

# Impact of cetsp (Rs708272) gene polymorphisms on type 2 diabetes mellitus and the risk of coronary artery disease in northern indian population

Wahid Ali, Mohd Wamique

HPLC Lab, Department of Pathology, King George's Medical University, Lucknow, India

**Correspondence:** Wahid Ali, HPLC Lab, Department of Pathology, King George's Medical University, Lucknow 226003, India, Email wamique007@gmail.com

**Received:** November 10, 2017 | **Published:** November 14, 2017

Copyright© 2017 Ali et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

The cholesteryl esters in the VLDL/LDL pool are subsequently delivered to the liver via the LDL receptor pathway. Human CETP gene is located on chromosome 6q21 and consists of 16 exons and 15 introns, with approximately 25 kb. Genetic variations in the CETP gene have been found such as rs708272. A case-control study was performed by comparing the frequencies of the CETP (rs708272) genotypes. A total of 300 blood samples of diabetes mellitus II cases and 300 healthy controls were collected from Department of Medicine, King George's Medical University, Lucknow. Data was represented in form of means  $\pm$  SD. All of this statistical analysis was performed

by using SPSS (Statistical Package for the Social Sciences) version 21 software and graph pad prism 7 soft. HDL-C was found to be higher in homozygous B2B2 as compared to B1B1 and B1B2. LDL-C was also found to be lower in B2B2 as compared to B1B1. B2 carriers may be a cardioprotective in comparison to B1. DNA analysis showed that 25.5% of all our patients were homozygous carriers of the B1 allele (B1B1 genotype), whereas 61.3% were heterozygous carriers of the B1 and B2 alleles (B1B2 genotype) and 21.6% of all our patients were homozygous carriers of the B2 allele (B2B2 genotype). Genotype and allele frequencies in both the groups were not different.