	
TT	165	26.4	87	24.0	0.07*
TC	324	51.9	175	48.3	
CC	135	21.6	100	27.6	
CC vs Carrier of T	489	78.4	262	72.4	0.04 (OR=1.38 [1.02-1.86])*
	Male MS		MaleControls		0.92
TT	78	25.2	51	22.1	
TC	157	50.6	130	56.3	
CC	75	24.2	50	21.6	
CC vs Carrier of T	235	75.8	181	78.4	0.53

*Statistical comparisons do not stand Bonferroni correction (p*2)

Analysis stratified by clinical form

ARNTLrs3789327	RR		SP		PP	
	N	%	N	%	N	%
TT	111	25.4	23	27.1	3	16.7
CT	226	51.7	43	50.6	7	38.9
CC	100	22.9	19	22.4	8	44.4

RR vs SP p=0.79 RR vs PP p=0.07* SP vs PP p=0.08*

RR: Relapsing remitting
SP: secondary progressive
PP: primary progressive

*Statistical comparisons do not pass Bonferroni correction (p*2). The size of the PP group is too small to draw solid conclusions

Analysis stratified by HLA DRB*15:01 status

ARNTL rs3789327	MS		Controls		
Not HLA-DRB1*15:01	N	%	N	%	P
TT	152	24.8	100	24.6	0.42
CT	329	53.6	204	50.3	
CC	133	21.6	102	25.1	
HLA-DRB1*15:01 / X					
TT	82	28.3	14	25.4	0.79
CT	139	47.9	31	56.4	
CC	69	23.8	10	18.2	
HLA-DRB1*15:01 homozygote					
TT	7	24.1	0	0	0.61
CT	12	41.4	2	66.7	
CC	10	34.5	1	33.3	

*Statistical comparison does not pass Bonferroni correction ($p \times 2$). The control group is small and does not allow drawing solid conclusions.

Logistic regression and stratified analysis for rs6811520

Logistic regression of the SNP

Rs6811520	OR (95% CI)	P
Cc vs. Carrier of T	0.97 (0.72-1.3)	0.82

SNP adjusted by sex, HLA and clinical form

Rs6811520	OR (95% CI)	P
CC vis. Carrier of T	1.09 (0.74-1.63)	0.645
Sex male	1.56 (1.17-2.08)	0.002
Sex female	4.03 (1.03-15.75)	0.045
HLA-DRB1*1501	3.31 (2.40-4.58)	<0.001
Clinical form	--	--

Analysis stratified by sex

<i>CLOCK</i> rs6811520	FemaleMS		FemaleControls		p
	N	%	N	%	
TT	265	41.5	154	42.1	0.83
CT	292	45.8	167	45.6	
CC	81	12.7	45	12.3	
	Male MS		MaleControls		0.37
TT	127	41.1	90	37.3	
CT	137	44.3	112	46.5	
CC	45	14.6	39	16.2	

Analysis stratified by clinical form

<i>CLOCK</i> rs6811520	RR		SP		PP	
	N	%	N	%	N	%
TT	179	41.7	28	34.6	10	55.5
CT	199	46.4	42	51.9	2	11.2
CC	51	11.9	11	13.6	6	33.3

RR vs SP p=0.27; RR vs PP p=0.64; SP vs PP p=0.95

RR: Relapsing remitting

SP: secondary progressive

PP: primary progressive

Analysis stratified by HLA DRB*15:01 status

<i>CLOCK</i> rs6811520	MS		Controls		
Not HLA-DRB1*15:01	N	%	N	%	<i>p</i>
TT	244	39.7	159	37.9	0.26
CT	292	47.5	193	46.1	
CC	79	12.8	67	16.0	
HLA-DRB1*15:01 / X					
TT	132	44.9	31	55.4	0.04*
CT	124	42.2	23	41.1	
CC	38	12.9	2	3.5	
HLA-DRB1*15:01 homozygote					
TT	12	38.7	2	66.7	0.23
CT	9	29.0	1	33.3	
CC	10	32.3	0	0	

*Statistical comparison does not pass Bonferroni correction ($p \times 2$). The control group is small and does not allow drawing solid conclusions.