

# Genotype-guided antiplatelet therapy feasible, effective

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(HealthDay)—Using CYP2C19 genotype-guided dual antiplatelet

therapy (DAPT) selection is feasible in a real-world setting, although frequency of testing may be difficult to maintain, according to a study published online April 3 in *Circulation: Genomic and Precision Medicine*.

Craig R. Lee, Pharm.D., Ph.D., from the University of North Carolina at Chapel Hill, and colleagues assessed the feasibility, sustainability, and clinical impact of using CYP2C19 genotype-guided DAPT selection among 1,193 patients who underwent [percutaneous coronary intervention](#).

The researchers found that a CYP2C19 genotype was obtained in 72.8 percent of patients. Among loss-of-function (LOF) allele carriers, alternative DAPT was prescribed in 70.7 percent of [patients](#). In LOF carriers prescribed clopidogrel rather than alternative DAPT, the risk of major adverse cardiovascular or cerebrovascular events was significantly higher (adjusted hazard ratio, 4.65; 95 percent confidence interval, 2.22 to 10.0; P adverse events (adjusted hazard ratio, 1.37; 95 percent confidence interval, 0.72 to 2.85; P = 0.347). Across groups, bleeding event rates were similar (P = 0.816).

"The higher risk of major adverse cardiovascular or cerebrovascular associated with clopidogrel use in CYP2C19 LOF allele carriers suggests that use of genotype-guided DAPT in practice may improve clinical outcomes," the authors write.

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