Genetic variation in soluble epoxide hydrolase (EPHX2) is associated with an increased risk of ischemic stroke in white Europeans.

BACKGROUND AND PURPOSE: Genetic variation in the EPHX2 gene region has been reported to influence susceptibility to ischemic stroke in blacks. We assessed the role of this gene region in white Europeans and performed analyses with regard to stroke subtypes. METHODS: Twenty-six single nucleotide polymorphisms in the EPHX2 gene region were genotyped in 601 patients with ischemic stroke and 736 matched controls. Cases were subtyped according to the Trial of Org 10172 in Acute Stroke Treatment (TOAST) classification system. Analyses were done on single markers and haplotypes using a sliding-window approach. RESULTS: Three single nucleotide polymorphisms showed associations with an increased risk for ischemic stroke (allelic models; all P