

Date:*

Date:*

*Information required for testing

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

| Patient Information | | | | | | | |
|-------------------------|----------------------------|--------------------------|----------------------|------------|---------------------|--------------|----------------|
| | | | | | MM/DD/YYYY | | |
| LAST NAME* | | FIRST NAME* | MI | | DOB* | | SEX |
| ADDRESS | | CITY | STATE ZIPCODE | PF | IONE NUMBER | | EMAIL ADDRESS |
| Billing Information (PI | ease include a copy | of insurance card(s) for | billing purposes.) | | | | |
| * CLIENT BILL | NCE SELF PAY | MEDICARE/MEDIC/ | AID (🗆 PRIMARY 🛛 SEC | ONDARY) RI | ELATIONSHIP: 🗖 SELF | □ SPOUSE | DEPENDENT |
| INSURANCE NAME | | M | EMBER/POLICY ID | | | GROUP # | : |
| | | MN | 1/DD/YYYY | | | | |
| POLICY HOLDER NAME | | POLICY | Y HOLDER DOB | | TEST INDICATION/IC | CD-10 CODE(S | 5)* |
| Account Information | | | | | | | |
| | | | | | | | |
| FACILITY/PRACTICE NAME* | | PHONE NUMBER | FAX N | IUMBER | (| ORDERING PH | IYSICIAN NAME* |
| Specimen Informatio | n preferred specim | 1EN IS BUCCAL SWAB | | | | | |
| BLOOD IN EDTA (5ml MIN) | BUCCAL SWAB | 🗖 DNA (10 ug MIN) | COLLECTION DATE: | MM/DD/YYYY | COLLECTION TIM | E:00:0 | DO AM/PM |
| Background Informat | t ion (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) | | |
|--|--|--|
| COMPREHENSIVE PANEL: СУР1А2, СУР2В6, СУР2С19, СУР2D6, СУР2С9, VKORC1, СУР3А4, СУР3А5, | MENTAL HEALTH/ PSYCHIATRY PANEL CYP1A2, CYP2D6, CYP2C19, CYP2C9, CYP3A4, CYP3A5, | |
| ADRA2A, OPRM1, COMT, Factor II, Factor V, MTHFR, APOE, SLCO1B1, HTR2A | ADRA2A, COMT, HTR2A | |
| CARDIOVASCULAR PANEL: CYP2C19, CYP2D6, CYP2C9, VKORC1, CYP3A4, CYP3A5, Factor II, Factor | PAIN MANAGEMENT PANEL: CYP1A2, CYP2D6, CYP2C19, CYP3A4, CYP3A5, CYP2B6, CYP2C9 OPRM1, | |
| V, MTHFR, APOE, SLCO1B1 | Factor II, Factor V, MTHFR | |
| ORTHOPEDIC PANEL: CYP2D6, CYP2C19, VKORC1, CYP3A4, CYP3A5, Factor II, Factor V, MTHFR | ADHD/ NEUROLOGY PANEL CYP1A2, CYP2B6, CYP2C19, CYP2D6, CYP2C9, COMT, OPRM1, HTR2A | |
| GASTROINTESTINAL PANEL: CYP2D6, CYP2C19, CYP3A4 and MTHFR | UROLOGICAL PANEL: CYP2D6 | |

| Clinical Utility of Tests*: How will pharmacogenetic results directly change treatment or management of the patient? | | | | |
|--|---|----------------------|-----------------------|--|
| □ Selection of new prescription medication(s) □ Alternative dosing of existing medication(s) □ Anti-coagulant, anti-thrombotic treatment | Discontinuation of existing medication(s) Adjustment of current multi-drug regimen Clarification of prior equivocal diagnostics | Current Medications: | Intended Medications: | |

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 bill 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 provided 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:*

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:*

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 bability of Next Generation Sequencing to detect mall 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:

, has several medical conditions requiring prescription drugs. Given the conditions and My patient. 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:

| □ Identify risk for an adverse drug reaction | □ Drug therapy best matched to patient's metabolic genotype/phenotype |
|---|---|
| □ Efficacy of current and/or future drug therapy | □ Correct dosage(s) to maximize therapeutic effect |
| □ Risk of thromboembolism, hyperhomocysteinemia, and hyperlipidemia | □ Other: |

Treatment Plan Statement

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

| □ Identify current medications that may be causing adverse reactions, such as | Determine the optimal dosage(s) for current or potential future medications to ensure maximum effect. |
|--|---|
| □ Identify and prescribe new medications that will provide maximum therapeutic effect without causing harmful adverse reactions. | □ Other: |
| Medical Considerations | |

Supporting Documentation

| The following documents have been provided to further support the media | cal necessity of this testing. | |
|---|--------------------------------|--|
| □ Clinical Notes (H & P) | □ Medication List | |
| Problem Diagnosis List | □ Other: | |
| Required for every patient*: Please provide a brief explanation why this test is medically/clinically necessary for the patient below: | | |

