

Client: ARUP Physician Services
321 TESTING ANSR EXTRACT
Salt Lake City, NY 84108
UNITED STATES

Physician: TEST,

Patient: 21596 ARUPTEST, 2C19GENO 1

DOB

Gender: Female

Patient Identifiers: [REDACTED]

Visit Number (FIN): [REDACTED]

Collection Date: 5/23/2019 12:23

CYP2C19

ARUP test code 3001508

2C19GENO Specimen whole Blood

CYP2C19 Genotype Neg/Neg

2C19GENO Interpretation See Note

Interpretation: No impaired CYP2C19 variants were detected, consistent with functional alleles. This result predicts the normal metabolizer phenotype.

This result has been reviewed and approved by Pinar Bayrak-Toydemir, M.D., Ph.D.

H=High, L=Low, *=Abnormal, C=Critical

BACKGROUND INFORMATION: CYP2C19

CHARACTERISTICS: The cytochrome P450 (CYP) isozyme 2C19 is involved in the metabolism of many drugs. Variants in the gene that codes for CYP2C19 will influence pharmacokinetics of CYP2C19 substrates, and may predict or explain non-standard dose requirements, therapeutic failure or adverse reactions.

INHERITANCE: Autosomal co-dominant.

CAUSE: CYP2C19 gene variants affect enzyme expression or activity.

VARIANTS TESTED:

(Variants are numbered according to NM_000769 transcript).

Negative: No variants detected is predictive of the *1 functional allele.

CYP2C19*2: rs4244285, c.681G>A
CYP2C19*3: rs4986893, c.636G>A
CYP2C19*4: rs28399504, c.1A>G
CYP2C19*5: rs56337013, c.1297C>T
CYP2C19*6: rs72552267, c.395G>A
CYP2C19*7: rs72558186, c.819+2T>A
CYP2C19*8: rs41291556, c.358T>C
CYP2C19*9: rs17884712, c.431G>A
CYP2C19*10: rs6413438, c.680C>T
CYP2C19*15: rs17882687, c.55A>C
CYP2C19*17: rs12248560, c.-806C>T
CYP2C19*35: rs12769205, c.12662A>G

CLINICAL SENSITIVITY: Drug-dependent.

METHODOLOGY: Polymerase chain reaction (PCR) and fluorescence monitoring.

ANALYTICAL SENSITIVITY AND SPECIFICITY: Greater than 99 percent.

LIMITATIONS: Only the targeted CYP2C19 variants will be detected by this panel, and assumptions about phase and content are made to assign alleles. Publically available sources such as the www.pharmvar.org or www.pharmgkb.org provide guidance on phenotype predictions and allele frequencies. Diagnostic errors can occur due to rare sequence variations. Risk of therapeutic failure or adverse reactions with CYP2C19 substrates may be affected by genetic and non-genetic factors that are not detected by this test. This result does not replace the need for therapeutic drug or clinical monitoring.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement C: aruplab.com/CS

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VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
2C19GENO Specimen	19-143-108964	5/23/2019 12:23:00 PM	5/23/2019 12:28:12 PM	5/23/2019 2:38:00 PM
CYP2C19 Genotype	19-143-108964	5/23/2019 12:23:00 PM	5/23/2019 12:28:12 PM	5/23/2019 2:38:00 PM
2C19GENO Interpretation	19-143-108964	5/23/2019 12:23:00 PM	5/23/2019 12:28:12 PM	5/23/2019 2:38:00 PM

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical