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.