



\*Information required for testing

Letter of Medical Necessity on reverse side is **REQUIRED** for all Pharmacogenetic testing

**Patient Information**

LAST NAME*	FIRST NAME*	MI	DOB* MM/DD/YYYY	SEX	GENDER
ADDRESS	CITY	STATE	ZIP CODE	PHONE NUMBER	EMAIL ADDRESS

**Billing Information** (Please include a copy of insurance card(s) for billing purposes.)

\*  CLIENT BILL    INSURANCE    SELF PAY    MEDICARE/MEDICAID (  PRIMARY    SECONDARY )   RELATIONSHIP:  SELF    SPOUSE    DEPENDENT

INSURANCE NAME	MEMBER/POLICY ID	GROUP #
POLICY HOLDER NAME	POLICY HOLDER DOB MM/DD/YYYY	TEST INDICATION/ICD-10 CODE(S)*

**Account Information**

FACILITY/PRACTICE NAME*	PHONE NUMBER	FAX NUMBER	ORDERING PHYSICIAN NAME*
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**Specimen Information** PREFERRED SPECIMEN IS BUCCAL SWAB

BLOOD IN EDTA (5ml MIN)    BUCCAL SWAB    DNA (10 ug MIN)   COLLECTION DATE: MM/DD/YYYY   COLLECTION TIME: 00:00 AM/PM

**Background Information** (Please check all that apply)

RACE AND ETHNICITY:  WHITE    ASIAN    HISPANIC    AFRICAN AMERICAN    ASHKENAZI JEWISH    OTHER (PLEASE SPECIFY): \_\_\_\_\_

PANELS PROVIDED* (Must choose at least one)	
<input type="checkbox"/> <b>COMPREHENSIVE PANEL:</b> ABCB1, APOE, COMT, CYP1A2, CYP2B6, CYP2C19, CYP2C9, CYP2D6, CYP3A4, CYP3A5, DRD2, Factor II, Factor V, GLP1R, MTHFR, OPRM1, PNPLA5, SLCO1B1, SULT4A1, VKORC1	<input type="checkbox"/> <b>MENTAL HEALTH/ PSYCHIATRY PANEL:</b> ANKK1/DRD2, COMT, CYP1A2, CYP2B6, CYP2C19, CYP2C9, CYP2D6, CYP3A4, CYP3A5, MTHFR
<input type="checkbox"/> <b>CARDIOVASCULAR PANEL:</b> APOE, CYP2C19, CYP2C9, CYP2D6, CYP3A4, CYP3A5, Factor II, Factor V, MTHFR, SLCO1B1, VKORC1	<input type="checkbox"/> <b>PAIN MANAGEMENT PANEL:</b> COMT, CYP1A2, CYP2B6, CYP2C19, CYP2C9, CYP2D6, CYP3A4, CYP3A5, Factor II, Factor V, MTHFR, OPRM1
<input type="checkbox"/> <b>ORTHOPEDIC PANEL:</b> ABCB1, CYP2B6, CYP2C19, CYP2C9, CYP2D6, CYP3A4, CYP3A5, Factor II, Factor V, MTHFR, OPRM1, VKORC1	<input type="checkbox"/> <b>ADHD/ NEUROLOGY PANEL:</b> COMT, CYP1A2, CYP2B6, CYP2C19, CYP2C9, CYP2D6, OPRM1
<input type="checkbox"/> <b>GASTROINTESTINAL PANEL:</b> ABCB1, CYP2C19, CYP2C9, CYP2D6, CYP3A4	<input type="checkbox"/> <b>UROLOGICAL PANEL:</b> CYP2D6, CYP3A4, CYP3A5

**Clinical Utility of Tests\*:** How will pharmacogenetic results directly change treatment or management of the patient?

<input type="checkbox"/> Selection of new prescription medication(s)	<input type="checkbox"/> Discontinuation of existing medication(s)	Current Medication(s): _____	Intended Medication(s): _____
<input type="checkbox"/> Alternative dosing of existing medication(s)	<input type="checkbox"/> Adjustment of current multi-drug regimen	_____	_____
<input type="checkbox"/> Anti-coagulant, anti-thrombotic treatment	<input type="checkbox"/> Clarification of prior equivocal diagnostics	_____	_____
<input type="checkbox"/> Check here if current medications have failed more than once			

