

PLEASE SUBMIT THE FOLLOWING WITH REQUISITION FORM

- $\hfill\square$  Statement of Medical Necessity (Signed by Physician) □ Informed Consent Form (Signed by Pt & Physician)
- □ SOAP & Progress Note (Signed by Physician)
- Summary of Active Medications

	Tel : a	832 476 80	089   Fax	: 832 786 5133	🗆 Scanned	Insurance Ca	rd Copy		
	CARDIO-PULM	ONAR	Y TES	TING REQUI	SITION	ORM			
PATIENT INFORMATION									
Patient First Name			Patient Last Name				Biological Sex 🗌 F 🗌 M		
Date of Birth (MM/DD/YYYY)	Phone Number			Email			il Addre	l Address	
Address			City			State	Zip Zip		
Ethnicity:       African American       Asian       Caucasian       Hispanic       Jewish(Ashkenazi)       Portuguese       Other									
PATIENT INSU	RANCE INFORMATIO	ON			SPECII	MEN INFO	ORMA	ΓΙΟΝ	
Insurance Self-Pay Client Bill				Date Sample Collected (mm/dd/yy) (required)					
Name of the insurance	Secondary Insurance, If any			Medical Record#					
Insurance Policy/ID number	Name of the insured			Buccal Swab					
Insurance Group number	Date of Birth of Insu	Date of Birth of Insured			□ Other (specify source)				
ORDERING PHYSICIAN/SENDING FACILITY (Each Listed person will receive a copy of the report)									
Facility Name (Facility Code):			Address: C			City:	ïty:		
State/Country :			Zip:			Phone:			
Ordering Licensed Provider Name (Last, First)(Code)			NPI#			Phone		Fax/Email	
Additional Results Recipients									
Genetic Counselor or Other Medical Provider Name (Last, First)(Code)					Phone/Fax/Email				
Signature Required for Processing Medical Professional Signature: Date :									
	STATEM	ENT O	FME	DICAL NECE	SSITY				
By submission of this test requisition and accompanying sample(s), I: (i) authorize and direct to perform the testing indicated; (ii) certify that the person listed as the ordering provider is authorized by law to order the test(s) requested; (iii) certify that any custom panel and/or ordered test(s) requested on this test requisition form are reasonable and medically necessary for the diagnosis and/or treatment of a disease, illness, impairment, symptom, syndrome or disorder; (iv) the test results will determine my patient's medical management and treatment decisions of this patient's condition on this date of service; (v) have obtained this patient's and relatives', when applicable, written informed consent to undergo any genetic testing requested; and (vi) that the full and appropriate diagnosis code(s) are indicated to the highest level of specificity.									
Signature of Provider (required) Date:						Date:			
INDICATIONS FOR TESTING (CHECK ALL THAT APPLY)									

Diagnostic Family history Positive or normal control Other..... Will Patient management be changed depending on the test results? 
Yes No

