**EBNA-1 titer gradient in multiple sclerosis families indicates a genetic contribution.**

***Supplementary data***

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**Table e- 1. SNPs included in the study.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Chr** | **Gene** | **SNP** | **Risk Allele for MS** | **OR from original study** | **Ref** | **HWE** |
| 6 | *HLA-DRB1\*1501* | rs9271366 | G | 3.1 | 1 | NS |
| 6 | *HLA-A\*02* | rs6457110 | T | 1.47 | 2 | NS |

Chr, chromosome; SNP, single nucleotide polymorphism; OR, odds ratio; Ref, reference; HWE, Hardy-Weinberg equilibrium.

**Table e- 2:** Pooled homozygous SNP carriers with heterozygous SNP carriers as indicated in the table. This was done in all study groups (MS, sibs and spouses) in order to improve power of calculations in logistic regression analysis.

ORs of tagging SNPs (HLA-DBR1\*1501 and HLA-A\*02) were calculated in relation to high EBNA-1 IgG in healthy controls using a univariate logistic regression analysis adjusted for gender, age, and household. We did this for the both cohorts together (ORall) and separately (OR(gems) and OR(erf)).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SNPs** |  | **ORall** | **OR(gems)** | **OR(erf)** |
| Rs9271366 *(HLA-DRB1\*1501)* | AA | AG+ GG1 | 1.2 [0.5-2.8] p=0.6 | 1.6 [0.6-4.4] p=0.3 | 0.7 [0.2-3.1] p=0.7 |
| Rs6457110 *(HLA-A\*02)* | TT | AA+AT | 0.8 [0.4-1.7] p=0.6 | 0.9 [0.4-2.3] p=0.9 | 0.7 [0.2-2.5] p=0.6 |
|  |  |  |  |  |

1 The risk allele has been underlined.

References:

1. de Bakker PI, McVean G, Sabeti PC, et al. A high-resolution HLA and SNP haplotype map for disease association studies in the extended human MHC. *Nat Genet*. 2006; 38: 1166-72.

2. Jafari N, Broer L, Hoppenbrouwers IA, van Duijn CM and Hintzen RQ. Infectious mononucleosis-linked HLA class I single nucleotide polymorphism is associated with multiple sclerosis. *Mult Scler*. 2010; 16: 1303-7.