# Vitamin D receptor initiation codon polymorphism influences genetic susceptibility to type 1 diabetes mellitus in the Japanese population


## ABSTRACT

Our research indicates that the vitamin D receptor initiation codon polymorphism is a factor in the genetic susceptibility of Japanese T1DM. This polypheny is also associated with GAD65-Ab-positive T1.


## INTRODUCTION

Vitamin D is an important factor for bone health. However, the association between obesity and increased risk for type 1 diabetes mellitus has not been clearly established.

In this study, we aimed to study the association between codon position and the risk of type 1 diabetes in the Japanese population.

Methods: We conducted a population-based case-control study in Japan from 1999 to 2001. The population included 1686 Japanese men and women, aged 19–65 years, and had no history of diabetes. We analyzed data from the Japanese National Health and Nutrition Examination Survey (NHANES).

Results: The association between codon position and the risk of type 1 diabetes was significant (adjusted odds ratio 1.57, 95% confidence interval 1.25–1.82) for A multifactorial disease known as T1DM, with a strong genetic component, MHC on the short arm of chromosome 6 has been used to identify T2DM susceptibility regions. Other approaches include case-control studies of candidate genes, combined linkage and association-based studies using T4s, and systematic total genome searches. T1DM prevalence in Southern India is similar to that in Asian children in the UK and Caucasian children of European extraction. However, there are also differences in immunogenetic predisposition across countries, and disease incidence appears to be influenced by these differences. VDR gene polymorphisms have an impact on susceptibility to osteoporosis, primary hyperparathyroidisia, and autoimmune diseases such as Graves' disease, Hashimoto's thyroiditis (MST), and multiple sclerosis. They also differ in their alleles from other individuals with different genetic variations of Vdr. The locus has six known Polymorphics in the VD gene: FokI restriction enzyme, BsmIL, Tru9I

## CONCLUSION

Remarkable conclusions The data suggests an association with T1DM in Japanese people, suggesting that the VDR gene may be responsible for its role in immune responses.