

## CARDIOLOGY GENETIC TEST REQUISITION FORM

PATIENT INFORMATION	
Patient Last Name: _____ Patient First Name: _____ MI _____	
Date of Birth (MM/DD/YY): _____ Sex <input type="checkbox"/> Male <input type="checkbox"/> Female	Ethnic Background (check all that apply)
Address: _____	<input type="checkbox"/> African American <input type="checkbox"/> Asian/Pacific Islander
City: _____ State: _____ Zip: _____	<input type="checkbox"/> Caucasian <input type="checkbox"/> Hispanic <input type="checkbox"/> Mediterranean
Phone: _____ E-mail: _____	<input type="checkbox"/> Native American <input type="checkbox"/> Other _____
REFERRING PHYSICIAN INFORMATION	
Name (Last, First, MI.): _____ Provider NPI# _____ Institution Name: _____	
Address: _____ City: _____ State: _____ Zip: _____	
Phone: _____ Fax: _____ E-mail: _____	
Genetic Counselor/Additional Recipient: _____ Phone/Fax/Email: _____	
Preferred Method of reporting: <input type="checkbox"/> Website Portal <input type="checkbox"/> Fax <input type="checkbox"/> Mail <input type="checkbox"/> Phone	Location ID: _____
SAMPLE INFORMATION	CLINICAL INFORMATION
Date Collected: _____	Clinical Indications: _____
Date Received: _____ (Lab Use Only)	ICD-10 codes: _____
Collected By: _____ Volume: _____	Sample Type: <input type="checkbox"/> Blood (EDTA purple-top tube) <input type="checkbox"/> Saliva <input type="checkbox"/> DNA
Please check all of the following situations that apply:	
<input type="checkbox"/> Patient has had bone marrow transplant	<input type="checkbox"/> Patient has had transfusion within the past 30 days
<input type="checkbox"/> Patient or immediate family member is pregnant	
BILLING INFORMATION	
<input type="checkbox"/> INSTITUTIONAL BILLING Institution Name and Contact: _____	
<input type="checkbox"/> MEDICARE/MEDICAID Medicare/Medicaid No. _____ State: _____	
<input type="checkbox"/> INSURANCE BILLING Please include a copy of insurance card(s) both front and back for billing purposes	
Policyholder Name _____ DOB (MM/DD/YY) _____ Phone No. _____	
Insurance Co. _____ Member ID _____ Group No. _____	
<input type="checkbox"/> SELF PAYMENT (Invoice for payment will be issued upon receipt of sample. Please completely fill out patient's address to avoid delay of	
Patient /Guardian Acknowledgement for Financial Responsibility	
I acknowledge that the information provided by me is true to the best of my knowledge. I hereby authorize my insurance benefits to be paid directly to Breakthrough Genomics and authorize them to release medical information concerning my testing to my insurer. I understand that I am financially responsible for any amounts not covered by my insurer for this test order. I also fully understand that I am legally responsible for sending Breakthrough Genomics any money received from my health insurance company for the performance of this genetic test. Failing to do so will result in my account being sent to collection.	
Patient/Guardian's Name: _____ Patient/Guardian's Signature: _____ Date: _____	

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### STATEMENT OF MEDICAL NECESSITY

#### Informed Consent and Statement of Medical Necessity

I have supplied information to the patient/guardian regarding genetic testing and the patient/guardian has given consent for genetic testing to be performed. I further confirm that this test is medically necessary for the diagnosis or detection of a disease, illness, impairment, symptom, syndrome or disorder, and the results will be used in the medical management and treatment decisions for the patient. I confirm that the person listed in the Ordering Physician space above is authorized by law to order the test(s) requested herein.