Provider Signature:*

ICD Codes* □ F33.4X Recur depr psyc- (part rem-.1) (full I21.3 AMI NOS, unsp **Neurology Panel** M54.5 Lumbago/low back pain □ F84.X Pervasive Developmental □ M54.15 Lumbosacral neuritis rem-.2) □ I24.1 Post MI syndrome Disorders (Autistic dis-0) (Rett's synd-2) NOS □ F31.1X Bipol 1 current manic (mild-.1) (mod-.2) □ I20.0 Intermed coronary synd (othr chld dis-3) (asp-5) (othr dis-8) (Pervasive dev dis, unsp-9) (sev-.3) F31.3X Bipol 1 current depres (mild-.1) (mod-□ M75.50 Burstis of unsp □ 124.0 Acute cor ocdsn w/o MI □ 124.9 Aschemic hrt dis shoulder 2) (severe-.3) (w/ psyc-.4)
 ☐ F31.75 Bipol 1 cur dep rem NOS □ M60.9 Myakgia, myositis, unsp □ I25.2 Old Myocardial Infarction disorder (inattentive-1) (hyperactive-2) □ R03.0 Elevated BP w/o 🗖 I20.8 Angina decubitus □ F31.76 Bipol 1 currnt dep remis □ F31.61 Bipol 1 currnt mix (mild-.1) (mod-.2) (sev-.3) (w psy-.4) □ F31.7X Bipol 1 currnt mix (part term-7) (mild-8) I20.1 Prinzmetal Angina
 I20.9 Angina pectoris NEC/NOS
 I25.10 Crnry athrscl natvs vssl Hypertension ☐ M60.8X Other Myositis (other-8) E91.X Conduct disorder (confined to (shoulder-1) (upper arm-2) (forearm-3) (hand-4) (thigh-5) family-0) (child onset-1) (adolescent onset-2) (oppositional defiant dis-3) □ I26.99 Pulm embol/infarct NEC □ F31.81 Bipolar II dis □ F3.9 Episodic mood dis (other-8) (lower leg-6) (ankle+foot-7) 🗖 I27.82 Chr pulmonary embolism I48.91 Atrial brillation (othr-8) Other: □ F41.1 Generalized anxiety dis □ I49.01 Ventricular brillation Pain Panel F34.1 Dysthymic dis □ I50.22 Systolic hear failure, chronic □ Z79.891 Long term (current) use of **Psychiatry Panel** opiate analgesic F31.31 Bipol I cur depress-mild F43.0 Stress react, emotional 🗖 I50.32 Diastolic heart failure, chronic ☐ K21.9 Esophageal Reflux ☐ G89.11 Acute pain due to trauma ☐ G89.18 Acute post-op pain F43.21 Adjustment dis w depress
 F43.25 Adj dis-emotion/conduct
 F93.8 Misery & unhappiness dis □ I50.32 Didstoire incure infinite □ I50.42 Chr syst/diastl hrt fail □ I65.29 Ocl ctrd art wo infrct G43.909 Migraine I1.0 Hypertension □ F30.1X Recur manic episode I67.1 Nonrupt cerebral aneurysm R5.2 Generalized pain mild w/o psychotic symptoms G1.0 Huntington's chorea □ 170.0 Aortic atherosclerosis (mod-.2) (severe-.3) F20.89 Other schizophren G89.4 Chronic pain syndrome Other: I70.25 Ath ext ntv art ulcrtion Cardiology Panel Z79.01 Long term (current) use of □ 173.00 Raynaud's syndrome □ 182.409 Acute DVT, LE, unsp dep G89.21 Chronic pain due to trauma G89.28 Chronic post-op pain □ F20.1 Disorganized schizo G89.29 Chronic pain, other F20.2 Catatonia schizo anticoagulants veins □ I82.4Y9 Acute DVT, PLE G43.909 Migrane, unspec wo ntrc □ F20.0 Paranoid schizo I25.2 Old myocardial infarction ☐ F20.81 Schizophreniform dis ☐ F20.89 Schizophrenia other ☐ F30.2 Bipol1 single manic with □ I82.509 Chronic DVT, LE □ I82.729 Chronic DVT, UE □ 170.0 Aortic Atherosclerosis mgrn M12.9 Arthropathy Unsp D68.5 Hypercoagulable state (contraceptives, □ M47.892 Cervical Spondylosis □ 182.629 Acute DVT, ÚE lupus) M47.896 Lumbosacral Spondylosis psychotic sym □ I10.0 Hypertension R55 Syncope and collapse □ F32.X MDD single episode (mild-0) (mod-.1) (severe-.2) (severe w/psychotic feat-.3) □ M50.30 Cervical Disk Disease □ M51.36/37 Lumbar Disk Disease □ I21.09 AMI anterolateral, unsp □ I21.19 AMI inferior wall, unsp E78.01 Familial Hypercholesterolemia □ M48.02 Cervical Spinal Stenosis □ I21.11 AMI inferopost, unsp Other: _ □ M54.2 Cervicalgia (other depr epis-8) □ I21.4 Subendo infarct, unsp □ M54.13 Brachial neuritis NOS F33.X Recur depr psychosis □ I21.29 AMI NEC, unsp □ M54.6 Pain in thoracic spine (mild-0) (mod-.1) (severe.2

8 Enterprise Lane Oakdale, CT 06370

Date:*