

# The association between HLA DQ genetic polymorphism and type 1 diabetes

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Susceptibility to the type 1 diabetes is genetically controlled and there is an increased risk associated with the presence of some specific alleles of the human leukocyte antigens class II loci (DQA1 and DQB1 genes). The purpose of this study is to evaluate the association between type 1 diabetes and HLA DQ alleles using case-parents trios in the admixed population of Uruguay composed by a mixture of Caucasian, Amerindian and Negroid populations. DQA1 and DQB1 genotyping was performed by polymerase chain reaction followed by oligospecific probes hybridization in 51 case-parents trios. The transmission disequilibrium test was used for detecting differential transmission in the HLA DQ loci. DQB1\*0302 was the only allele for which preferential transmission is suggested (probability of transmission=67.56%; exact p-value TDT=0.047 uncorrected for multiple comparisons). DQA1\*0301 allele showed a trend for preferential transmission without achieving statistical significance. This result woul