

Client: Example Client ABC123 123 Test Drive Salt Lake City, UT 84108 UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB

Gender: Female

Patient Identifiers: 01234567890ABCD, 012345

Visit Number (FIN): 01234567890ABCD **Collection Date:** 00/00/0000 00:00

HLA-B*57:01 for Abacavir Sensitivity

ARUP test code 2002429

HLA-B*57:01 Specimen

Whole Blood

HLA-B*57:01 Allele

Positive

Indication for testing: Considering or recently prescribed abacavir.

Interpretation: At least one copy of the HLA-B*57:01 allele was detected; therefore, this patient is at significantly increased risk for abacavir hypersensitivity. Abacavir hypersensitivity reaction may be severe or fatal and often includes fever, rash, malaise, nausea, vomiting, diarrhea and respiratory symptoms.

Recommendations: Avoidance or discontinuation of abacavir is strongly advised. Although 2 percent of HLA-B*57:01 positive individuals are tolerant to abacavir, therapy with an abacavir-containing regimen should only be considered under exceptional circumstances where benefit outweighs risk.

This result has been reviewed and approved by

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

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BACKGROUND INFORMATION: HLA-B*57:01 for Abacavir Sensitivity

CHARACTERISTICS: Abacavir sulfate is a nucleoside reverse transcriptase inhibitor (NRTI) used for the treatment of HIV. Abacavir hypersensitivity reaction is characterized by fever, rash, malaise, gastrointestinal and respiratory symptoms. Symptoms typically appear within the first six weeks of treatment, worsen with each subsequent abacavir dose, and may be severe or fatal.

INHERTANCE: Autosomal dominant.

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CAUSE: Abacavir hypersensitivity is strongly associated with the HLA-B*57:01 allele. The mechanism is related to drug-specific activation of T lymphocyte killer cells.
ALLELE TESTED: Prescense or abscence of the HLA-B*57:01 allele.
ALLELE FREQUENCY: Southwest Asian 11 percent, Other Asian 0-6.7 percent, European 6.8 percent, South American 2.6 percent, Middle Eastern 2.5 percent, Mexican 2.2 percent, African 1 percent percent.

CLINICAL SENSITIVITY: 100 percent for immunologically confirmed hypersensitivity reaction.
METHODOLOGY: Polymerase Chain Reaction and Fluorescence

Monitoring.

ANALYTICAL SENSITIVITY AND SPECIFICITY: Greater than 99 percent. LIMITATIONS: Alleles other than HLA-B*57:01 will not be evaluated. This test does not distinguish between heterozygote and homozygote carriers. Diagnostic errors can occur due to rare sequence variations. Risk of therapeutic failure or adverse reactions with abacavir 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

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.

VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
HLA-B*57:01 Specimen	23-067-117610	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
HLA-B*57:01 Allele	23-067-117610	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

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

Patient: Patient, Example ARUP Accession: 23-067-117610 Patient Identifiers: 01234567890ABCD, 012345 Visit Number (FIN): 01234567890ABCD Page 2 of 2 | Printed: 3/31/2023 11:05:17 AM

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