CLINICAL HISTORY (PLEASE SUPPLY CLINIC NOTES AND PEDIGREE)						
		Types (s) of Arrhythmia:				
□ No personal history of Cardiopulmonary disease		Family or personal history of chronic bronchitis? Yes No Pulmonary edema? Yes No				
Sudden Lungs Failur Y N (if yes): # Episodes:	Age first incident:	Family history of heart failure?				
History of Cardiopulmonary $\Box$ Y $\Box$ N Age at dx:		Family or personal history of a COPD? Yes No Cardiac arrhythmias? Yes No				
Type(s) of Cardiopulmnary:		☐ History of right-sided heart failure? ☐ Yes ☐ No ☐ Collection of fluid in legs or belly area? ☐ Yes ☐ No				
		□ Diagnosed with Emphysema? □ Yes □ No				
History of Arrhythmia 🛛 Y 🗋 N		Family history show the segregation of pulmonary emphysema? Yes No Diagnosed with alpha 1-antitrypsin deficiency-related pulmonary emphysema or early				
Age at dx:		onset pulmonary emphysema?  Yes  No				
		Diagnosed with cor pulmonale? Yes No				
CLINICAL	INFORMATION (DETAILEI	D MEDICAL RECORDS MUST BE ATTACHED)				
Reason for testing: O Diagnosis O Presymptomatic diagr		esting				
Please check all that apply. This is not a substitute for submi	ting clinical records.					
Diagnosis	Marfan/TAAD/HDCT	Abnormal heart morphology				
	Aortic/Arterial aneurysm     Aertic/Arterial dispection	<ul> <li>Bicuspid aortic valve</li> <li>Coarctation of aorta</li> </ul>				
O ARVC O Brugada syndrome	<ul> <li>Aortic/Arterial dissection</li> <li>Aortic root dilation</li> </ul>	$\bigcirc$ Heart murmur				
○ Brugada syndrome ○ CPVT	Aortic root dilation     Arachnodactyly	⊖ Heterotaxy				
ODCM	<ul> <li>Arterial tortuosity/ectasia</li> </ul>	O Hypoplastic left heart				
O Ehlers-Danlos syndrome	$\bigcirc$ Arthralgia	○ Mitral valve prolapse				
O HCM	<ul> <li>Atypical scarring of skin</li> </ul>	<ul> <li>Patent ductus arteriosus</li> </ul>				
O HHT	<ul> <li>Beighton score</li> </ul>	O Patent foramen ovale				
O Hypertension	O Bifid uvula	<ul> <li>O Tetralogy of Fallot</li> <li>O Ventricular septal defect</li> </ul>				
○ Loeys-Dietz syndrome	O Blue sclerae	<ul> <li>Atrial septal defect</li> </ul>				
○ LQT syndrome	O Bruising susceptibility	O Other:				
<ul> <li>Noncompaction Cardiopulmonary (LVNC)</li> </ul>	<ul> <li>Cleft lip</li> </ul>	РАН				
O Marfan syndrome	O Cleft palate	<ul> <li>Pulmonary hypertension</li> </ul>				
O PAH	○ Craniosynostosis	Cardiopulmonary				
	○ Cutis laxa	O Chronic bronchitis				
<ul> <li>○ SQT syndrome</li> <li>○ Sudden Cardiac Arrest</li> </ul>	<ul> <li>Dental crowding</li> </ul>	O Chronic obstructive pulmonary disease (COPD)				
$\bigcirc$ Sudden Death	○ Dural ectasia	Congestive heart failure				
Echocardiogram	<ul> <li>Ectopia lentis</li> </ul>	O Emphysema				
O Aortic root dimensions:	<ul> <li>Flexion contracture</li> </ul>	Other O Abnormality of the periventricular white matter				
O Z-score:	○ High palate	$\bigcirc$ Angiokeratomas				
○ EF%:	○ Hollow organ rupture:	○ Anhydrosis				
O LVEDD:	•	ntestinal perforation O Café-Au-Lait Macules				
O Z-score:		O Hearing impairment:				
O Max LV wall thickness:	○ Hypertelorism	○ Sensorineural ○ Conductive				
○ Normal	<ul> <li>Joint contractures</li> </ul>	<ul> <li>Craniosynostosis</li> <li>Curtis transmission</li> </ul>				
O Report Included	<ul> <li>Joint dislocations</li> </ul>	<ul> <li>Cystic hygroma</li> <li>Downslanted palpebral fissures</li> </ul>				
ECG	<ul> <li>Joint hypermobility</li> <li>Masta Object evitation</li> </ul>	<ul> <li>Downstanted palpebra insores</li> <li>Dysmorphic features:</li> </ul>				
Prolonged QTc interval: O Meets Ghent criteria						
Max QTc: O Micrognathia / Retrognathia > Normal O Midface retrusion		© Elevated CPK				
O Report Included	<ul> <li>Mitral valve prolapse</li> </ul>	O Hypotonia				
rhythmia/Cardiopulmonary O Myopia		<ul> <li>Increase nuchal translucency</li> </ul>				
O Abnormal atrioventricular conduction	$\bigcirc$ Osteoarthritis	O Intellectual disability				
○ Atrial fibrillation	<ul> <li>O Pectus carinatum</li> </ul>	○ Keratoconus				
⊖ Bradycardia	<ul> <li>Pectus excavatum</li> </ul>	Muscle weakness     Muscathy				
○ Fatty replacement of ventricular myocardial tissue	O Pes Planus	<ul> <li>Myopathy</li> <li>Renal insufficiency</li> </ul>				
O Heart transplant	○ Pneumothorax	O Short neck				
○ Syncope	O Recurrent fractures	O Thromboembolism				
O Torsades de pointe	Retinal detachment     Secliaria (Kurbasia (airela un)	O Type:				
O Ventricular tachycardia	<ul> <li>Scoliosis/Kyphosis (circle w</li> <li>Skin findinge, Specify</li> </ul>	vnat applies) :				
Arteriovenous malformation	<ul> <li>Skin findings, Specify:</li> <li>Stroke</li> </ul>					
$\bigcirc$ Epistaxis	○ Subke ○ Tall stature					
O Telangiectasia	O Velvety skin					
Dislipidemias	2 -					
○ Atherosclerosis						
○ Corneal Arcus						
○ LDL-C levels						
○ Xanthomatosis						

O Other:\_

Custom Cardio-Pulmonary NGS Testing (Select the genes below) or 🔤 Comprehensive Cardio-Pulmonary NGS Testing Panel (Test All Genes)								
				nomics Genes				
<ul> <li>ABCC9</li> <li>BGN</li> <li>ACTA2</li> <li>BMPR2</li> <li>ACTC1</li> <li>BRAF</li> <li>ACTN2</li> <li>CACNA1C</li> <li>ACVRL1</li> <li>CACNA2D1</li> <li>ADAMTS2</li> <li>CACNB2</li> <li>AKAP9</li> <li>CALM1^</li> <li>ALDH18A1</li> <li>CALM2</li> <li>ALMS1</li> <li>CALM3</li> <li>ALPK3</li> <li>CASQ2</li> <li>ANK2</li> <li>CAV1</li> <li>ANKRD1</li> <li>CAV3</li> <li>APOB</li> <li>CBS</li> <li>ATP6V0A2</li> <li>CHRM2</li> <li>ATP7A</li> <li>CCL11A1</li> <li>B3GALT6*</li> <li>CCL1A1</li> <li>BAG3</li> <li>CCL1A2</li> </ul>	<ul> <li>COLJA1</li> <li>COLJA1</li> <li>COLJA1</li> <li>COLJA2</li> <li>COLJA2</li> <li>COLJA3</li> <li>COLJA</li></ul>	) ELN ) EMD ) EMG ) ENG ) EYA4 ) FBN5 ) FBN1 ) FBN2 ) FBN2 ) FHL1 ) FKBP14 ) FKRP* ) FKTN ) FLNA ) FJNA ) FJNC ) GAA ) GATA4 ) GATA5^ ) GATA6 ) GATAD1 ) GATAD1 ) GAF2	<ul> <li>GJA5</li> <li>GLA</li> <li>GNB5</li> <li>GPD1L</li> <li>HCN4</li> <li>HFE</li> <li>HRAS*</li> <li>ILK</li> <li>JPH2</li> <li>JUP</li> <li>KCNA5</li> <li>KCN13</li> <li>KCNE1</li> <li>KCNE1L</li> <li>(KCNE5)</li> <li>KCNE2</li> <li>KCNE2</li> <li>KCNE3</li> <li>KCNH2</li> <li>(HERG)</li> <li>KCNJ2</li> </ul>	<ul> <li>KCNJ5</li> <li>KCNJ8</li> <li>KCNK3</li> <li>KCNK3</li> <li>KCNQ1</li> <li>KRAS</li> <li>LAMA4</li> <li>LAMP2</li> <li>LDB3</li> <li>LDLR</li> <li>LDLRAP1</li> <li>LMNA</li> <li>LOX</li> <li>LRRC10</li> <li>LTBP4</li> <li>MAP2K1</li> <li>MAP2K1</li> <li>MAP2K2</li> <li>MAT2A</li> <li>MED12</li> <li>MFAP5</li> <li>MIB1</li> </ul>	<ul> <li>MURC</li> <li>MYBPC3</li> <li>MYH11</li> <li>MYH6</li> <li>MYH7</li> <li>MYL2</li> <li>MYL3</li> <li>MYL4</li> <li>MYL4</li> <li>MYLK2</li> <li>MYLK2</li> <li>MYOZ2</li> <li>MYPN</li> <li>NEBL</li> <li>NEXN</li> <li>NKX2-5</li> <li>NOTCH1</li> <li>NRAS</li> <li>PCSK9</li> <li>PDLIM3</li> <li>PKP2</li> </ul>	<ul> <li>PLN</li> <li>PLOD1</li> <li>PPA2</li> <li>PRDM16</li> <li>PRCM5</li> <li>PRKAG2</li> <li>PRKG1</li> <li>PTPN11</li> <li>PYCR1</li> <li>RAF1</li> <li>RAF1</li> <li>RASA1</li> <li>RBM20</li> <li>RIN2</li> <li>RIT1</li> <li>RYR2</li> <li>SCN10A</li> <li>SCN1B^</li> <li>SCN2B</li> <li>SCN3B</li> </ul>	<ul> <li>SCN4B</li> <li>SCN5A</li> <li>SGCD</li> <li>SHOC2</li> <li>SKI</li> <li>SLC2A10</li> <li>SLC39A13</li> <li>SMAD2</li> <li>SMAD3</li> <li>SMAD4</li> <li>SMAD4</li> <li>SMAD9</li> <li>SNTA1</li> <li>SOS1</li> <li>TAZ^</li> <li>TBX20^</li> <li>TCAP</li> <li>TECRL</li> <li>TGFB2</li> <li>TGFB3</li> <li>TGFBR1</li> </ul>	<ul> <li>TGFBR2</li> <li>TMEM43</li> <li>TMPO</li> <li>TNNC1</li> <li>TNN13</li> <li>TNNT2</li> <li>TNXB</li> <li>TOR1AIP1</li> <li>TPM1</li> <li>TRDN</li> <li>TRPM4</li> <li>TTN</li> <li>TTR</li> <li>TXNRD2</li> <li>VCL</li> <li>ZNF469</li> </ul>
			Pulmo	nary Genes				
CCDC39CHRNDCCDC40CHRNECFTRCOLQCHATCSF2RACHRNA1CSF2RBCHRNB1DKC1		NAL1 DN3 EMP2 .MOD2	OFLCNC FOXF1C GAS8C GLRA1C	ITGA3     O     N       LTBP4     O     P       MECP2     O     P       NAF1     O     P		14A O SERPIN 19 O SFTPA1 .1 O SFTPA2	3 O SLC34A2 A1 O SLC6A5 O SLC7A7	<ul> <li>TERC</li> <li>TERT</li> <li>TINF2</li> <li>TSC1</li> <li>TSC2</li> <li>ZEB2</li> </ul>
ICD-10 DIAGNOSIS CODES WITH DESCRIPTION CardioGenomics Disease								
E78.4 - Other Hyperlipidemia		L 125.2			sis with insufficiency	/ □ R60.1 - Gener	alizad adama	
<ul> <li>G89.29 - Other Chronic Pain</li> <li>I42.0 - dilated Cardio</li> <li>I10 - Essential (Primary) Hypertension</li> <li>I42.5 - Other restrictive</li> <li>I25.10 - Atherosclerotic heart disease of native</li> <li>I25.5 - Ischemic Cardiovascular</li> <li>I25.6 - Silent Myocardial Ischemia</li> <li>I25.9 - Other forms of chronic ischemic heart disease</li> <li>I25.9 - Other forms of chronic ischemic heart disease</li> <li>I25.9 - Chronic ischemic heart disease, unspecified</li> <li>I34.1 - Nonrheumatic mitral (valve) prolapse</li> <li>I34.2 - Nonrheumatic mitral (valve) stenosis</li> <li>I35.8 - Other nonreheumatic mitral valve disorders</li> <li>I35.0 - Nonrheumatic aortic (Valve) Insufficiency</li> <li>I35.1 - Nonrheumatic aortic (Valve) Insufficiency</li> <li>I35.1 - Nonrheumatic aortic (Valve) Insufficiency</li> <li>I0 - E78.01 - Familial hy</li> </ul>			ve CardiovascularR06.00Dyspnea, unspecifiedlar tachycardiaR06.09Other forms of dyspneaemature depolarizationPR06.3Periodic breathingrial fibrillationR06.89Other abnormalities of breathingfibrillationR07.9Chest pain, unspecifiedd cardiac arrhythmiasR07.2Precordial painunspecifiedR07.82Intercostal painc (congestive) heart failureR94.31Nonspecific abnormalolic (congestive) heart failureZ79.01- Long term (current) use of anticoagonic diastolic (congestive) heart failureZ01.810Encounter for preprocedural cardiovascular examinationseases classified elsewhereZ01.812Encounter for preprocedural laboratory examinationcollapseZ01.818Encounter for other preprocedural examination				breathing G)(EKG) of anticoagulants edural ation edural	
