



## **Single Nucleotide Gene Polymorphism of Interleukin-12 Gene at Position -1188 in Diabetes type -1 Disease**

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**Abstract:** The association between a single nucleotide polymorphism of interleukin-12 gene at position -1188 and Diabetes Type-1 disease (T1D) was determined in thirty-nine Iraqi patients (12 males and 27 females) as well as 21 controls (7 males and 14 females). Among T1D patients, frequencies of AA genotype (48.71 vs. 47.61 %; RR = 2.1) and A allele (65.38 vs. 54.76 %; RR = 23.5) were significantly increased in patients compared to controls (P = 1.000 and 0.325, respectively). In addition, AC genotype were significantly increased in patients compared to controls (33.33 vs. 14.28 %; P = 0.137; RR = 22.2) In contrast, CC genotype (17.94 vs. 38.09%; P = 0.120; PF = 0.36) frequencies were significantly decreased in patients compared to controls. In addition, C allele (34.62 vs. 45.24 %; P = 0.325; PF = 0.64) were significantly decreased in patients. In conclusion, SNPs of *IL12* might have a role in etiopathogenesis of T1D.

**Keywords:** Polymorphism IL-12, Diabetes.