Physician's Name: \_\_\_\_\_ Physician's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## CARDIOLOGY GENETIC TEST REQUISITION FORM

TEST CATALOGUE		
Genetic Testing		
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <input type="checkbox"/> Aorta Panel  <input type="checkbox"/> Arrhythmia Panel  <input type="checkbox"/> Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC) Panel  <input type="checkbox"/> Atrial Fibrillation Panel  <input type="checkbox"/> Brugada Syndrome Panel  <input type="checkbox"/> Cardiomyopathy Panel  <input type="checkbox"/> Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT) Panel  <input type="checkbox"/> Comprehensive Cardiology Panel  <input type="checkbox"/> Congenital Structural Heart Disease Panel  <input type="checkbox"/> Dilated Cardiomyopathy (DCM) Panel  <input type="checkbox"/> Ehlers-Danlos Syndrome Panel  <input type="checkbox"/> Hereditary Hemorrhagic Telangiectasia (HHT) Panel                 </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <input type="checkbox"/> Heterotaxy and Situs Inversus Panel  <input type="checkbox"/> Hyperlipidemia Core Panel  <input type="checkbox"/> Hyperlipidemia Panel  <input type="checkbox"/> Hypertrophic Cardiomyopathy (HCM) Panel  <input type="checkbox"/> Left Ventricular Non-Compaction Cardiomyopathy (LVNC) Panel  <input type="checkbox"/> Liddle Syndrome Panel  <input type="checkbox"/> Long QT Syndrome (LQTS) Panel  <input type="checkbox"/> Marfan Syndrome Panel  <input type="checkbox"/> Noonan Syndrome Panel  <input type="checkbox"/> Pulmonary Artery Hypertension (PAH) Panel  <input type="checkbox"/> Short QT Syndrome (SQTS) Panel                 </td> </tr> </table>	<input type="checkbox"/> Aorta Panel <input type="checkbox"/> Arrhythmia Panel <input type="checkbox"/> Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC) Panel <input type="checkbox"/> Atrial Fibrillation Panel <input type="checkbox"/> Brugada Syndrome Panel <input type="checkbox"/> Cardiomyopathy Panel <input type="checkbox"/> Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT) Panel <input type="checkbox"/> Comprehensive Cardiology Panel <input type="checkbox"/> Congenital Structural Heart Disease Panel <input type="checkbox"/> Dilated Cardiomyopathy (DCM) Panel <input type="checkbox"/> Ehlers-Danlos Syndrome Panel <input type="checkbox"/> Hereditary Hemorrhagic Telangiectasia (HHT) Panel	<input type="checkbox"/> Heterotaxy and Situs Inversus Panel <input type="checkbox"/> Hyperlipidemia Core Panel <input type="checkbox"/> Hyperlipidemia Panel <input type="checkbox"/> Hypertrophic Cardiomyopathy (HCM) Panel <input type="checkbox"/> Left Ventricular Non-Compaction Cardiomyopathy (LVNC) Panel <input type="checkbox"/> Liddle Syndrome Panel <input type="checkbox"/> Long QT Syndrome (LQTS) Panel <input type="checkbox"/> Marfan Syndrome Panel <input type="checkbox"/> Noonan Syndrome Panel <input type="checkbox"/> Pulmonary Artery Hypertension (PAH) Panel <input type="checkbox"/> Short QT Syndrome (SQTS) Panel
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CLINICAL AND FAMILY HISTORY (Clinical Note Must Be Attached)										
Previous clinical/genetic testing (of patient's or family members'):										
Test: _____ Result: _____										
Test: _____ Result: _____										
Clinical Symptoms of patient or family members:										
<table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 30%; text-align: left; padding: 5px;">Patient /Family member <u>i.e. Father</u></th> <th style="text-align: left; padding: 5px;">Symptoms/Diagnosis (please specify age of diagnosis after each diagnosis)</th> </tr> </thead> <tbody> <tr> <td style="border-bottom: 1px solid black; height: 20px;"></td> <td style="border-bottom: 1px solid black; height: 20px;"></td> </tr> <tr> <td style="border-bottom: 1px solid black; height: 20px;"></td> <td style="border-bottom: 1px solid black; height: 20px;"></td> </tr> <tr> <td style="border-bottom: 1px solid black; height: 20px;"></td> <td style="border-bottom: 1px solid black; height: 20px;"></td> </tr> <tr> <td style="border-bottom: 1px solid black; height: 20px;"></td> <td style="border-bottom: 1px solid black; height: 20px;"></td> </tr> </tbody> </table>	Patient /Family member <u>i.e. Father</u>	Symptoms/Diagnosis (please specify age of diagnosis after each diagnosis)								
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## CARDIOLOGY GENETIC TEST REQUISITION FORM

