

HLA-DP antigens present peptides to CD4⁺ T cells and play an important role in parasitic infections and autoimmune diseases, yet their influence on HIV-1 susceptibility has not been well studied. Here, we report several HLA-DP genotypes associated with HIV-1 susceptibility in Kenyan sex workers. Among these, one common genotype stands out. DPA1*010301 (frequency=60.4%) was associated with HIV-resistance (P=0.033, odds ratio=1.585, 95% confidence interval=1.036-2.425) and slower seroconversion (P=0.001, log rank=0.595, 95% confidence interval=0.433-0.817). The discovery of common HLA-DP antigens contributing to HIV-1 immunity may help overcome difficulties encountered with highly polymorphic HLA antigens.