

Short Communication

***FYB* polymorphisms in Brazilian patients with type I diabetes mellitus and autoimmune polyglandular syndrome type III**

**C.J.C. Addobbati^{1,2}, J. de Azevêdo Silva², N.A.C. Tavares², J. Araújo³,
R.L. Guimarães^{1,2}, L. Brandão^{1,4}, S. Crovella^{1,2} and P. Sandrin-Garcia^{1,2}**

¹Departamento de Genética, Universidade Federal de Pernambuco,
Recife, PE, Brasil

²Laboratório de Imunopatologia Keizo Asami,
Universidade Federal de Pernambuco, Recife, PE, Brasil

³Serviço de Endocrinologia Pediátrica, Hospital das Clínicas,
Universidade Federal de Pernambuco, Recife, PE, Brasil

⁴Departamento de Patologia, Universidade Federal de Pernambuco,
Recife, PE, Brasil

Corresponding author: C.J.C. Addobbati
E-mail: catarinaaddobbati@hotmail.com

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ABSTRACT. The aim of this study was to perform an association study between seven Fyn-binding protein gene (*FYB*)-tag single nucleotide polymorphisms (SNPs) and type I diabetes mellitus (T1DM), as well as with disease age of onset. We also assessed the role of *FYB* SNPs in the insurgence of autoimmune polyglandular syndrome type III (APSIII), characterized by the simultaneous presence of autoimmune thyroid disease and celiac disease, in patients with T1DM from a Northeastern Brazilian population. One hundred and seventy-seven patients with T1DM and 190 healthy individuals were genotyped for seven tag SNPs, covering most of the *FYB* locus, using real-time polymerase chain reaction amplification. There was no significant difference in the distribution of

allele and genotype frequencies among patients and healthy individuals. Moreover, none of the tag SNPs were associated either to T1DM age of onset or to the insurgence of APSIII. However, since the FYB protein is a key component in T cell response, its gene variants might play a role in protein function, which might be testable in a population with different genetic backgrounds or by using functional assays.

Key words: T1DM; Autoimmune polyglandular syndrome type III; Fyn-binding protein; Polymorphisms