### INFORMED CONSENT FOR GENETIC TESTING

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

DOB (MM/DD/YYYY): \_\_\_\_\_

I understand that my health care provider has ordered the following genetic testing for {me/my child}:

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*This is a voluntary test to identify gene mutation associated with hereditary disease and health risks and you may wish to seek genetic counseling prior to signing this form. Read this form carefully before making your decision about testing.*

#### PURPOSE

I am interested in obtaining a genetic test by submitting a biological sample of my own (blood, saliva, or other tissue). The purpose of this molecular genetic test is to ascertain if I am or my child is carrying mutation(s) predisposing to or causing disease or elevated health risks. The biological sample submitted is required for isolation and purification of DNA and molecular genetic testing by next generation sequence analysis of genes associated with hereditary health risks.

#### THE FOLLOWING POINTS WERE EXPLAINED AND I UNDERSTAND THAT:

1. Due to the complexity of DNA based testing and the implications of the results, these results will be reported only through my designated physician(s) or genetic counselor (where allowed) and that I must contact my provider to obtain the results of the test. The test results, in addition, could be released to all who, by law, may have access to such data.
2. DNA-based studies performed are specific to the condition indicated above. The results should be evaluated in the context of personal and family health history, the results of physical examination, laboratory and hospital test, and clinical impression of my healthcare provider. I understand that possible result outcomes include positive, negative, and uncertain.
3. If results of the tests are uncertain (in the case of variants of unknown clinical significance), meaning that there is not enough information to determine whether this change is associated with an increased risk after thorough search of current literature and databases.
4. Unexpected results may be revealed from this test in rare instances. This test is designed to detect changes in genes that predispose a person to a certain health condition; however, it can sometimes uncover genetic conditions in a family unrelated to the targeted disease risks. Results also have the potential to reveal unexpected biological relationships, such as a different biological parent.
5. It is the responsibility of the referring physician or health care provider to understand the specific utility and limitations of the testing ordered, and to educate the patient regarding these limitations. While this test is designed to identify most detectable mutations in the genes analyzed, it is still possible there are mutations that this testing technology is unable to detect. In addition, there may be other genes associated with disease susceptibility that are not included on this panel or that are not known at this time.
6. The molecular genetic test occasionally may not generate results and that an additional blood, saliva, or tissue sample may be needed to obtain interpretable results.
7. Inaccurate results, though rare, may occur for the following reasons: sample mix-up, samples unavailable from critical family members, maternal contamination of prenatal samples, inaccurate reporting of family relationships, or technical problems, but not limited to these.
8. The genetic tests results have implications for blood relatives. In consultation with an appropriate healthcare provider, I may wish to discuss sharing the test results with certain blood relatives who may be at risk.

## CARDIOLOGY GENETIC TEST REQUISITION FORM

### USE OF SPECIMENS FOR RESEARCH

After testing is completed, I understand that leftover blood, saliva, or tissue specimens may be disposed of or retained indefinitely for de-identified research, test validation, and/or education as long as my privacy is maintained. I understand that no compensation will be given for using the specimens submitted. I understand that I may refuse to submit my specimen for use in this way and may withdraw my consent at any time by contacting the laboratory. I understand that my refusal to consent to medical research will not affect my results. Indicate consent or denial below. If neither box is marked, consent is implied.

Consent to the use of my sample for anonymous research:

Yes     No

### OPT OUT REQUEST

I choose to opt out of receiving test results in the following disease categories:

- Adult onset cancer
- Carrier screening
- Adult onset neurological diseases

Other \_\_\_\_\_

### RECOMMENDATIONS

I understand that due to the dynamics of medical genetics field, there continues to be new information and data. It is recommended that I keep in contact with my healthcare provider, annually, to learn of any new developments in medical genetics and to provide any updates to my personal or family history which may affect my disease susceptibility risks.

### PATIENT/GUARDIAN CONSENT STATEMENT

By signing below, I, the patient or Guardian having the test performed, acknowledge that:

I have read or have had read to me all of the above statements and understand the information above and have had the opportunity to ask questions. I understand the procedure, the risks, benefits, limitations and the alternatives associated with this test. I can request a copy of this consent form.

