

## **No association of BgII dimorphism of human renin gene in hypertensive subjects in Malaysia.**

### **Abstract**

The presence of a dimorphic BgII site in the first intron of the Renin (REN) gene is an increased risk in essential hypertension. Several studies have found the association between BgII dimorphism and essential hypertension with conflicting results in various populations, which might be due to ethnic and geographical variations. The objective of this study is to determine the relationship between the BgII dimorphism of REN gene and Essential Hypertension (EHT) with or without Type 2 Diabetes Mellitus (T2DM) in Malaysian subjects. The study includes 70 EHT, 60 EHT with T2DM and 70 unrelated healthy subjects from the three ethnic groups of Malaysian Subjects. The genotype of BgII dimorphism was done by PCR-RFLP method using BgII restriction enzyme. The frequency of the BgII (+) allele was 37.86% in EHT, 40.83% in EHT with T2DM subjects and 35.71% in control subjects. The results of this study indicate that the BgII (+) allele of REN gene is not associated with essential hypertension with or without T2DM in Malaysian Subjects.

**Keyword:** Essential hypertension; Type 2 diabetes mellitus; Renin; BgII dimorphism; PCR-RFLP.