

Article

## Analysis of *Gln223Agr* Polymorphism of Leptin Receptor Gene in Type II Diabetic Mellitus Subjects among Malaysians

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**Abstract:** Leptin is known as the adipose peptide hormone. It plays an important role in the regulation of body fat and inhibits food intake by its action. Moreover, it is believed that leptin level deductions might be the cause of obesity and may play an important role in the development of Type 2 Diabetes Mellitus (T2DM), as well as in cardiovascular diseases (CVD). The Leptin Receptor (LEPR) gene and its polymorphisms have not been extensively studied in relation to the T2DM and its complications in various populations. In this study, we have determined the association of *Gln223Agr* loci of LEPR gene in three ethnic groups of Malaysia, namely: Malays, Chinese and Indians. A total of 284 T2DM subjects and 281 healthy individuals were recruited based on International Diabetes Federation (IDF) criteria. Genomic DNA was extracted from the buccal