**Patient Authorization and Consent**

It has been explained to me and I understand that I am voluntarily providing a specimen for a genetic test. I will provide the specimen in a collection device provided by Genesys. My DNA will be extracted from my specimen at Genesys, and the test will evaluate how my body responds to certain medications. The Genesys test will look for common genetic variations in genes that are important for response to medications. The test identifies the most common variants of these genes but is not designed to identify some rare mutations which may also affect response to medications. The test is a clinical laboratory test and may aid in my treatment plan; therefore, I or my health insurer will be billed for this test. A written report of the test results will be provided to my health care provider who will inform me of the results. Genesys will keep all my medical information confidential and only disclose it to pursuant to applicable state and federal laws. I understand that I am responsible for providing accurate information about my insurance to Genesys Diagnostics Inc. I understand that Genesys Diagnostics Inc. will be providing testing service and billing my insurance. However, I understand that charges that are not covered by my insurance, including any applicable copayments and deductibles are my responsibility and I agree to pay such charges promptly.

Patient/Guardian Signature:\* \_\_\_\_\_ Date:\* \_\_\_\_\_

I do not consent to having my deidentified DNA sample used for internal research purposes.

**Healthcare Provider Authorization**

I certify that (i) this test is medically necessary, (ii) the patient (or authorized representative on the patient's behalf) has given informed consent (which includes written informed consent or written authorization when required by law) to have this testing performed, and (iii) the informed consent obtained from the patient meets the requirements of applicable law. I agree to provide Genesys, or its designee, any and all additional information reasonably required for this testing to be performed.

Healthcare Provider Signature:\* \_\_\_\_\_ Date:\* \_\_\_\_\_

**Medical Necessity Statement:** Tests ordered on Medicare patients must follow CMS rules regarding medical necessity and FDA approval guidelines and must include diagnosis, symptoms and reason for testing as indicated in the medical record. If testing does not come under Medicare guidelines for payment a 'signed' Advanced Beneficiary Notice must be included.

\*\*Certain regions in various genes have poor coverage and are not included in the panel (if you would like more coverage information regarding any specific genes of interest, please contact Genesys Diagnostics Inc.). All genes that have pseudogenes will have poorer performance on the MiSeq instrument. Variants in genes with pseudogenes may not be reliably detected. DNA alterations in regions not covered by this test such as deep intronic or regulatory regions, or in poorly covered regions will not be detected using Next Generation Sequencing analysis. There are technical limitations on the ability of Next Generation Sequencing to detect small insertions and deletions and these types of alterations are not detected as reliably as single nucleotide variants. This assay is not designed or validated for the detection of low-level mosaicism or somatic mutations.



**Letter of Medical Necessity\***

Dear Insurance Representative:

My patient, \_\_\_\_\_, has several medical conditions requiring prescription drugs. Given the conditions and drugs being used, testing for drug metabolism and/or certain genetic risk factors is medically necessary. These indications are clearly documented in the paperwork and supporting documentation provided to the laboratory at the time of test requisition.

I ordered the Pharmacogenetics test, performed by **Genesys Diagnostics Inc.**, for this patient in order to understand possible dangers and risks for suboptimal outcomes for specific medications currently prescribed under consideration. Specifically, to assess:

<input type="checkbox"/> Identify risk for an adverse drug reaction	<input type="checkbox"/> Drug therapy best matched to patient's metabolic genotype/phenotype
<input type="checkbox"/> Efficacy of current and/or future drug therapy	<input type="checkbox"/> Correct dosage(s) to maximize therapeutic effect
<input type="checkbox"/> Risk of thromboembolism, hyperhomocysteinemia, and hyperlipidemia	<input type="checkbox"/> Other: _____

**Treatment Plan Statement**

I plan to use the information from this test report to improve treatment care through the following:

<input type="checkbox"/> Identify current medications that may be causing adverse reactions, such as _____	<input type="checkbox"/> Determine the optimal dosage(s) for current or potential future medications to ensure maximum effect.
<input type="checkbox"/> Identify and prescribe new medications that will provide maximum therapeutic effect without causing harmful adverse reactions.	<input type="checkbox"/> Other: _____

**Medical Considerations**

Current medication list enclosed

Failed medication, patient history enclosed

Medications that are under consideration for this patient (if applicable):

**Supporting Documentation**

The following documents have been provided to further support the medical necessity of this testing.