Pulmonary Disease         C34.1-Malignant Neoplasm of upper lobe, right bronchus or lung       Image: Disease display the second display to the second dis								
<ul> <li>C34.12-Malignant Neoplasm of upper lobe, left bronchus or lung</li> <li>C34.2-Malignant Neoplasm of Middle lobe, bronchus or lung</li> <li>C34.31-Malignant Neoplasm of lower lobe, right bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>C34.32-Malignant Neoplasm of lower lobe, left bronchus or lung</li> <li>S44.9-Chronic Obstructive Pulmonary Disease with acute exacerbation</li> <li>J44.1-Chronic Obstructive Pulmonary Disease with acute exacerbation</li> <li>J44.1-Chronic Obstructive Pulmonary Disease NOS</li> <li>J20.0-Acute bronchitis due to Mycoplasma pneumoniae</li> <li>J20.1-Acute bronchitis due to Mycoplasma pneumoniae</li> <li>J20.4-Acute bronchitis due to coxsackievirus</li> <li>J20.5-Acute bronchitis due to respiratory syncytial virus</li> <li>J20.5-Acute bronchitis due to rhinovirus</li> <li>J20.6-Acute bronchitis due to other specified organisms</li> <li>J20.9-Acute bronchitis due to other specified organisms</li> <li>J20.9-Acute pulmonary Edema</li> <li>R06.02 -Shortness of Breath</li> <li>R06.22-Sweezing   R05-Cough</li> <td colspan="6"><ul> <li>J20.6-acute bronchitis due to rhinovirus</li> <li>J20.7-Acute bronchitis due to echovirus</li> <li>J20.8-Acute bronchitis due to other specified organisms</li> <li>J20.9-Acute bronchitis, unspecified</li> <li>J16.8-Pneumonia due to other specified infectious organisms</li> <li>J18.9-Pneumonia, unspecified organism</li> <li>J40-Bronchitis, not specified as acute or chronic</li> <li>J44.1-Obstructive chronic bronchitis, with (acute) exacerbation</li> <li>J45.20-Mild Intermittent Asthma</li> <li>J45.23-Mild Intermittent Asthma with acute exacerbation</li> <li>J45.31-Mild Persistent Asthma with acute exacerbation</li> <li>J45.42-Moderate persistent Asthma with acute exacerbation</li> <li>J45.21-Mild Intermittent Asthma with acute exacerbation</li> <li>J45.23-Mild Persistent Asthma with acute exacerbation</li> <li>J45.24-Moderate persistent Asthma with acute exacerbation</li> <li>J45.25-Severe persistent Asthma with acute exacerbation</li> <li>J45.30-Mild Persistent Asthma with acute exacerbation</li> <li>J45.32-Mild Persistent Asthma with acute exacerbation</li> <li>J45.31-Mild Persistent Asthma with acute exacerbation</li> <li>J45.21-Mild Intermittent Asthma with acute exacerbation</li> <li>J45.21-Mild Persistent Asthma with acute exacerbation</li> <li>J45.30-Mild Persistent Asthma with acute exacerbation</li> <li>J45.31-Mild Persistent Asthma with acute exacerbation</li> <li>J45.32-Severe persistent Asthma with acute exacerbation</li> <li>J45.32-Severe persistent Asthma with acute exacerbation</li> <li>J45.52-Severe persistent Asthma with acute exacerbation</li> <li>J45.53-Severe persistent Asthma with acute exacerbation</li> <li>J45.51-Severe persistent Asthma with acute exacerbation</li> <li>J45.909-Unspecified asthma, uncomplicated</li> <li>J44.9-Chronic obstructive pulmonary disease, unspecified</li> </ul></td></ul>			<ul> <li>J20.6-acute bronchitis due to rhinovirus</li> <li>J20.7-Acute bronchitis due to echovirus</li> <li>J20.8-Acute bronchitis due to other specified organisms</li> <li>J20.9-Acute bronchitis, unspecified</li> <li>J16.8-Pneumonia due to other specified infectious organisms</li> <li>J18.9-Pneumonia, unspecified organism</li> <li>J40-Bronchitis, not specified as acute or chronic</li> <li>J44.1-Obstructive chronic bronchitis, with (acute) exacerbation</li> <li>J45.20-Mild Intermittent Asthma</li> <li>J45.23-Mild Intermittent Asthma with acute exacerbation</li> <li>J45.31-Mild Persistent Asthma with acute exacerbation</li> <li>J45.42-Moderate persistent Asthma with acute exacerbation</li> <li>J45.21-Mild Intermittent Asthma with acute exacerbation</li> <li>J45.23-Mild Persistent Asthma with acute exacerbation</li> <li>J45.24-Moderate persistent Asthma with acute exacerbation</li> <li>J45.25-Severe persistent Asthma with acute exacerbation</li> <li>J45.30-Mild Persistent Asthma with acute exacerbation</li> <li>J45.32-Mild Persistent Asthma with acute exacerbation</li> <li>J45.31-Mild Persistent Asthma with acute exacerbation</li> <li>J45.21-Mild Intermittent Asthma with acute exacerbation</li> <li>J45.21-Mild Persistent Asthma with acute exacerbation</li> <li>J45.30-Mild Persistent Asthma with acute exacerbation</li> <li>J45.31-Mild Persistent Asthma with acute exacerbation</li> <li>J45.32-Severe persistent Asthma with acute exacerbation</li> <li>J45.32-Severe persistent Asthma with acute exacerbation</li> <li>J45.52-Severe persistent Asthma with acute exacerbation</li> <li>J45.53-Severe persistent Asthma with acute exacerbation</li> <li>J45.51-Severe persistent Asthma with acute exacerbation</li> <li>J45.909-Unspecified asthma, uncomplicated</li> <li>J44.9-Chronic obstructive pulmonary disease, unspecified</li> </ul>					

