

1-800-533-1710

PATIENT NAME WARFP, TESTING			PATIENT NUM			<b>AGE</b> 57	SEX F	ACCESSION # G9155353
ORDERING PHYSICIAN			CLIENT ORDE			<u>  0.</u>	1.	ACCOUNT # LIAISONS
COLLECTION 08/24/10 04:09 P DATE TIME  Test Client Attn: Mayo Liaisons 200 First Street SW	RECEIVED 08/24/10 04 DATE	4:09 P TIME	REPORT PRIN 08/30/10 DATE	ITED 12:08 P TIME	SPECIMEN INFORMA DATE OF BIRTH:	TION		
Rochester, MN 55905 507-284-8202								

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**Rapid DNA Extraction** 

Comment Genomic DNA was MCR

extracted.

Warfarin Sensitivity Genotyping

Sequencing Performed MCR

Warfarin Sensitivity, Genotype

Warfarin Sens MCR

Phenotype Interp

Predicted intermediate warfarin sensitivity
This patient has a genotype associated with intermediate warfarin sensitivity. A moderate dose decrease may be required to maintain optimal INR.

There is a small residual risk of having a rare, undetected polymorphism which may result in high warfarin sensitivity. This should be considered if the predicted phenotype is discordant with clinical findings. See below for a link to the FDA for dosing information.

CYP2C9 Star 1/2 G/A MCR

Alleles/VKORC1

Genotype

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/2010/009218s108lbl.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.

\* Perform Site Legend on last page of report

PATIENT NAME	ORDER STATUS	COLLECTION DATE AND TIME
WARFP, TESTING	Final	08/24/10 04:09 P



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PATIENT NAME WARFP, TESTING				PATIENT NUMBER L3MRNG9155353			SEX F	<b>ACCESSION #</b> G9155353	
ORDERING PHYSICIAN			CLIENT ORDER #					ACCOUNT # LIAISONS	
<b>COLLECT</b> 08/24/10		RECEIVED		<b>REPORT PRI</b> 08/30/10	NTED 12:08 P	SPECIMEN INFORMA	TION		
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Rochester, MN 55905									
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For a full description of CYP2C9 alleles, see:

http://www.cypalleles.ki.se/cyp2c9.htm

CYP2C9 430C>T(*2)	C/T	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/A	MCR
Warfarin Sens		MCR

## **Genotype Interp**

This patient has one copy of an allele encoding CYP2C9 protein with reduced activity and one copy with normal activity. The patient also has one copy of VKORC1 with normal activity and one with reduced expression. 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/).

**Warfarin Sensitivity** 

Dennis J. O'Kane, Ph.D.

MCR

## Reviewed by

This test was developed and its performance characteristics determined by Laboratory Medicine and Pathology, Mayo Clinic, Rochester MN. It has not been cleared or approved by the U.S. Food and Drug Administration.

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

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Rochester, MN 55905									
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**REF RANGE** 

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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.

## \* PERFORMING SITE

MCR Mayo Clinic Dpt of Lab Med & Pathology
Lab Director: Franklin R. Cockerill, III, M.D.
200 First Street SW Rochester, MN 55905

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