Identification of Novel Phytotherapeutic Agents for Understanding Hypertrophic Cardiomyopathy via Genetic Mapping and Advanced Computational Analysis.

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Abstract

Hypertrophic cardiomyopathy (HCM) is a classic example of a monogenic cardiovascular disorder that has been less comprehensively studied at the molecular, genetic, and computational levels. This study aim s to examine and understand the genetic mapping of HCM polymorphic targets using a computational approach to identify new phytochemicals that may have therapeutic properties. The study results show the range of mutations associated with cardiomyopathies by identifying new associations between genes and phenotypes in this disease category. Additionally, our findings suggest that a number of genes associated with channelopathies may serve as genetic modifiers, altering the clinical features and severity of cardiomyopathic phenotypes while also impacting the diverse manifestation of the cardiomyopathic phenotype.

Keywords: Genetic Mapping; Hypertrophic Cardiomyopathy; Polymorphic Target; Phytotherapeutics