

Effective Date: November 13, 2023

TEST CHANGE

CYP2C19

3001508, 2C19GENO

Specimen Requirements:			
Patient Preparation:			
Collect:	Lavender (EDTA), Pink (K2EDTA), or Yellow (ACD Solution A of B).		
Specimen Preparation:	Transport 3 mL whole blood. (Min: 1 mL)		
Transport Temperature:	Refrigerated.		
Unacceptable Conditions:	Plasma or serum. Specimens collected in sodium heparin or lithium heparin. Frozen specimens in glass collection tubes.		
Remarks:			
Stability:	Ambient: 72 hours; Refrigerated: 1 week; Frozen: 1 month		
Methodology:	Polymerase Chain Reaction (PCR)/Fluorescence Monitoring		
Performed:	Varies		
Reported:	5-10 days		
Note:	Whole blood is the preferred specimen. Saliva samples that yield inadequate DNA quality and/or quantity will be reported as inconclusive if test performance does not meet laboratory-determined criteria for reporting.		
CPT Codes:	81225		
New York DOH Approval Status:	This test is New York DOH approved.		

Interpretive Data:

Refer to report Background Information for CYP2C19:

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

Inheritance: Autosomal codominant.

Cause: CYP2C19 gene variants affect enzyme function.

Variants Tested: See the Additional Technical Information document.

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. Publicly 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.

Effective Date: November 13, 2023

Please note the information contained in this report does not contain medication recommendations, and should not be interpreted as recommending any specific medications. Any dosage adjustments or other changes to medications should be evaluated in consultation with a medical provider.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Counseling and informed consent are recommended for genetic testing. Consent forms are available online.

Reference Interval:		
By report		

HOTLINE NOTE: There is a component change associated with this test. One or more components have been added or removed. Refer to the Hotline Test Mix for interface build information.