Royal Brompton and Harefield hospitals





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## **Molecular Genetic Testing Request Form**

For detailed lab and referral information please see our website: https://www.rbht.nhs.uk/our-services/clinical\_support/laboratories/clinical-genetics-and-genomics-laboratory

All fields are mandatory. Illegible, unclear or incomplete forms or incorrect blood containers will result in delayed processing or no tests being performed

Patient Details (Affix sticker if available. A minimum of three identifiers are required)			Referrer Details		
Family name:	Sex: M/F	Billing: NHS/PP	Referrer: Tel:		
First name(s):	Hospital Numb	oer:	Named Consultant:		
Date of Birth:	NHS number:		Hospital:		
Postcode:	CGGL Family Number:		Department:		
Ethnic origin: □Caucasian □African/African American □S Asian (inc. Bangladeshi, Indian & Pakistani) □E Asian (inc. □Mixed □Other □	Chinese & Japanese)		NHS email address: CC reports to (name and address):		
Clinical information and family history Plea Please ensure this referral complies with current eligibility criteria: I			the state of the s		
Have other members of this family been tested by our lab? Y/N Please provide details:  Is this sample urgent Y/N Please indicate why:					
CONSENT STATEMENT: The results of a genetic test may have implications both for the person being tested and for other members of that person's family. It is the referring clinician's responsibility to ensure that the patient/carer knows the purpose of the test, that the sample may be stored for future diagnostic testing, and that the sample may be used to inform appropriate healthcare of members of the patient's family.  In sending this form and sample for testing, the clinician has obtained consent for testing, storage and for the use of this sample and the information gathered from it to be shared with members of the patient's family through their health professionals (if appropriate). The patient should be advised that the sample may be used anonymously for quality assurance and training purposes. If the patient does not wish information to be shared, or does not wish the sample to be stored, or to be used for quality assurance and training purposes, please write this clearly in the clinical summary box.  In the course of genetic analysis, we generate sequence data on many genes. It is foreseeable, that in a small proportion of cases, that while not actively sought, we will identify "incidental" findings in genes unrelated to the initial presenting clinical phenotype. Incidental Pathogenic/Likely Pathogenic variants in genes listed in the ACMG SF v3.1 list of secondary findings may be reported, following discussion with the referring clinician.  Consent for any surplus diagnostic samples to be used in ethical research projects approved by the Trust's research office. Some research projects nvolve collaboration with commercial companies. Samples will not be used for any animal experiments, or any research that benefits non-healthcare industry. Clinical data will only be accessed by authorised staff in relation to approved research projects and will be anonymised to any person not involved my direct clinical care.    Yes					
Patient/parent's signature Consent undertaken by:			Date		
Clinician's name		Clinician's signature			
PHLEBOTOMY/REFERRER: Please take 2x 4ml El A minimum of 2x 1ml of EDTA Blood is acceptable for paed		LAB USE ONLY Sample(s) received:			
Date of collection:	•	Aliquot checked:			

Diagnostic testing is by Next Generation Sequencing (NGS) using custom panels. Data is generated and stored on all genes in each panel. Analysis, including CNV calling, will be reported on the genes of clinical relevance to the disease category requested below. Incidental findings may also be reported (see consent statement on page 1)

For full details of genes on each subpanel, please refer to our website (see page 1). National Genomic Test Directory codes ('R' no.) are included for cardiac and respiratory specialist test groups (in bold) only. NOTE: for NHS commissioned testing, requests MUST be for one of the Test directory coded panels.

