

Abstract

An investigation on the genetic factor that is believed to influence interethnic differences in drug response is carried out. The focus is on the statin pathway looking at Single Nucleotide Polymorphisms (SNPs). A combination of strong evidence from literature review and data mining, the investigation comprises of four perspectives namely polymorphism of the statin pathway through median SNP density values, population differentiated SNPs through fixation index values (F_{ST}), potentially functionality of SNPs and SNP associated with expressions. One candidate gene *SLCO1B3*, an organic anion transporter that is greatly involved in the statin related drug response pathways (DRP), population differentiated structural SNP, *rs3764006* and SNP *rs60140950* which is associated with expression are highlighted in our investigations.