□ <b>R07.81</b> -Pleurodynia	J90-Pleural effusion, not elsewhere classified				
J45.20 Mild Intermittent Asthma	J98.11-Atelectasis				
J45.23-Mild Intermittent Asthma with status asthmaticus	J98.19-Other pulmonary collapse				
□ J45.31-Mild Persistent Asthma with acute exacerbation	<b>J98.2</b> -Interstitial emphysema				
J45.40-Moderate persistent Asthma	□ J81.0-Acute pulmonary edema				
J45.42-Moderate persistent Asthma with status asthmaticus	J95.84-Transfusion related acute lung injury (TRALI)				
J45.21-Mild Intermittent Asthma with acute exacerbation	□ J96.00-Acute respiratory failure, unspecified whether with hypoxia or hypercapnia				
J45.30-Mild Persistent Asthma	<b>J96.0</b> -Acute respiratory failure				
J45.32-Mild Persistent Asthma with status asthmaticus	J96.02-Acute respiratory failure with hypercapnia				
□ J45.41-Moderate persistent Asthma with acute exacerbation	J98.4-Other disorders of lung				
□ J45.52-Servere persistent Asthma with status asthmaticus	□ J96.10- Chronic respiratory failure, unspecified whether with hypoxia or hypercapnia				
J45.50-Servere persistent Asthma	J96.11- Chronic respiratory failure with hypoxia				
□ J45.51-Servere persistent Asthma with acute exacerbation	J96.12-Chronic respiratory failure with hypercapnia				
□ <b>R22.2</b> -Localized swelling, mass and lump, trunk	□ J96.20- Acute/Chronic respiratory failure, unspecified whether with hypoxia or hypercapnia				
R09.02 Hypoxemia	J96.21-Acute/Chronic respiratory failure with hypoxia				
<b>R91.8-</b> Nonspecific abnormal finding of lung field in diagnostic imaging	□ J96.22-Acute/Chronic respiratory failure with hypercapnia				
<b>R94.2</b> -Abnormal results of pulmonary function studies	J98.4-Other disorders of lung				
A41.9-Sepsis, unspecified organism Malignant neoplasm of trachea, bronchus, lung	N17.9-Acute kidney failure, unspecified				
C33-Trachea	R06.02-Shortness of breath				
<b>C34.00</b> -Unspecified main bronchus	R06.2-Wheezing				
<b>C34.10-</b> Upper lobe unspecified bronchus or lung	<b>R09.89-</b> Other specified symptoms and signs involving the circulatory and respiratory systems				
C34.2-Middle lobe bronchus or lung	R05-Cough				
C34.30-Lower lobe bronchus or lung	R07.1-Chest pain on breathing				
<b>C34.80-</b> Overlapping sites of unspecified bronchus or lung	<b>R07.81</b> -Pleurodynia				
E84.0-Cystic fibrosis with pulmonary manifestation	R22.2-Localized swelling, mass and lump, trunk (chest mass)(localized swelling of chest)				
G47.33-Obstructive sleep apnea (adult) (pediatric)	R91.8-Other nonspecific abnormal finding of lung field(lung mass)				
□ <b>I26.99-</b> Other pulmonary embolism without acute corpulmonale	R91.1-Solitary pulmonary nodule				
□ 127.0-Primary pulmonary hypertension	R91.8-Other nonspecific abnormal finding of lung field				
I95.9-Hypotension, unspecified	R94.2-Abnormal results of pulmonary function studies				
□ J20.0-Acute bronchitis due to Mycoplasma pneumoniae	□ <b>R09.02-</b> Hypoxemia				
□ J20.0-Acute bronchitis due to Mycoplasma pneumoniae	□ J98.4-Other disorders of lung				
□ J20.1-Acute bronchitis due to Hemophilius influenzae	□ <b>R65.20</b> -Severe sepsis without septic shock (sequence the underlying infection first)				
□ J20.2-Acute bronchitis due to streptococcus	<b>Z85.118-</b> Personal history of malignant neoplasm of bronchus and lung				
□ J20.3-Acute bronchitis due to coxsackievirus	<b>Z79.01-</b> Long-term (current) use of anticoagulants				
□ J20.4-Acute bronchitis due to parainfluenza virus					
	1				

