

UHS LAB USE

Specimen(s) received (central): BMT / Slides / BMA EDTA / PB EDTA / Cyto / other

Specimen(s) distribution: Histo MGG Flow Flow WGLS Sal.

Iron WGLS Sot. WGLS Sot. WGLS Sal.

Date:

Specimen(s) received (local):

Barcode

HaemOnc. Test Request Form

Referrer Information		Patient Information	
Referring consultant		Surname	
Hospital		First Name	
Department		Date of Birth	Gender
Departmental Email (secure)		Hospital number	
Telephone number / bleep		NHS number	
<input type="checkbox"/> NHS <input type="checkbox"/> Private		Address	Postcode:

Diagnosis / clinical details			
• How does the patient meet the National Genomic Test Directory eligibility <sup>a</sup> ?			
• Clinical utility <sup>b</sup> :	Patient management <input type="checkbox"/>	Infection Risk? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Priority	Urgent <input type="checkbox"/> Cancer pathway <input type="checkbox"/> Routine <input type="checkbox"/> <i>Please notify the laboratory if clinically urgent</i>		

Sample details (see reverse for instructions)	Operator:	Tel./Bleep	
Lab reference number (referrals to UHS)	Collection date/time	Histo. macro. UHS LAB USE	UHS lab use only
Specimen type	PB <input type="checkbox"/> BMA <input type="checkbox"/> BMT <input type="checkbox"/> Cytogenetics <input type="checkbox"/> CSF <input type="checkbox"/> FFPE <input type="checkbox"/> Fresh tissue <input type="checkbox"/> Other <input type="checkbox"/>		
<small>Refer to sample requirements overleaf. Please indicate if multiples of the same sample are collected eg. BM✓x2</small>	(EDTA) (EDTA) Biopsy <input type="checkbox"/> Resection <input type="checkbox"/> ..... <input type="checkbox"/> Trial (sent direct):..... Biopsy Site:.....		

Haematology request(s) ✓	Histopathology request(s) ✓
PB morphology <input type="checkbox"/> BM morphology <input type="checkbox"/> Iron stain <input type="checkbox"/> BMT (haem) <input type="checkbox"/>	BMT <input type="checkbox"/> CD138 IHC <input type="checkbox"/> Congo Red <input type="checkbox"/>

Flow cytometry test request(s) ✓ One EDTA per sub-section
Acute <input type="checkbox"/> Lymphoid <input type="checkbox"/> Ext. B <input type="checkbox"/> Ext. T <input type="checkbox"/> Plasma cell <input type="checkbox"/> Flow MRD <input type="checkbox"/>
<small>Inc. blast enumeration Progressive B / T panels as required or known disease (Send Away – specify BM / PB)</small>

Wessex Genomics Laboratory Service (Southampton) test request(s) ✓ One EDTA per sub-section		
JAK2 V617F (monitoring) <input type="checkbox"/>	BRAF V600E <input type="checkbox"/>	MYD88 L265P <input type="checkbox"/>
Post allo transplant chimerism <sup>5</sup> <input type="checkbox"/>	FVL/PTM genotyping <input type="checkbox"/>	CLL IGHV somatic hypermutation <input type="checkbox"/>
BCR::ABL1 qPCR – Presentation <sup>1</sup> <input type="checkbox"/>	BCR::ABL1 qPCR – Monitoring <sup>1</sup> <input type="checkbox"/>	BCR::ABL1 kinase domain mutation** <input type="checkbox"/>
Whole Genome Sequencing**	Acute leukaemia molecular (genetics) MRD <sup>2**</sup>	Clonality T cell disease <input type="checkbox"/>
Eligible tumour** presentation <input type="checkbox"/>	AML Follow up <input type="checkbox"/> (AML baseline from WGLS Salisbury <sup>3</sup> )	<small>A progressive testing strategy is used</small> B cell disease <input type="checkbox"/>
Paired Germline (approx. day 10-14) <input type="checkbox"/>	ALL Baseline <input type="checkbox"/> Follow up <input type="checkbox"/>	Include histology / immunophenotyping report
<input type="checkbox"/> Confirm no circulating tumour cells	<small>ADULT AND TYA PATIENTS ONLY*</small>	
<small>Must be confirmed before germline sample is collected. Please refer to central NHS England eligibility criteria. Ensure clinical details are entered.</small>	Date of diagnosis/this timepoint: ..... MRD Marker: ..... Transcript/mutation type: ..... <small>Must be provided to ensure timely processing and directing of samples</small>	