CARDIAC	HPO terms				
Please select a panel(s) for testing using tick boxes below	Please indicate any relevant HPO terms from the lists below IF APPLICABLE (major HPO terms only are listed)				
Aortopathy disorders	Cardiac related				
$\square$ R125 Familial thoracic aortic aneurysm (FTAA)	<ul><li>☐ Aortic aneurysm</li><li>☐ Aortic dissection</li></ul>	<ul> <li>☐ Arachnodactyly</li> <li>☐ Joint dislocation</li> </ul>			
☐ R140.1 Elastin-related phenotypes	☐ Arterial dissection	☐ Pectus excavatum			
Arrhythmias	☐ Ectopia lentis	☐ Bicuspid aortic valve			
☐ R127 Long QT syndrome (LQTS)	☐ Myopia	☐ Arterial tortuosity			
☐ R128 Brugada syndrome (BrS)	<ul> <li>☐ Disproportionate tall stature</li> <li>☐ Ventricular fibrillation</li> </ul>	<ul> <li>☐ Aneurysm-osteoarthritis syndrome</li> <li>☐ Bruising susceptibility</li> </ul>			
☐ R129 Catecholaminergic polymorphic VT (CPVT)	☐ Atrial fibrillation	☐ Tachycardia			
☐ R130 Short QT syndrome	☐ Atrial flutter	☐ Bradycardia			
☐ R328 Progressive cardiac conduction disease	<ul><li>☐ Prolonged QTc interval</li><li>☐ Shortened QT interval</li></ul>	<ul><li>☐ Syncope</li><li>☐ Palpitations</li></ul>			
Cardiomyopathies	☐ Left bundle branch block	☐ Right bundle branch block			
☐ R131 Hypertrophic cardiomyopathy (HCM)	☐ ST segment elevation	<ul> <li>☐ Impaired myocardial contractility</li> <li>☐ Sudden cardiac death</li> </ul>			
□ R132 Dilated/arrhythmogenic cardiomyopathy (DCM/ACM)	<ul><li>☐ Atrioventricular block</li><li>☐ Subvalvular aortic stenosis</li></ul>	☐ Severely reduced left ventricular			
☐ R133 Arrhythmogenic right ventricular cardiomyopathy (ARVC)	☐ Hypertrophic cardiomyopathy	ejection fraction			
☐ R138 Sudden unexplained death or survivors of a cardiac event	☐ Asymmetric septal hypertrophy	☐ Increased left ventricular end-diastolic			
☐ R135 Paediatric or syndromic cardiomyopathy	<ul><li>☐ Congestive heart failure</li><li>☐ Arrhythmia</li></ul>	volume  ☐ Sensorineural hearing impairment			
☐ (R135) RASopathies/Noonan syndrome	☐ Ventricular arrhythmia	☐ Generalized arterial calcification			
Other cardiac conditions	☐ Sinus bradycardia	$\square$ Premature arteriosclerosis			
	☐ Dilated cardiomyopathy	☐ Precocious atherosclerosis			
☐ R384 Generalised arterial calcification in infancy	☐ Cardiomegaly ☐ Arterial stenosis	<ul><li>☐ Hypertension</li><li>☐ Angina pectoris</li></ul>			
☐ R391 Barth syndrome	☐ Congestive heart failure	☐ Myocardial infarction			
☐ R134 Familial Hypercholesterolaemia including PRS	☐ Abnormal left ventricular	☐ Coronary artery atherosclerosis			
Primary Lymphoedema	function  Heart murmur	☐ Abnormality of the lymphatic system			
□ R136 Primary Lymphoedema	☐ Pulmonary artery stenosis	☐ Short stature			
,,,,	, ,	Other (state)			
RESPIRATORY	Respiratory	related			
Bronchiectasis/Cystic Fibrosis/Ciliopathies	☐ Bronchiectasis	☐ Failure to thrive			
☐ R184 Cystic Fibrosis, <i>CFTR</i> full gene including introns	☐ Chronic bronchitis	☐ Exocrine pancreatic insufficiency			
☐ R189 Respiratory ciliopathies including non-CF bronchiectasis	<ul><li>☐ Chronic rhinitis</li><li>☐ Chronic sinusitis</li></ul>	☐ Situs inversus totalis			
☐ R139 Laterality disorders & isomerism (heterotaxy)	☐ Recurrent respiratory infections	☐ Ciliary dyskinesia ☐ Immotile cilia			
	☐ Nasal polyposis	☐ Absent outer dynein arms			
Congenital respiratory conditions	☐ Chronic otitis media	☐ Absent inner dynein arms			
☐ R330 Alveolar capillary dysplasia	<ul><li>☐ Elevated sweat chloride</li><li>☐ Abnormal lung lobation</li></ul>	☐ Male infertility ☐ Hypoventilation			
☐ R333 Central Congenital Hypoventilation syndrome	☐ Alveolar capillary dysplasia	☐ Hypoxemia			
☐ Periventricular nodular heterotopia and lung disease (FLNA) ☐ R421 Pulmonary alveolar microlithiasis (PAM)	☐ Neonatal respiratory distress	☐ Apnea			
, , ,	<ul> <li>Progressive pulmonary function impairment</li> </ul>	☐ Intra-alveolar nodular calcifications			
Emphysema	☐ Emphysema	☐ Absent surfactant-protein			
□ R191 Alpha-1-Antitrypsin deficiency (AAT)	☐ Desquamative interstitial	☐ Interstitial pneumonitis			
☐ All Emphysema genes (small panel)	pneumonitis	☐ Respiratory insufficiency ☐ Pulmonary fibrosis			
Interstitial Lung Disease (ILD)	<ul><li>☐ Respiratory distress</li><li>☐ Respiratory failure</li></ul>	□ Cough			
☐ R192 Surfactant deficiency (includes childhood ILD)	☐ Ground-glass opacification	☐ Exertional dyspnea			
☐ R421 Familial Pulmonary Fibrosis	☐ Crazy paving pattern	☐ Elevated pulmonary artery			
Pulmonary Hypertension	<ul> <li>☐ Abnormal pulmonary interstitial morphology</li> </ul>	pressure  Increased pulmonary vascular			
☐ R188 Pulmonary Arterial Hypertension	☐ Pulmonary arterial hypertension	resistance			
Vasculopathies	☐ Abnormal pleura morphology	☐ Telangiectasia of the skin			
	☐ Pneumothorax	☐ Mucosal telangiectasiae			
☐ R190 Familial Pneumothorax	<ul><li>☐ Epistaxis</li><li>☐ Arteriovenous malformation</li></ul>	☐ Spontaneous hematomas			
☐ R186 Hereditary Haemorrhagic Telangiectasia (HHT)		Other (state)			
TESTING FOR A KNOWN FAMILIAL VARIANT: A COPY OF PROBAND R	EPORT AND A POSITIVE CONTROL	SAMPLE MUST BE SUPPLIED. OR FULL			
DETAILS OF WHERE THE PROBAND WAS TESTED MUST BE INDICATED					
R240.1 Diagnostic/confirmatory testing (patient has phenotype consistent with familial disease-causing variant)					
□ R242.1Predictive/pre-symptomatic testing (no or unknown phenotype; available for pathogenic or likely pathogenic variants only)					
☐ R244.1 Family studies (carrier testing or segregation analysis for variant interpretation)					
Variant/previous testing details:					
☐ R346.1 DNA STORAGE ONLY (no test will be performed until requested)					

Samples and forms should be sent to the lab packaged according to UN3373 guidance. All samples should be sent by first class post, courier or hospital transport.