**GENOTYPE-BASED ATRIAL FIBRILLATION THERAPIES**

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The last decade has seen major advances in the understanding of molecular mechanisms of atrial fibrillation (AF). Using genome-wide association studies and targeted gene sequencing, common and rare genetic variants have been identified to confer the risk of AF. However, only limited data exists on the relation between the success of different AF therapies and the underlying genotype. While genotype-guided warfarin treatment is a well established concept and is undergoing clinical evaluation, few studies have shown that the outcome of pharmacologic rate control and rhythm control using antiarrhythmic drugs or catheter ablation is modified by common genetic polymorphisms. These and ongoing studies will eventually pave the road to personalized AF therapies.