Wessex Genomics Laboratory Service (Salisbury) test request(s) ✓ (see reverse for sample details)	
Myeloid disorders (MDS, MPN, AML, SM, CML***)	ALL (T- and B-)
G-banding <input type="checkbox"/> FISH <input type="checkbox"/> Myeloid NGS panel <input type="checkbox"/>	G-banding <input type="checkbox"/> FISH <input type="checkbox"/> SNP array <input type="checkbox"/>
MPN panel (JAK2 V617F/CALR/MPL/JAK2 exon 12) <input type="checkbox"/>	Lymphoid (Mature: CLL, NHL, etc.)
KIT D816V (ddPCR) <input type="checkbox"/> Ext. KIT NGS panel (if D816V neg) <input type="checkbox"/>	FISH <input type="checkbox"/> TP53 NGS seq. <input type="checkbox"/>
FIP1L1-PDGFRα (diagnosis) <input type="checkbox"/>	Lymphoid NGS panel <input type="checkbox"/>
AML (urgent molecular testing)	Myeloma:
FLT3-ITD <input type="checkbox"/> FLT3-TKD <input type="checkbox"/> NPM1 <input type="checkbox"/> IDH1 <input type="checkbox"/> TP53 <input type="checkbox"/>	CD138-positive separation only (storage) <input type="checkbox"/>
***CML chronic phase is not a clinical indication for myeloid NGS panel	Myeloma FISH panel <input type="checkbox"/>

Requester			
Name		Signature	Date
Email / phone			/ /

## Sample transport

The referring laboratory is responsible for the safe transfer of tissue and it is thus recommended that Royal Mail Recorded Delivery or an equivalent tracked postal service is used.

Transport tracking ID

Please send flow samples to:	WGLS (Southampton) samples to:	WGLS (Salisbury) samples to:	BMT samples to:
Department of Immunology Laboratory Medicine University Hospital Southampton NHFT, Tremona Road, Southampton, Hampshire, SO16 6YD.	Formerly Department of Molecular Pathology Duthie Link Building, Mailpoint 225, University Hospital Southampton NHSFT, Tremona Road, Southampton, Hampshire, SO16 6YD.	Formerly Wessex Regional Genetics Laboratory Salisbury District Hospital, Salisbury, Wiltshire, SP2 8BJ	Department of Cellular Pathology, Pathology Block, Level E, Mailpoint 002. University Hospital Southampton NHSFT, Tremona Road, Southampton, Hampshire, SO16 6YD.
UKAS ref: 8696 ☎ 02381 206615 / 02381 206640 ✉ <a href="mailto:immunologylab@uhs.nhs.uk">immunologylab@uhs.nhs.uk</a>	UKAS ref: 9194 ☎ 02381 206638 ✉ <a href="mailto:wglscancergenomics@uhs.nhs.uk">wglscancergenomics@uhs.nhs.uk</a> ✉ <a href="mailto:wgs_cancerwgl@uhs.nhs.uk">wgs_cancerwgl@uhs.nhs.uk</a> (WGS ONLY)	UKAS ref: 1175 ☎ 01722 429080 ✉ <a href="mailto:shc-tr.WRGLdutyscientist@nhs.net">shc-tr.WRGLdutyscientist@nhs.net</a>	UKAS Ref: 8178 ☎ 023 8120 4879 ✉ <a href="mailto:cellpath@uhs.nhs.uk">cellpath@uhs.nhs.uk</a>
🌐 <a href="http://www.uhs.nhs.uk/health-professionals/pathology-services/handbook/laboratorymedicine">www.uhs.nhs.uk/health-professionals/pathology-services/handbook/laboratorymedicine</a>	🌐 <a href="http://www.uhs.nhs.uk/health-professionals/pathology-services/handbook/wessex-genomics-laboratory-service">www.uhs.nhs.uk/health-professionals/pathology-services/handbook/wessex-genomics-laboratory-service</a>		🌐 <a href="http://www.uhs.nhs.uk/health-professionals/pathology-services/handbook/cellularpathology">www.uhs.nhs.uk/health-professionals/pathology-services/handbook/cellularpathology</a>

## Sample requirements

Details on both the referral card and the sample tube should be complete and legible. A minimum of 3 ID points are required. We reserve the right to refuse to process samples with incomplete, illegible or ambiguous patient information. Any samples in the wrong tube or medium, or which are subject to significant delay in transit, are liable to be rejected.

- FOR ALL GENOMIC TESTING, PLEASE ALSO PROVIDE SPECIFIC INFORMATION DETAILING HOW THE PATIENT MEETS THE NATIONAL GENOMIC TEST DIRECTORY (NGTD) ELIGIBILITY CRITERIA FOR THE TEST BEING REQUESTED (see <http://www.england.nhs.uk/publication/national-genomic-test-directories> for further information)
- FOR ALL GENOMIC TESTING, PLEASE INDICATE HOW TESTING WILL IMPACT PATIENT CARE. PATIENT MANAGEMENT INCLUDES DETERMINING THERAPEUTIC DECISIONS AND/OR CLINICAL INVESTIGATION AND/OR SURVEILLANCE PROGRAMMES.

