

# **Laboratory Service Report**

# 1-800-533-1710

Patient Name SAMPLEREPORT,2C9SO A	Patient ID SA00059751	<b>Age</b> 47	Gender F	<b>Order #</b> SA00059751	
Ordering Phys CLIENT, CLIENT			•	<b>DOB</b> 06/10/1966	
Client Order # SA00059751	Account Information			Report Notes	
<b>Collected</b> 07/08/2013 00:00	3050 Superior Drive	1 · · · · · · · · · · · · · · · · · · ·			
<b>Printed</b> 07/23/2013 09:46	Rochester, MN 55901	Rochester, MN 55901			

Test Flag Results Unit Value Site*  CYP2C9 Genotype, Saliva  RECEIVED: 07/09/2013 09:19 REPORTED: 07/17/2013 15:56  CYP2C9 Genotype  CYP2C9 Genotype  CYP2C9 Genotype Star Alleles 2/3 MCR  For a full description of CYP2C9 alleles, see:
CYP2C9 Genotype, Saliva  RECEIVED: 07/09/2013 09:19 REPORTED: 07/17/2013 15:56  CYP2C9 Genotype  CYP2C9 Genotype Star Alleles 2/3 MCR  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/C MCR  CYP2C9 1076T>C (*4) T/T  CYP2C9 1080C>G (*5) C/C MCR  CYP2C9 Genotype Interpretation MCR  This patient has two copies of alleles encoding CYP2C9
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protein with reduced activity. Additional descriptions of
the effects of the star alleles on CYP2C9 function are
found in the Mayo Test Catalog
(http://www.mayomedicallaboratories.com/test-catalog/).
CYP2C9 Reviewed by Jamie Bruflat MCR
CYP2C9 Phenotype Interpretation MCR
Predicted poor metabolizer. This patient has a genotype
associated with no enzyme activity. Caution should be
exercised when treating with drugs metabolized by CYP2C9.
Dose reductions or changes to drugs metabolized by other
pathways may be considered.
Bidirectional DNA sequence analysis was used to test for
the presence of variants in exons 3, 5, and 7 of the CYP2C9
gene. These sequencing reactions detect the presence of
CYP2C9 430C>T (*2), 818delA (*6), 1075A>C (*3), 1076T>C
(*4), and 1080C>G (*5). This sequencing assay will not
detect all the known mutations that result in decreased or
inactive CYP2C9. 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 poor metabolizer phenotype.
Patients with an extensive or intermediate metabolizer
genotype may have CYP2C9 enzyme activity inhibited by a
variety of medications or their metabolites. The following
is a partial listing of drugs known to affect CYP2C9
activity as of the date of this report.
Drugs that undergo metabolism by CYP2C9:
Angiotensin II Blockers: irbesartan, losartan
Anticoagulants: warfarin
Anti-depressants: amitriptyline (minor), fluoxetine (minor)

## \*\*\*Performing Site Legend on Last Page of Report\*\*\*

Patient Name SAMPLEREPORT.2C9SO A	Report Status Final
Page 1 of 2	>> Continued on Next Page >>



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Test Flag Results Unit Value Site\*

Non-Steroidal Anti-Inflammatory Drugs (NSAIDS): celecoxib, diclofenac, ibuprofen, naproxen, piroxicam, suprofen Oral Hypoglycemic Agents: glipizide, glimepiride, glyburide/glibenclamide, nateglinide, tolbutamide Miscellaneous Drugs: fluvastatin, phenytoin, rosuvastatin (minor), sulfamethoxazole, tamoxifen, torsemide. Co-administration may decrease the rate of elimination of other drugs metabolized by CYP2C9.

Drugs known to increase CYP2C9 activity: Phenobarbital, rifampin, secobarbital. Co-administration of these drugs increase the concentration of CYP2C9.

Drugs known to decrease CYP2C9 activity: Amiodarone, fenofibrate, fluconazole, fluvastatin, fluvoxamine, isoniazid, lovastatin, phenylbutazone, sertraline, sulfamethoxazole, sulfaphenazole, teniposide, ticlopidine, voriconazole, zafirlukast. Co-administration will decrease the rate of metabolism of CYP2C9 metabolized drugs, increasing the possibility of toxicity, particularly in heterozygous individuals. Laboratory developed test.

CYP2C9 Sequencing 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.
	200 First St SW Rochester MN 55905	· ·

Patient Name		Report Status
SAMPLEREPORT,2C9SO A	07/08/2013 00:00	Final
Page 2 of 2		** End of Report **

<sup>\*</sup> Report times for Mayo performed tests are CST/CDT