

CD209 Promoter Single Nucleotide Polymorphism -336A/G and the Risk of Susceptibility to Tuberculosis Disease in the Moroccan Population

Khalid Sadki^a, Hoda Lamsyah^{a,d}, Blanca Rueda^c, Ouafae Lahlou^b, Rajae ElAouad^e and Javier Martin^c

^a*National Institute of Hygiene, Human Genomic Laboratory, Rabat, Morocco*

^b*National Institute of Hygiene, National Reference Laboratory of Tuberculosis, Rabat, Morocco*

^c*Instituto de Parasitología y Biomedicina, Granada, Spain*

^d*Department of Biology, Faculty of Science, University Mohammed V, Rabat Agdal, Morocco*

^e*National Institute of Hygiene, Department of Immunology and Virology, Rabat, Morocco.*

KEYWORDS CD209. Genetic Variation. Single Nucleotide Polymorphism. Tuberculosis

ABSTRACT Tuberculosis (TB) remains a major cause of morbidity and mortality worldwide. *Mycobacterium tuberculosis* is the causal agent of this infection and its major receptor is CD209 which is expressed on human Dendritic Cells (DC). This interaction could influence bacterial persistence and immunity response. The aim of this study was to evaluate the functional polymorphism -336G/A SNP in TB susceptibility in the Moroccan population. We performed a case-control study within a cohort that included 122 pulmonary TB patients and 151 healthy controls. All subjects were genotyped by TaqMan SNP genotyping assays. No significant difference was observed in allele or genotype frequencies of -336G/A CD209 between TB patients and healthy controls. Further studies are needed to confirm our finding including a large sample size.