Flow cytometry	<b>EDTA whole blood, bone marrow or fluid in universal container.</b> Sample must arrive and be tested within 72 hours of collection
WGLS (Southampton) Formerly Molecular Pathology	<b>FFPE:</b> Send FFPE block (preferred) or tissue scrolls (3 x 20µm). Scrolls should be prepared on a clean microtome, ideally using a fresh blade per case, to avoid the risk of cross-contamination. <b>PB:</b> Send minimum 3.4ml EDTA as an independent sample. This must <b>not</b> have been used previously on an automated laboratory analyser. <sup>1</sup> For <i>BCR::ABL1</i> analysis, if PB sample, please send minimum 12ml EDTA. TKI information and dates must be provided in clinical details to enable effective monitoring. <sup>2</sup> For MRD analysis, if PB, please send 20ml EDTA, if BM, please send 5ml EDTA. Patients monitored at unusual laboratories must be highlighted and the MRD lab identified. <sup>3</sup> AML cases where the diagnostic sample identifies an MRD marker as part of the usual genetic work up, will have material sent from the WGLS Salisbury sample (the standard cytogenetics sample – <u>no additional sample required specifically for AML baseline MRD</u> ) to WGLS Southampton for RNA extraction and onward sending to the relevant laboratory. <sup>4</sup> Adult patients (>26years of age), TYA patients (16-25years of age) only. Paediatric patients remain under the care of the CNS/trials team(s). Samples for RNA extraction must arrive in this laboratory within 48 hours of collection. <sup>5</sup> This laboratory performs whole PB/BM chimerism. This is not requesting Lineage Specific Chimerism, which is sent directly from clinical teams. <b>** This is a send away test.</b>
WGLS (Salisbury) Formerly WRGL	<b>BM:</b> <ul style="list-style-type: none"> <li>Conventional cytogenetics for acute leukaemias, MDS, MPD and AA: 0.5- 1ml in transport medium (but lithium heparin accepted)</li> <li>For new paediatric acute leukaemias also send KCH (3 drops of BM in KCH to be fixed at referring laboratory); if transport medium is not available, send in lithium heparin.</li> <li>Molecular studies of <i>FLT3</i>-ITD, <i>FLT3</i>-TKD, <i>NPM1</i>, <i>IDH1</i>, <i>IDH2</i>, <i>TP53</i>, <i>KIT</i>, <i>JAK2</i>, <i>JAK2</i> exon 12, <i>CALR</i>, <i>MPL</i> and Myeloid NGS panel: 2-3ml in EDTA; however, material sent in BM transport medium or lithium heparin is acceptable.</li> </ul> <b>PB:</b> <ul style="list-style-type: none"> <li>Conventional cytogenetics for new diagnosis CML, myelofibrosis or new acute leukaemias if no BM available: 5ml in lithium heparin.</li> <li>FISH for CLL/MCL and <i>TP53</i> mutation testing: 5ml in lithium heparin.</li> <li>Molecular studies of <i>JAK2</i>, <i>CALR</i>, <i>MPL</i>, myeloid NGS panel, etc.: 5ml in EDTA.</li> <li><i>FIP1L1-PDGFR</i>: 10ml in EDTA.</li> </ul> <b>Smears:</b> for CLL or NHL with suitable FISH markers, FISH can be attempted on freshly made, unfixed, unstained smears (at least 4 smears) if no fresh material is available. Please note that FISH can be attempted on smears that have been stored for some time if no other material available. <b>Biopsies:</b> FFPE sections / tumour dabs: slides containing unstained FFPE sections (3-4µm) or tumour dabs should contain at least 2 patient identifiers. Please package in a slide box. For large FFPE sections, please also send H&E slide with the tumour area appropriately marked. <b>Other Tissues:</b> lymph node, spleen, skin etc. should be sent in transport medium upon previous discussion with the laboratory. <u>Please phone as soon as possible if anything is sent by courier which might arrive outside normal working hours. There is an on-call rota for acute presentations and Burkitt lymphoma after hours on a Friday or at the weekend (please phone the switch board on 01722 336262).</u> <u>In submitting samples the clinician confirms that consent has been obtained for testing and storage. Anonymised stored samples may be used for quality control procedures including validation of new genetic tests.</u>
Cellular Pathology	Specimen to be submitted in 60ml pot containing 10% neutral buffered formalin (ratio of 10:1). Direct purchase from Genta Medical.