

POLYMORPHISMS IN MBL-2 GENE AND SUSCEPTIBILITY TO INFECTION BY *WUCHERERIA BANCROFTI* IN OLINDA-PE, BRAZIL

Guimarães, R. L.¹, Brandão, L.A.C.¹, P.R.E. Souza, P.R.E.¹, Simonetti, A.C.¹,
Silva, S.S.^{1,4}, Alves, L.C.^{1,4}, Brayner, F.A.^{1,4}, Albuquerque, J.V.L.⁵, Crovella, S.^{1,2},
Lima-Filho, J.L.^{1,3}

¹Laboratório de Imunopatologia Keizo Asami-LIKA-UFPE; ²Universidade de Triste, Itália; ³Departamento de Bioquímica-UFPE, ⁴Departamento de Biologia Celular e Ultraestrutura-CPqAM-FIOCRUZ. ⁵Secretaria de Saúde de Olinda.

Lymphatic filariasis (LF), a debilitating disease caused by *Wuchereria bancrofti* (*Wb*) and *Brugia malayi*, affects nearly 120 million people globally. *Wuchereria* is responsible for >90% of the LF cases. The mean *Wb* microfilaraemia prevalence rate has shown a steady increase in the last 10 years in the city Recife (northeastern Brazil). Both social and genetic factors are involved in susceptibility to *Wb* infections. Human mannose-binding lectin, encoded by the MBL2 gene, is a key component of innate immunity response. MBL2 gene polymorphisms are associated with an increased risk of various infections. In this study we investigated the association of single nucleotide polymorphism in the exon 1 of MBL2 gene and the susceptibility to *Wb* infection. The study population included 17 *Wb* positive Brazilian patients and 165 healthy individuals used as control group. The genotyping were carried out using Rotor Gene-3000 Real Time-PCR (Corbett Research), through melting temperature curve and the obtained frequencies were analyzed by Fisher Exact Test. The frequencies of MBL2 polymorphisms didn't show difference among infected and control group (p-value>0,05). Thus, the MBL2 exon 1 polymorphisms don't play key role in protecting human against *Wb* infection.