<input type="checkbox"/> Clinical Notes (H & P)	<input type="checkbox"/> Medication List
<input type="checkbox"/> Problem Diagnosis List	<input type="checkbox"/> Other: _____

**Required for every patient\*:** Please provide a brief explanation why this test is medically/clinically necessary for the patient below:

Provider Signature:\*

Date:\*

ICD Codes*			
<p><b>Neurology Panel</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> F84.X Pervasive Developmental Disorders (Autistic dis-0) (Rett's synd-2) (othr chld dis-3) (asp-5) (othr dis-8) (Pervasive dev dis, unsp-9)</li> <li><input type="checkbox"/> F90.X Attention-deficit hyperactivity disorder (inattentive-1) (hyperactive-2) (other-8)</li> <li><input type="checkbox"/> F91.X Conduct disorder (confined to family-0) (child onset-1) (adolescent onset-2) (oppositional defiant dis-3) (other-8)</li> <li><input type="checkbox"/> Other: _____</li> </ul> <p><b>Pain Panel</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Z79.891 Long term (current) use of opiate analgesic</li> <li><input type="checkbox"/> K21.9 Esophageal Reflux</li> <li><input type="checkbox"/> G89.11 Acute pain due to trauma</li> <li><input type="checkbox"/> G89.18 Acute post-op pain</li> <li><input type="checkbox"/> R5.2 Generalized pain</li> <li><input type="checkbox"/> G89.4 Chronic pain syndrome</li> <li><input type="checkbox"/> G89.21 Chronic pain due to trauma</li> <li><input type="checkbox"/> G89.28 Chronic post-op pain</li> <li><input type="checkbox"/> G89.29 Chronic pain, other</li> <li><input type="checkbox"/> G43.909 Migrane, unspc w/ ntrc mgrn</li> <li><input type="checkbox"/> M12.9 Arthropathy Unsp</li> <li><input type="checkbox"/> M47.892 Cervical Spondylosis</li> <li><input type="checkbox"/> M47.896 Lumbosacral Spondylosis</li> <li><input type="checkbox"/> M50.30 Cervical Disk Disease</li> <li><input type="checkbox"/> M51.36/37 Lumbar Disk Disease</li> <li><input type="checkbox"/> M48.02 Cervical Spinal Stenosis</li> <li><input type="checkbox"/> M54.2 Cervicalgia</li> <li><input type="checkbox"/> M54.13 Brachial neuritis NOS</li> <li><input type="checkbox"/> M54.6 Pain in thoracic spine</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> M54.5 Lumbago/low back pain</li> <li><input type="checkbox"/> M54.15 Lumbosacral neuritis NOS</li> <li><input type="checkbox"/> M75.50 Burstis of unsp shoulder</li> <li><input type="checkbox"/> M60.9 Myalgia, myositis, unsp</li> <li><input type="checkbox"/> R03.0 Elevated BP w/o Hypertension</li> <li><input type="checkbox"/> M60.8X Other Myositis (shoulder-1) (upper arm-2) (forearm-3) (hand-4) (thigh-5) (lower leg-6) (ankle+foot-7) (other-8)</li> <li><input type="checkbox"/> Other: _____</li> </ul> <p><b>Psychiatry Panel</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> F31.31 Bipol I cur depress-mild</li> <li><input type="checkbox"/> G43.909 Migraine</li> <li><input type="checkbox"/> I1.0 Hypertension</li> <li><input type="checkbox"/> F30.1X Recur manic episode mild w/o psychotic symptoms (mod-.2) (severe-.3)</li> <li><input type="checkbox"/> F20.89 Other schizophren</li> <li><input type="checkbox"/> F20.1 Disorganized schizo</li> <li><input type="checkbox"/> F20.2 Catatonia schizo</li> <li><input type="checkbox"/> F20.0 Paranoid schizo</li> <li><input type="checkbox"/> F20.81 Schizophreniform dis</li> <li><input type="checkbox"/> F20.89 Schizophrenia other</li> <li><input type="checkbox"/> F30.2 Bipol1 single manic with psychotic sym</li> <li><input type="checkbox"/> F32.X MDD single episode (mild-0) (mod-.1) (severe-.2) (severe w/psychotic feat-.3) (other depr epis-8)</li> <li><input type="checkbox"/> F33.X Recur depr psychosis (mild-0) (mod-.1) (severe.2)</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> F33.4X