



Genekor

Committed to Biotechnological Innovation

Genekor Medical S.A. | 52, Spaton Ave., 15344, Gerakas, Athens, Greece ,G.E.MI. nr: 0007856001000

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Scientific Director: George Nasioulas PhD

SAMPLE INFORMATION

Name :	Date Received :
Medical ID :	Date of Report :
Date of Birth :	Req. Physician :
Location :	Barcode :
Material :	Reason of referral: <i>CYP2C9</i>

Results

****The tested sample does not carry the *CYP2C9 3 polymorphism*, but it carries the *CYP2C9 2 polymorphism* in the heterozygous state.**

Patient genotype: *CYP2C9 *1/*2*



Electronically Signed by -

- **George Nasioulas, PhD Molecular Biologist, Scientific Director, AMKA:26025301255**

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Methodology

Total genomic DNA was extracted from the submitted sample. Analysis for the presence of the **CYP2C9*2 (rs1799853, c.430C>T, p.R144C)** and **CYP2C9*3 (rs1057910, c.1075A>C, p.I359L)** polymorphisms in the *CYP2C9* gene was performed using the **CE-IVD real-time PCR methodology, CYP2C9 mpx. RealFast™ Assay (ViennaLab Diagnostics GmbH)**.

Cytochrome P450 2C9 (**CYP2C9**) is an enzyme responsible for the hydroxylation of approximately **16% of drugs used in clinical practice**. In addition to the normal **CYP2C9*1** allele, two other alleles are commonly assessed: **CYP2C9*2 (R144C)** and **CYP2C9*3 (I359L)**, which have approximately **12% and 5% of normal enzymatic activity**, respectively.

CYP2C9 genotyping is important prior to initiating treatment with **siponimod**, in order to determine the patient's **CYP2C9 metabolizer status**.

In addition, the *CYP2C9* gene encodes one of the major enzymes involved in the metabolism of **warfarin**. A patient's **CYP2C9** and **VKORC1** genotypes may be used to help determine the optimal initial warfarin dose. Several *CYP2C9* allele variants are associated with **reduced enzymatic activity and lower warfarin clearance rates**.

Note:

Each molecular analysis has an inherent error rate of approximately **0.5–1%**. This may be attributable to rare molecular events and factors associated with sample preparation and analysis.



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