### Additional ICD10 codes:

# **INFORMED CONSENT**

For the purposes of this consent, "I", "my", and "your" will refer to me or to my child, including my unborn child, if my child is the person for whom the healthcare provider has ordered testing.

**PURPOSE OF THIS TEST** - The purpose of this test is (a) to see if I may have a genetic variant or chromosome rearrangement causing a genetic disorder; or (b) to evaluate the chance that I will develop or passon a genetic disorder in the future. If I already know the specific gene variant(s) or chromosome rearrangement that causes the genetic disorder in my family, I agree to inform the laboratory of this information.

### WHAT TYPE OF TEST RESULTS CAN I EXPECT FROM GENETIC TESTING?

1. Positive: A change in your DNA was found, which is very likely the cause of your features/symptoms. This is the most straightforward test result, which can be used as the basis to test other family members to determine their chances of having either the disease or a child with the disease.

2. Negative: No variants were found to explain your symptoms. This does not mean that you do not have a genetic condition. It is still possible that there is a genetic variant not found by the test that was ordered. Your healthcare provider or genetic counselor may discuss more testing either now or in the future.

3. Variant of Uncertain Significance (VUS): A change in a gene was found. However, we are not sure whether this variant is the cause of your symptoms/features. More information is needed. We may suggest testing other family members to help figure out the meaning of the test result.

4. Unexpected Results: In rare instances, this test may reveal an important genetic change that is not directly related to the reason for ordering this test. For example, this test may find you are at risk for another genetic condition I am not aware of or it may indicate differences in the number or rearrangement of sex chromosomes. We may disclose this information to the ordering healthcare provider if it likely affects medical care. Because medical and scientific knowledge is constantly changing, new information that becomes available may supplement the information **Medex Laboratories Inc** used to interpret my results.

Healthcare providers can contact Medex Laboratories Inc at any time to discuss the classification of an identified variant.

