PREMIER GENOMICS

ABACAVIR HYPERSENSITIVITY PHARMACOGENOMICS TESTING

AMONG HIV AND AIDS TREATMENT CONSIDERATIONS, FDA RECOMMENDS HLA-B*57:01 SCREENING FOR ABACAVIR HYPERSENSITIVITY TO REDUCE INCIDENCE OF ADVERSE REACTIONS [1,2]

Abacavir is a nucleoside analog reverse transcriptase inhibitor (NRTI) used to treat HIV and AIDS, and is generally prescribed in combination with other antiretroviral drugs.[1,2]

The drug is well-tolerated and on the World Health Organization's List of Essential Medicines.[3] However, hypersensitivity reactions—which can be fatal—have been associated with abacavir therapy in approximately 5% of patients.[4,5]

Abacavir is available in various formulations under trade names Ziagen, Epzicom, Trizivir, and Triumeq.[1,2]

Symptoms of abacavir hypersensitivity may include:

- Fever
- Skin rash
- Fatigue
- Nausea, vomiting, diarrhea
- Respiratory symptoms including pharyngitis, dyspnea, cough[5,6]

OUR GENETIC TEST ALLOWS YOU TO SCREEN PATIENTS QUICKLY AND EFFECTIVELY BEFORE STARTING OR RESTARTING ABACAVIR TREATMENT

The FDA, Clinical Pharmacogenomics Implementation Consortium (CPIC), and US Health and Human Services Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents recommend all patients be screened for the HLA-B*57:01 allele before starting or restarting treatment with abacavir or abacavir-containing medications due to increased risk for abacavir hypersensitivity.[2, 7-8]

Frequency of the HLA-B*57:01 allele varies with ethnicity, with a frequency of 4% to 8% in European populations, and up to 10% in Southwest Asian populations.[9-11]

Pharmacogenomics testing has been convincingly shown to reduce the incidence of abacavir hypersensitivity reactions,[12] and is cost effective [13-14]

Pharmacogenomics testing for abacavir hypersensitivity is well-covered by insurances

CLINICAL MANAGEMENT FOR POSITIVE HLA-B*57:01 SCREEN

- Abacavir is not recommended for use in patients screening positive for the HLA-B*57:01 allele[8]
- The US Health and Human Services Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents and the International Antiviral Society list alternative treatment considerations [8, 15]
- Development of clinically suspected abacavir hypersensitivity requires immediate and permanent discontinuation of abacavir therapy in all patients, including patients negative for HLA-B*57:01[8]

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ABACAVIR HYPERSENSITIVITY TESTING PROCESS	
THE PROCESS	The DNA collection procedure is simple and requires only an in-office buccal (cheek) swab with our sample collection kit. UPS will pick up your patient samples and deliver them directly to our lab (labels and instructions are included in each kit). Dedicated account services are always available to answer questions and manage requests.
THE TURNAROUND TIME	7 to 10 days
THE REPORT	Upon completion of DNA extraction and evaluation at our advanced laboratory facility, a comprehensive report is generated and uploaded to a secure portal with dedicated physician log-in and downloading capabilities. Physician-to-physician consultation is also available with our Medical Director or our Genetic Counselor. Monograph is available upon request.

Talk to your representative or visit our web site for our full catalog of genetic testing solutions.
Personalized Genetic Medicine // Inherited Genetic Disorders // Women's Genetic Health

ABOUT PREMIER GENOMICS

Premier Genomics is committed to advancing the field of personalized genetic medicine by offering cutting-edge genetic screening services to help practitioners and their patients in pursuit of tailored treatment and optimized, personalized health care. We work together with patients and their insurance providers to help ensure that access to these important genetic tests does not cause patients financial hardship.

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CLIA-accredited, CAP-certified clinical laboratory

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