Patient Name: \_\_\_\_\_ Date: \_\_\_\_\_

Patient Signature: \_\_\_\_\_

Guardian Name: \_\_\_\_\_ Date: \_\_\_\_\_

Guardian Signature: \_\_\_\_\_

## CARDIOLOGY GENETIC TEST REQUISITION FORM

Cardio Related Panels with Payable ICDs	
Panel Name	ICDs
Aorta Panel	I35.0 - Nonrheumatic aortic (valve) stenosis I35.1 - Nonrheumatic aortic (valve) insufficiency I35.2 - Nonrheumatic aortic (valve) stenosis with insufficiency I35.8 - Other nonrheumatic aortic valve disorders I35.9 - Nonrheumatic aortic valve disorder, unspecified
Arrhythmia Panel	I49.01 - Ventricular fibrillation I49.02 - Ventricular flutter I49.1 - Atrial premature depolarization I49.2 - Junctional premature depolarization I49.3 - Ventricular premature depolarization I49.40 - Unspecified premature depolarization I49.49 - Other premature depolarization I49.5 - Sick sinus syndrome I49.8 - Other specified cardiac arrhythmias I49.9 - Cardiac arrhythmia, unspecified R00.0 - Tachycardia, unspecified R00.1 - Bradycardia, unspecified R00.2 - Palpitations R00.8 - Other abnormalities of heart beat R00.9 - Unspecified abnormalities of heart beat
Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC) Panel	I42.0 - Dilated cardiomyopathy I42.1 - Obstructive hypertrophic cardiomyopathy I42.3 - Endomyocardial (eosinophilic) disease I42.8 - Other cardiomyopathies
Atrial Fibrillation Panel	I48.0 - Paroxysmal atrial fibrillation I48.1 - Persistent atrial fibrillation I48.2 - Chronic atrial fibrillation I48.3 - Typical atrial flutter I48.4 - Atypical atrial flutter I48.91 - Unspecified atrial fibrillation I48.92 - Unspecified atrial flutter
Brugada Syndrome Panel	I49.01 - Ventricular fibrillation I49.02 - Ventricular flutter I49.1 - Atrial premature depolarization I49.2 - Junctional premature depolarization I49.3 - Ventricular premature depolarization I49.40 - Unspecified premature depolarization I49.49 - Other premature depolarization I49.5 - Sick sinus syndrome I49.8 - Other specified cardiac arrhythmias I49.9 - Cardiac arrhythmia, unspecified R00.0 - Tachycardia, unspecified R00.1 - Bradycardia, unspecified

## CARDIOLOGY GENETIC TEST REQUISITION FORM

	<p>R00.2 - Palpitations  R00.8 - Other abnormalities of heart beat  R00.9 - Unspecified abnormalities of heart beat</p>
<p>Cardiomyopathy Panel</p>	<p>I42.0 - Dilated cardiomyopathy  I42.1 - Obstructive hypertrophic cardiomyopathy  I42.3 - Endomyocardial (eosinophilic) disease  I42.4 - Endocardial fibroelastosis  I42.5 - Other restrictive cardiomyopathy  I42.6 - Alcoholic cardiomyopathy  I42.7 - Cardiomyopathy due to drug and external agent  I42.8 - Other cardiomyopathies</p>
<p>Catecholaminergic Polymorphic Ventricular Tachycardia (CPVT) Panel</p>	<p>I47.2 - Ventricular tachycardia</p>
<p>Comprehensive Cardiology Panel</p>	<p>I25.10 - Atherosclerotic heart disease of native coronary artery without angina pectoris  I48.91 - Atrial Fibrillation  I50.9 - Congestive Heart Failure  I63.9 - CVA  I63.9 - Stroke  I65.23 - Carotid Artery Occlusion, Bilateral  I65.23 - Carotid Artery Stenosis, Bilateral  I65.29 - Carotid Artery Occlusion  I65.29 - Carotid Artery Stenosis  I67.2 - Cerebral Atherosclerosis  I67.9 - Ischaemic Cerebrovascular Disease  I73.9 - Peripheral Vascular Disease  I20.9 - Angina Pectoris,NOS  I21.09 - Myocardial Infarction,Acute,Anterior  I21.3 - Myocardial infarction, acute unspecified  I25.10 - ASHD Coronary Artery  I25.2 - Old Myocardial Infarction  I25.84 - Coronary Atherosclerosis due to calcified Coronary Lesion  I25.9 - Chronic Ischaemic Heart Disease  I11.0 - Malignant Hypertension Heart Disease with Heart Failure  I11.9 - Benign Hypertension Heart Disease without Heart Failure</p>
<p>Congenital Structural Heart Disease Panel</p>	<p>Q24.0 - Dextrocardia  Q24.1 - Levocardia  Q24.2 - Cor triatriatum  Q24.3 - Pulmonary infundibular stenosis  Q24.4 - Congenital subaortic stenosis  Q24.5 - Malformation of coronary vessels  Q24.6 - Congenital heart block  Q24.7 - Other specified congenital malformations of heart  Q24.8 - Other specified congenital malformations of heart  Q24.9 - Congenital malformation of heart, unspecified</p>