## WHAT IS TRIO/DUO-BASED GENETIC TESTING?

For some genetic tests, including samples from the biological parents and/or other biological relatives along with the patient's sample can help with the interpretation of the test results. These tests are often referred to as "trio tests" since they typically include samples from the patient and both parents. Samples from relatives should be submitted with the patient's sample.

I understand that **Medex Laboratories Inc** will use the relative sample(s) when needed for the interpretation of my test results and that my test report may include clinical and genetic information about relative when it is relevant to the interpretation of the test results. I further understand that relatives will not receive an independent analysis of data nor a separate report.

## RISKS AND LIMITATIONS OF GENETIC TESTING

1. In some cases, testing may not identify a genetic variant even though one exists. This may be due to limitations in current medical knowledge or testing technology.

2. Accurate interpretation of test results may require knowing the true biological relationships in a family. I understand that if I fail to accurately state the biological relationships in my family, it could lead to incorrect interpretation of the test results, incorrect diagnoses, and/or inconclusive test results. If genetic testing reveals that the true biological relationships in a family are not as I reported them, including non-paternity (the reported father is not the biological father) and consanguinity (the parents are related by blood), I agree to have these findings reported to the healthcare provider who ordered the test.

3. Although genetic testing is highly accurate, inaccurate results may occur. These reasons include, but are not limited to mislabeled samples, inaccurate reporting of clinical/medical information, rare technical errors, or other reasons.

4. I understand that this test may not detect all of the long-term medical risks that I might experience. The result of this test does not guarantee my health and that additional diagnostic tests may still need to be done.

5. I agree to provide an additional sample if the initial sample is not adequate.

## PATIENT CONFIDENTIALITY AND GENETIC COUNSELING

It is recommended that I receive genetic counseling before and after having this genetic test. I can find a genetic counselor in my area at www.nsgc.org. Further testing or additional consultations with a healthcare provider may be necessary.

To maintain confidentiality, test results will only be released to the referring healthcare provider, the ordering laboratory, to me, to other healthcare providers involved in my care, diagnosis and treatment, or to others with my consent or as permitted or required by law. Federal laws prohibit unauthorized disclosure of this information. More information can be found at: www.genome.gov/10002077

### **INTERNATIONAL SAMPLES**

If I reside outside the United States, I attest that by providing a sample for testing, I am not knowingly violating any export ban or other legal restriction in the country of my residence.

### SAMPLE RETENTION

After testing is complete, my sample may be de-identified and be used for test development and improvement, internal validation, quality assurance, and training purposes. **Medex Laboratories Inc** will not return DNA samples to you or to referring healthcare providers, unless specific prior arrangements have been made. I understand that samples from residents of New York State will not be included in the de-identified research studies described in this authorization and will not retain them for more than 60 days after test completion, unless specifically authorized by my selection. The authorization is optional, and testing will be unaffected if I do not check the box for the New York authorization language. **Medex Laboratories Inc** will not perform any tests on the biological sample other than those specifically authorized.

### DATABASE PARTICIPATION

De-identified health history and genetic information can help healthcare providers and scientists understand how genes affect human health. Sharing this de-identified information helps healthcare providers to provide better care for their patients and researchers to make new discoveries. **Medex Laboratories Inc** shares this type of information with healthcare providers, scientists, and healthcare databases. **Medex Laboratories Inc** will not share any personally identifying information and will replace the identifying information with a unique code not derived from any personally identifying information. Even with a unique code, there is a risk that I could be identified based on the genetic and health information that is shared. **Medex Laboratories Inc** believes that this is unlikely, though the risk is greater if I have already shared my genetic or health information with public resources, such as genealogy websites.

## **INFORMED CONSENT**

### EXOME/GENOME SEQUENCING SECONDARY FINDINGS

Applicable Only for Full Exome Sequencing and Genome Sequencing Tests.
 Oees not pertain to Xpanded® or Slice tests

As many different genes and conditions are analyzed in an exome or genome sequencing test, these tests may reveal some findings not directly related to the reason for ordering the test. Such findings are called "incidental" or "secondary" and can provide information that was not anticipated.

Secondary findings are variants, identified by an exome or genome sequencing test, in genes that are unrelated to the individual's reported clinical features.

The American College of Medical Genetics and Genomics (ACMG) has recommended that secondary findings identified in a specific subset of medically actionable genes associated with various inherited disorders be reported for all probands undergoing exome or genome sequencing. Please refer to the latest version of the ACMG recommendations for reporting of secondary findings in clinical exome and genome sequencing for complete details of the genes and associated genetic disorders. Reportable secondary findings will be confirmed by an alternate test method when needed.

