

“The Association between Family Risk of Stroke and Heart Attack with
Prevalent Risk Factors and Coexisting Diseases”

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Abstract

The heritability of stroke and myocardial infarction (MI) is partially mediated by the individual heritability of the risk factors that contribute to cerebrovascular and cardiovascular disease. We examined this relationship in the Reasons for Geographic and Racial Differences in Stroke (REGARDS) cohort using the stratified log-rank family score (SLFS), a novel index of the contribution of family history. Our results indicate that family history of stroke and MI are strongly associated with the majority of the risk factors. Although these risk factors are associated with the development of both diseases, most families exhibited relatively specific manifestation as only one disorder. Implications of these findings for future family and genetic studies of stroke and myocardial infarction will be discussed.