Recur depr psyc- (part rem-.1) ( full rem-.2)</li> <li><input type="checkbox"/> F31.1X Bipol 1 current manic (mild-.1) (mod-.2) (sev-.3)</li> <li><input type="checkbox"/> F31.3X Bipol 1 current depres (mild-.1) (mod-.2) (severe-.3) (w/ psyc-4)</li> <li><input type="checkbox"/> F31.75 Bipol 1 cur dep rem NOS</li> <li><input type="checkbox"/> F31.76 Bipol 1 currnt dep remis</li> <li><input type="checkbox"/> F31.61 Bipol 1 currnt mix (mild-.1) (mod-.2) (sev-.3) (w psy-4)</li> <li><input type="checkbox"/> F31.7X Bipol 1 currnt mix (part term-7) (mild-8)</li> <li><input type="checkbox"/> F31.81 Bipolar II dis</li> <li><input type="checkbox"/> F3.9 Episodic mood dis</li> <li><input type="checkbox"/> F41.1 Generalized anxiety dis</li> <li><input type="checkbox"/> F34.1 Dysthymic dis</li> <li><input type="checkbox"/> F43.0 Stress react, emotional</li> <li><input type="checkbox"/> F43.21 Adjustment dis w depress</li> <li><input type="checkbox"/> F43.25 Adj dis-emotion/conduct</li> <li><input type="checkbox"/> F93.8 Misery &amp; unhappiness dis</li> <li><input type="checkbox"/> G1.0 Huntington's chorea</li> <li><input type="checkbox"/> Other: _____</li> </ul> <p><b>Cardiology Panel</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Z79.01 Long term (current) use of anticoagulants</li> <li><input type="checkbox"/> I25.2 Old myocardial infarction</li> <li><input type="checkbox"/> I70.0 Aortic Atherosclerosis</li> <li><input type="checkbox"/> D68.5 Hypercoagulable state (contraceptives, lupus)</li> <li><input type="checkbox"/> I10.0 Hypertension</li> <li><input type="checkbox"/> I21.09 AMI anterolateral, unsp</li> <li><input type="checkbox"/> I21.19 AMI inferior wall, unsp</li> <li><input type="checkbox"/> I21.11 AMI inferopost, (unsp)</li> <li><input type="checkbox"/> I21.4 Subendo infarct, unsp</li> <li><input type="checkbox"/> I21.29 AMI NEC, unsp</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> I21.3 AMI NOS, unsp</li> <li><input type="checkbox"/> I24.1 Post MI syndrome</li> <li><input type="checkbox"/> I20.0 Intermed coronary synd</li> <li><input type="checkbox"/> I24.0 Acute cor ocdsn w/o MI</li> <li><input type="checkbox"/> I24.9 Aschermic hrt dis</li> <li><input type="checkbox"/> I25.2 Old Myocardial Infarction</li> <li><input type="checkbox"/> I20.8 Angina decubitus</li> <li><input type="checkbox"/> I20.1 Prinzmetal Angina</li> <li><input type="checkbox"/> I20.9 Angina pectoris NEC/NOS</li> <li><input type="checkbox"/> I25.10 Crnry athrscel natvs vssl</li> <li><input type="checkbox"/> I26.99 Pulm embol/infarct NEC</li> <li><input type="checkbox"/> I27.82 Chr pulmonary embolism</li> <li><input type="checkbox"/> I48.91 Atrial brillation</li> <li><input type="checkbox"/> I49.01 Ventricular brillation</li> <li><input type="checkbox"/> I50.22 Systolic hear failure, chronic</li> <li><input type="checkbox"/> I50.32 Diastolic heart failure, chronic</li> <li><input type="checkbox"/> I50.42 Chr syst/diastl hrt fail</li> <li><input type="checkbox"/> I65.29 Ocl ctrd art wo infrcr</li> <li><input type="checkbox"/> I67.1 Nonrupt cerebral aneurysm</li> <li><input type="checkbox"/> I70.0 Aortic atherosclerosis</li> <li><input type="checkbox"/> I70.25 Ath ext ntv art ulcrctn</li> <li><input type="checkbox"/> I73.00 Raynaud's syndrome</li> <li><input type="checkbox"/> I82.409 Acute DVT, LE, unsp dep veins</li> <li><input type="checkbox"/> I82.4Y9 Acute DVT, PLE</li> <li><input type="checkbox"/> I82.509 Chronic DVT, LE</li> <li><input type="checkbox"/> I82.729 Chronic DVT, UE</li> <li><input type="checkbox"/> I82.629 Acute DVT, UE</li> <li><input type="checkbox"/> I85.5 Syncope and collapse</li> <li><input type="checkbox"/> E78.01 Familial Hypercholesterolemia</li> <li><input type="checkbox"/> Other: _____</li> </ul>