

Patient Name SAMPLEREP,WARFP N	Patient ID SA00060519	Age 47	Gender F	Order # SA00060519
Ordering Phys CLIENT,CLIENT				DOB 06/10/1966
Client Order # SA00060519	Account Information		Report Notes	
Collected 07/31/2013 00:00	C7028846-DLMP Rochester 3050 Superior Drive Rochester, MN 55901			
Printed 08/13/2013 08:53				

Test	Flag	Results	Unit	Reference Value	Perform Site*
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Warfarin Sensitivity Genotype

RECEIVED: 08/01/2013 14:41 REPORTED: 08/12/2013 17:02

Warfarin Sensitivity, Genotype

Warfarin Sens Phenotype Interp

MCR

Predicted low warfarin sensitivity. This patient has a genotype associated with low warfarin sensitivity. A dose increase may be required to maintain optimal INR. There is a small residual risk of having a rare, undetected polymorphism which may result in an intermediate to high warfarin sensitivity. This should be considered if the predicted phenotype is discordant with clinical findings. See link to the FDA for dosing information.

Cytochrome P450 2C9 (CYP2C9) metabolizes warfarin and Vitamin K Epoxide Reductase Complex, subunit 1 (VKORC1) is the target of warfarin therapy. The combined genotype can be used to predict an individual's response to warfarin therapy. Bidirectional DNA sequence analysis was used to test for the presence of variants in exons 3, 5, and 7 of the CYP2C9 gene as well as in VKORC1's distal promoter. These sequencing reactions detect the presence of CYP2C9 430C>T (*2), 818delA (*6), 1075A>C (*3), 1076T>C (*4), 1080C>G (*5), and VKORC1 -1639G>A. This sequencing assay will not detect all the known mutations that result in decreased or inactive CYP2C9 or VKORC1. Rare polymorphisms could interfere with test results. Absence of a detectable gene mutation or polymorphism does not rule out the possibility that a patient has an intermediate or high sensitivity phenotype due to the presence of an undetected polymorphism or due to drug-drug interactions. Laboratory developed test.

CYP2C9 Star Alleles/VKORC1 Genotype 1/1 G/G

MCR

Initial drug dosing recommendations for this CYP2C9/VKORC1 genotype is available in Table 5 of the drug label, located online at:
http://www.accessdata.fda.gov/drugsatfda_docs/label/2010/009218s1081bl.pdf.

Numerous drugs have been reported to alter the warfarin dosing requirements for patients. The warfarin drug labeling also contains information regarding numerous potential drug interactions and endogenous factors that may impact dosing.

For a full description of CYP2C9 alleles, see:

Performing Site Legend on Last Page of Report

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http://www.cypalleles.ki.se/cyp2c9.htm .					
CYP2C9 430C>T(*2)		C/C			MCR
CYP2C9 818delA(*6)		A/A			MCR
CYP2C9 1075A>C(*3)		A/A			MCR
CYP2C9 1076T>C(*4)		T/T			MCR
CYP2C9 1080C>G(*5)		C/C			MCR
VKORC1 -1639G>A		G/G			MCR
Warfarin Sens Genotype Interp		This patient has two copies of alleles encoding CYP2C9 protein with normal activity. The patient also has two copies of VKORC1 with normal activity. Additional descriptions of the effects of the star alleles and variations on CYP2C9 and VKORC1 function are found in the Mayo Test Catalog (http://www.mayomedicallaboratories.com/test-catalog/).			MCR
Warfarin Sensitivity Reviewed by		Jamie Bruflat			MCR
Warfarin Sensitivity Genotyping		Performed			MCR

* Performing Site:

MCR	Mayo Clinic Laboratories - Rochester Main Campus 200 First St SW Rochester, MN 55905	Lab Director: Franklin R. Cockerill, III, M.D.
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