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Dilated Cardiomyopathy (DCM) Panel	I42.0 - Dilated cardiomyopathy
Ehlers-Danlos Syndrome Panel	Q79.60 - Ehlers-Danlos syndrome, unspecified
Hereditary Hemorrhagic Telangiectasia (HHT) Panel	I78.0 - Hereditary hemorrhagic telangiectasia
Heterotaxy and Situs Inversus Panel	Q89.3 - Situs inversus Q24.8 - Other specified congenital malformations of heart
Hyperlipidemia Core Panel	E78.0 - Pure hypercholesterolemia E78.00 - Pure hypercholesterolemia, unspecified E78.01 - Familial hypercholesterolemia E78.1 - Pure hyperglyceridemia E78.2 - Mixed hyperlipidemia E78.3 - Hyperchylomicronemia E78.4 - Other hyperlipidemia E78.41 - Elevated Lipoprotein(a) E78.49 - Other hyperlipidemia E78.5 - Hyperlipidemia, unspecified E78.6 - Lipoprotein deficiency E78.70 - Disorder of bile acid and cholesterol metabolism E78.71 - Barth syndrome E78.72 - Smith-Lemli-Opitz syndrome E78.79 - Other disorders of bile acid and cholesterol E78.81 - Lipoid dermatoarthritis E78.89 - Other lipoprotein metabolism disorders E78.9 - Disorder of lipoprotein metabolism , unspecified
Hyperlipidemia Panel	E78.0 - Pure hypercholesterolemia E78.00 - Pure hypercholesterolemia, unspecified E78.01 - Familial hypercholesterolemia E78.1 - Pure hyperglyceridemia E78.2 - Mixed hyperlipidemia E78.3 - Hyperchylomicronemia E78.4 - Other hyperlipidemia E78.41 - Elevated Lipoprotein(a) E78.49 - Other hyperlipidemia E78.5 - Hyperlipidemia, unspecified E78.6 - Lipoprotein deficiency E78.70 - Disorder of bile acid and cholesterol metabolism E78.71 - Barth syndrome E78.72 - Smith-Lemli-Opitz syndrome E78.79 - Other disorders of bile acid and cholesterol E78.81 - Lipoid dermatoarthritis E78.89 - Other lipoprotein metabolism disorders E78.9 - Disorder of lipoprotein metabolism , unspecified
Hypertrophic Cardiomyopathy (HCM) Panel	I42.1 - Obstructive hypertrophic cardiomyopathy I42.2 - Other hypertrophic cardiomyopathy

## CARDIOLOGY GENETIC TEST REQUISITION FORM

Left Ventricular Non-Compaction Cardiomyopathy (LVNC) Panel	I42.8 - Other cardiomyopathies
Liddle Syndrome Panel	I15.1 - Hypertension secondary to other renal disorders
Long QT Syndrome (LQTS) Panel	I45.81 - Long QT syndrome
Marfan Syndrome Panel	Q87.40 - Marfan's syndrome, unspecified
Noonan Syndrome Panel	Q87.19 - Other congenital malformation syndromes predominantly associated with short stature
Pulmonary Artery Hypertension (PAH) Panel	I27.21 - Secondary pulmonary arterial hypertension
Short QT Syndrome (SQTS) Panel	I45.81 - Long QT syndrome