WHAT WILL BE REPORTED FOR THE PATIENT? - All pathogenic and likely pathogenic variants associated with specific genotypes identified in the genes (for which a minimum of 10X coverage was achieved by exome sequencing), as recommended by the ACMG. WHAT WILL BE REPORTED FOR RELATIVES? - The presence or absence of any secondary finding(s) reported for the proband will be provided for all relatives analyzed

### by an exome or genome sequencing test.

LIMITATIONS - Pathogenic and/or likely pathogenic variants may be present in a portion of the gene not covered by this test and therefore are not reported. The absence of reportable secondary findings for any particular gene does not mean there are no pathogenic and/or likely pathogenic variants in that gene. Pathogenic variants and/or likely pathogenic variants that may be present in a relative, but are not present in the proband, will not be identified, or reported. Only changes at the sequence level will be reported in the secondary findings report. Larger deletions/duplications, abnormal methylation, triplet repeat or other expansion variants, or other variants not routinely identified by clinical exome and genome sequencing will not be reported.

FINANCIAL AGREEMENT AND GUARANTEE - For insurance billing, I understand and authorize Medex Laboratories Inc to bill my health insurance plan on my behalf, to release any information required for billing, and to be my designated representative for purposes of appealing any denial of benefits. I irrevocably assign to and direct that payment be made directly to I understand that my out-of-pocket costs may be different than the estimated amount indicated to me by Medex Laboratories Inc as part of a benefit investigation. I agree to be financially responsible for any and all amounts as indicated on the explanation of benefits issued by my health insurance plan. If my insurance provider sends a payment directly to me for services performed by Medex Laboratories Inc on my behalf, I agree to endorse the insurance check and forward it to Medex Laboratories Inc within 30 days of receipt as payment towards Medex Laboratories Inc claim for services rendered.

### MEDICARE

A completed Advance Beneficiary Notice (ABN) is required for Medicare patients.

### DIGITAL PATIENT LETTER CONSENT

Applicable Only for Commercial Insurance

• Estimate is provided by your health insurance company and therefore NO estimate will be sent for any orders placed with federal or state-funded insurance plans (e.g. Medicare, Medicaid, Tricare, etc.), institutional bill, or patient bill (self-pay).

To provide you with the estimated out-of-pocket expenses related to your test, **Medex Laboratories Inc** will send you an email and/or text with the link to access your personalized Digital Patient Letter.

In order to send this information, we need your consent and agreement to the following items:

1. can use your email address or mobile phone number solely for the purpose of **Medex Laboratories Inc** sending your estimated financial obligation. Text message data rates may apply. is not responsible for undelivered messages due to incorrect or illegible contact information.

2. will send you an email and/or text message containing a link to view your personalized Patient Letter that includes the test out-of-pocket estimate. The link is time-sensitive and will only be available for 72 hours from the time the message is sent. In order to view the estimate, you must click the link in the message.

3. If you take no action, **Medex Laboratories Inc** will assume that you agree to move ahead with testing and will bill your health insurance. You can approve testing with insurance, switch to self-pay, or cancel the test via the link within the given 72-hour window. In turn, **Medex Laboratories Inc** if receives your sample(s) and the billing method hasn't been changed, or the test hasn't been cancelled, we will move ahead with testing as ordered, and you will be responsible for any out-of-pocket costs for the completion of the test(s).

## **Patient Signature**

I hereby assign all rights and benefits under my health plan and all rights and obligations that I and my dependents have under my health plan to **Medex Laboratories Inc** its assigned affiliates and authorized representatives for laboratory services furnished to me by **Medex Laboratories Inc** | irrevocably designate, authorize and appoint **Medex Laboratories Inc** or its assigned affiliates and their authorized representatives as my true and lawful attorney-in-fact for the purpose of submitting my claims, obtain a copy of my health plan document, Summary Plan Description, disclosure, appeal, litigation or other remedies in accordance with the benefits and rights under my health plan and in accordance with federal or state laws. If my health plan fails to abide by my authorization and makes payment directly to me, I agree to endorse the insurance check and forward it to **Medex Laboratories Inc** immediately upon receipt. I hereby authorize **Medex Laboratories Inc** its assigned affiliates and authorized representatives to contact me or my health Plan/administrator for billing or payment purposes by phone, text message, or email with the contact information that I have provided to **Medex Laboratories Inc**, in compliance with federal and state laws. **Medex Laboratories Inc**, its assigned affiliates and their authorized representatives may release to my health plan administrator, my employer, and my authorized representative my personal health information for the purpose of procuring payment of **Medex Laborator fries Inc** and for all the laboratory services. I understand the acceptance of insurance does not relieve me from any responsibility concerning payment for laboratory services and that I am financially responsible for all charges whether or not they are covered by my insurance.

Signature of Patient or Patient Representative / Relationship to Patient

### **ORDERING PHYSICIAN SIGN HERE**

## Physician must only order tests that are medically necessory for the diagnosis or treatment of a patient

I attest that this test is medically necessary for the diagnosis or detection of a disease or disorder and that the results will be used in medical management and care decisions for the patient. Furthermore, all information on this Requisition Form is true to the best of my knowledge. I agree to provide the Care Plan notes and Letter of Intent for this order if the insurance requests the lab to gather the medical necessity for any reason

Date: