Barnsley and Rotherham Integrated Laboratory Services	Department: Haematology
Filename : Haematology Lab Handbook	QMS No : LI-HAEM-ADM-004

# Haematology Laboratory Handbook – Paediatric and Adult

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#### Introduction:

Dear Colleagues,

Welcome to the Haematology Laboratory Handbook. This handbook has been designed to provide you with basic information concerning the Haematology Department at Rotherham General Hospital, including contact details, opening times, sample requirements, test information, turnaround times, normal ranges and additional services the department offers. We hope this information will prove useful but obviously this is in no means an exhaustive source of information. If any additional information is required, please contact the laboratory where a member of staff will be available to help.

Staff and contact details (Note: internal numbers in bold) :		
Results hotline	(01709) 42 <b>7510</b>	
Haematology Laboratory	(01709) 42 <b>4236</b>	
Consultant Haematologist	(01709) 42 <b>7111</b>	
Consultant Haematologist	(01709) 42 <b>4188</b>	
Consultant Haematologist	(01709) 42 <b>7419</b>	
Consultant Haematologist	(01709) 42 <b>4720</b>	
Haematology Secretary	(01709) 42 <b>7119</b>	
Business & Services Manager	(01709) 42 <b>4023</b>	
Integrated Blood Sciences Manager	(01709) 42 <b>7621</b>	
Lead Biomedical Scientist	(01709) 42 <b>4236</b> (Lab) 42 <b>4251</b> (Office)	
Senior Biomedical Scientist	(01709) 42 <b>4236</b>	
Anticoagulation Nurse Specialist	(01709) 42 <b>4016</b>	
Quality Management Team	(01709) 42 <b>4008</b>	
Pathology Specimen Reception	(01709) 42 <b>7510</b>	

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#### **Laboratory Haematology**

#### **Out-of-hours service:**

The Haematology BMS on-call can be contacted via telephone number (01709) 424236 or the hospital switchboard (01709) 820000. The Consultant Haematologists are available via the Hospital switchboard and radiopagers.

Please note: The Blood Transfusion phone is **not** answered during non-routine hours. Please ring the Haematology number ((01709) 424236) or use the Blood Bank bleep in the case of severe emergencies e.g. Major haemorrhage activation.

Laborator	opening times:
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Routine Service:Monday - Friday09:00 hrs - 17:00 hrsOut of Hours service:All other times

#### Location of the laboratory:

The Laboratory is situated on A level (top floor). Following the signs for Pathology, at the T-junction near the central lifts, go down the corridor opposite the lifts and the Pathology department is first on the left through the double wooden doors. Pathology Reception is straight ahead.

#### Specimen reception:

All samples arrive at the laboratory via the centralised specimen reception area. The specimen reception area also deals with initial result enquiries for all pathology departments, with the exception of Histopathology. Specimen Reception contact number is (01709) 42**7510** Any queries regarding Specimen Reception should be directed to the Specimen Reception Manager on the above numbers.

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#### Phlebotomy:

The Phlebotomy department is situated on C Level, Junction 1 in the Whiston Suite. It is run by appointment. Please contact after 9am on 01709 424397 or email <u>rgh-tr.phlebotomy@nhs.net</u>

It is emphasised that Phlebotomy is not a point of access to the clinical haematology service, which is either via a referral letter or telephone communication.

#### **Receipt of Samples:**

The laboratory is open to receive routine samples Monday - Friday 09:00 hrs – 17:00 hrs with an out of hours service provided at all other times. Please note samples can be accepted for overnight storage prior to processing the following day, however, please check with the laboratory that samples left overnight will still be suitable for testing the following day as this will not be possible for all tests.

# Wherever possible, non-urgent routine haematology samples should arrive at least one hour prior to the end of the routine working day.

# Labelling policy:

Samples and forms for Haematology requests must meet minimum labelling requirements which are: Form: Full name (forename AND surname count as **one** identifier), date of birth and hospital number and/or NHS number, accurate location, full clinician name (not initials) and clinical details Sample:Full name (forename AND surname count as **one** identifier), date of birth and hospital number and/or NHS number

Note: Please give details of relevant clinical information and details of therapy given on the request form as this may provide guidance on further testing or suggestive comments that may prove helpful. Where pre-completed forms are used, please ensure any date and time stated accurately reflects the actual date and time the sample was taken. Failure to do this may result in samples being falsely rejected as being too old to test. Please be aware any misspelling of names or mismatching between form and sample will lead to rejection of the request.

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It is emphasised that patients referred by General Practitioners for phlebotomy require an appropriately completed request form, hospital letters are not suitable. Incomplete forms that do not have the required information cannot be accepted and blood will not be taken from the patient.

# High risk specimens:

All samples which are regarded as high risk should have both the request form and the specimen labelled with the appropriate "high risk" sticker. Samples from patients falling into the categories below should be regarded as high risk for the laboratory:

- HIV antibody positive
- Hepatitis B surface antigen or e antigen positive
- Hepatitis C positive
- Patient being tested for Blood Borne virus
- IV drug user
- All samples from GU Med/CASH
- COVID positive or suspected

# Transportation of specimens:

GP samples are usually transported using the hospital van system (organised by Portering Services Department). Most samples will be forwarded onto our partner site at Barnsley for testing. This will not affect sample quality or integrity of results. Hospital samples are delivered either via the air tube system or by hand to the Laboratory Specimen Reception Department. Note: high risk specimens should <u>not</u> be transported by the air tube system. Some specialised Haematology tests (eg Platelet function) cannot be transported by the air tube system (See Table below for details)

#### **Rejection of samples:**

Samples may be rejected for several reasons including:

• Inappropriate/inadequate labelling (see labelling policy).

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- Age of sample (too old to test at time of receipt)
- Sample leakage.
- Incorrect sample type.
- Over/underfilled sample.
- Clotted sample (EDTA or Citrate)
- Haemolysed sample (from poor/difficult phlebotomy)

Attempts will be made to inform users of any rejections ASAP where practically possible.

# **Confidentiality:**

All data and information acquired while providing the services of the laboratory is handled in strict accordance with the Pathology Confidentiality Policy. This ensures data is managed in compliance with all relevant legal obligations, standards and guidelines and professional codes of conduct. The Confidentiality Policy can be found on the Rotherham Hospital Website (<u>http://www.therotherhamft.nhs.uk/Pathology/Pathology/</u>). Either follow the link or from the website Home page click on 'Our services' > select tab 'P' > select 'Pathology'. A link to the Pathology Confidentiality Policy is included on this webpage.

# **Complaints procedure:**

If you have any concerns about the services provided by the laboratory, please let us know using any of the contact options provided at the start of the handbook. Formal complaints will be investigated in full accordance with Trust procedures.

#### Consent:

Prior to sample collection, Trust policy is followed to confirm patient identity and ensure consent for the collection procedure is given wherever possible in line with the Trusts Consent policy.

#### **Results service:**

All full blood count and routine coagulation requests received in the laboratory will have results available on that day. Results will be available electronically, as long as all minimum labelling criteria have been met, and/or as a printed report the following morning, unless further testing is required.

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Request forms that indicate an urgent response will be analysed within 60 minutes of receipt of sample and the results available electronically. If a result is required quicker than this due to an emergency situation, please contact the laboratory direct with details of the request and all effort will be made to accommodate where possible.

If necessary, results can be telephoned. This service can only be guaranteed if a contact telephone number is supplied on the request form. Please supply a number that will be answered. In addition, **unexpected** results exceeding certain limits will be telephoned. These limits are:

Haemoglobins	< 71 or > 200g/L					
Platelet count	< 50 or > 1000 x 10 <sup>9</sup> /L					
White cell count	< 2.0 or >30.0 x 10 <sup>9</sup> /L					
Neutrophils	$< 0.5 \text{ or} > 30 \times 10^9/L$					
INR	> 5					
APTT	> 50 seconds if PT is within 2 seconds of normal					
Fibrinogen	< 1.0 g/L					
D-Dimers	> 10 ug/ml					
ESR	> 50 with clinical details (?)temporal arteritis					
Positive malarial parasit	Positive malarial parasite screens					
Abnormal blood films requiring immediate attention (includes for features such as blast cells/new leukemia's, fragments (especially in cases of suspected TTP)						
etc						

To discuss the key factors that you believe may affect the performance of the test offered in the Haematology Department, please contact the laboratory directly in the first instance. Some significant factors are listed in the test information table. Should clinical advice be required, contact the on-call Consultant Haematologist via switchboard. Please note, **laboratory staff** <u>cannot</u> offer clinical advice.

#### Sample retention:

Samples are stored at 4°C for 72 hours. Any additional testing may be requested during this period, depending on sample suitability. The test information table below advises on the suitability of stored samples for additional tests required and any further arrangements needed. Contact the lab for further advice if required. It is preferable that FBC's are processed <12hours from venepuncture and essential that all clotting screens are processed <4hours from venepuncture and DDimers <8hours.

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#### **Referred work:**

The Haematology department holds a list of names, addresses, tests sent and accreditation status of all laboratories to which work is routinely referred. These lists are available on request.

# **Test Information:**

Please note: Paediatric sample tubes are available from the Haematology Laboratory (EDTA 0.5ml and 1.3ml citrate). Some tests on paediatric samples will require multiple samples, so please contact laboratory if unsure.

#### **Key for Shortcuts:**

RHH: Royal Hallamshire Hospital, Sheffield SCH: Sheffield Children's Hospital LSTM: Liverpool School of Tropical Medicine KCH: King's College Hospital, London HODS: Haematology Oncology Diagnostic Service (Sheffield) SP : Specimen preparation PP: Patient preparation

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# Table of tests offered by Haematology department:

Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
Full blood count (FBC)	EDTA blood sample. No SP or PP	0.5ml	FBC and automated differential within 12hrs. If blood film review necessary results will be available < 24hrs.	EDTA sample <24hrs old	Haemolysis and lipaemia. <u>Small</u> <u>volume samples,</u> <u>usually caused by</u> <u>poor/difficult</u> <u>venepunctures</u> <u>are more likely to</u> <u>clot or error on</u> <u>sampling</u> . <b>Try and</b> <b>fill samples to</b> <b>the fill line</b> . Insufficient volume may lead to an inability to produce a valid result.	For normal range see report (electronic & printed)
Blood Film	EDTA blood sample. No SP or PP	0.5ml	<24 hours for laboratory review	EDTA sample <24hrs old	Age of sample. Storage conditions prior to arrival in the lab	Blood films are normally generated by the laboratory based on the FBC result.

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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
Erythrocyte Sedimentation Rate (ESR)	EDTA blood sample. No SP or PP	2ml	Results available within 24 hours.	EDTA sample <24hrs old.	Affected by Haematocrit	Processed from FBC sample (if requested) For normal range see report
Infectious Mononucleosis Screen	EDTA or serum blood sample. No SP or PP	1ml	Results available within 24 hours. No FBC or film if serum only sent	EDTA sample <24hrs old.	Not all positive patients make heterophile antibodies	Normal = negative. Positive indicates presence of heterophile antibodies
Reticulocyte count	EDTA blood sample. No SP or PP	1ml	Results available within 6 hours.	EDTA sample <24hrs old.	No significant factors, discuss any concerns with lab	Processed from FBC sample (if requested) For normal range see report
HbA1C	EDTA blood sample. No SP or PP	1ml	Processed by Biochemistry BDGH. Results available within 2 working days	EDTA sample <5 days old	Presence of HbOpathy	Processed from FBC sample (if requested) For normal range see report

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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
Haemoglobino- pathy screen (including sickle cell screen) (This can be a routine request or Antenatal Screening Family Origin Questionnaire – FOQ/EFOQ)	EDTA blood sample AND serum blood sample. No SP or PP	EDTA- 2ml SST-1ml	Ante-natal FOQ requests – provisional result within 3 working days (EDTA only) Routine samples – results with 7 working days.(EDTA & serum) HbS screens – urgent results available within 24 hours (EDTA & serum) Abnormal Hb's are sent to RHH for confirmation (Results available within 4 weeks)	EDTA < 24 hrs (FBC required) and serum sample <5 days old (Routine only).	Raised HbA1C	Ante-natal HbOpathy screens must be accompanied by a completed family origin questionnaire (FOQ for manual requests or EFOQ via ICE/Meditech for electronic requests*) and do not require a gold top sample, unless for partner testing. See report for normal ranges. Alpha thalassemia testing is available as a referral but must be approved by a haematology consultant. *preferred method for screening programme.

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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
Haemolysis Screen	EDTA blood sample AND serum blood sample. No SP or PP	EDTA – 2ml SST – 1ml	DCT: < 72 hours Retics <6hours Haptoglobin within 1 week	EDTA sample <24hrs and serum sample <5 days old	Haemolysis, lipaemia, jaundice &clotted samples	Direct Coombs test: negative is normal (reported via Blood Tx) Hb & Retics: See report for normal range
Malarial Parasite Screen	EDTA blood sample. No SP. Preferable during pyrexial episode	2ml	Positive screens notified within 3 hours. All screens complete within 72 hours. Positive screens are sent to LSTM for confirmation	EDTA sample <24hrs old.	Samples are best taken during a period of pyrexia	Normal = negative Repeat test are encouraged to rule out the presence of malaria
Bone marrow	BM aspirate/trephine	As required for investigation	Sent to HODS Results available within 4 weeks	Sent fresh – investigation will be guided by clinical haematology	Dry taps will prohibit marker and genetic/ molecular investigations	Test is by referral to Clinical Haematology only
Erythropoietin	Serum blood sample. No SP or PP	SST – 5ml	Results available within 4 weeks (Tested at RGH)	Serum sample <5 days old	No significant factors, discuss any concerns with lab	For normal ranges see report
JAK2 mutation	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only Normal = no mutation detected

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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
Exon 12 mutation	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only Normal = no pathogenic mutation detected
CALR gene	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only Normal = no pathogenic mutation detected
NPM1 & FLT3 gene	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only Normal = no pathogenic mutation detected
MPL gene analysis	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only Normal = no pathogenic mutation detected
BCR-ABL	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only

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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
p53	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only Normal = no pathogenic mutation detected
T cell rearrangement	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <5 days old.	No significant factors, discuss any concerns with lab	Test is by referral to Clinical Haematology only Normal = No T cell clone detected
G6PD	EDTA blood sample. No SP or PP	2 x 1ml	Sent to Haem, RHH Results available within 4 weeks	EDTA sample <24hrs old.	Patient also requires a FBC and Retics	Advised in all positive Malaria cases Phone to laboratory in advance to discuss
Pyruvate Kinase	EDTA blood sample. No SP or PP	2 x 1ml	Sent to KCH Results available within 4 weeks	EDTA sample <24hrs old.	Patient also requires a FBC and Retics	Phone to laboratory in advance to discuss
PNH	EDTA blood sample. Not refrigerated. No PP	2 x 4ml	Sent to Haem, RHH Results available within 4 weeks	EDTA sample <24hrs old.	Sample must not be refrigerated	Phone to laboratory in advance to discuss
ADAMT13	Sodium citrate (green). Not refrigerated. Sample to lab immediately. No PP	2 x Full sample	Sent to Coag, RHH Results available by phone within 2 hours of receipt at RHH if urgent.	Citrate sample <1hr old	No significant factors, discuss any concerns with lab	MUST be discussed with Haematology Consultant before ordering test

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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
PLL-RARA	EDTA blood sample. No SP or PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <24hrs old.	No significant factors, discuss any concerns with lab	Phone to laboratory in advance to discuss
Immuno- phenotyping	EDTA blood sample. Not refrigerated. No PP	2 x 4ml	Sent to HODS Results available within 4 weeks	EDTA sample <24hrs old.	Sample must not be refrigerated	Test is by consultation with Clinical Haematology only. Phone to laboratory in advance to discuss.
T-cell subsets(CD4/8 counts)	EDTA blood sample. Not refrigerated. No PP	2ml	2 working days.	EDTA sample <24hrs old.	Sample must not be refrigerated	Limited service to GUM and Paediatrics. Before 3pm on last routine working day of week
Plasma Viscosity	EDTA blood sample. Not refrigerated. No PP	1 x 4ml	Sent to Haem, RHH Results available within 2 weeks	EDTA sample <24hrs old.	Sample must not be refrigerated	Phone to laboratory in advance to discuss
PT (INR)	Sodium citrate Blood (green). Not refrigerated. No PP	Full sample	3 hours	Citrate sample <24hr old	Sample must not be refrigerated	For normal ranges see report
ΑΡΤΤ	Sodium citrate Blood (green). Not refrigerated. No PP	Full sample	3 hours	Citrate sample <4hr old	Sample must not be refrigerated	For normal ranges see report
Clotting / DIC screen	Sodium citrate Blood (green). Not refrigerated. No PP	Full sample	3 hours	Citrate sample <4hr old	Sample must not be refrigerated	For normal ranges see report
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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
D-Dimer - negative predictor for DVT/PE	Sodium citrate Blood (green). Not refrigerated No PP	Full sample	4 hours	Citrate sample. Can be added up to 8hr from sample draw time	Sample must not be refrigerated	For normal ranges see report
Anti Xa assay	Sodium citrate Blood (green). Not refrigerated. Sample to lab immediately. No PP	Full sample	Sent to Coag, RHH Results available within 48 hours. Please phone if results needed more urgently	Citrate sample <1hr old	Sample must not be refrigerated	Sample has to be in lab within 1 hour Phone to laboratory in advance to discuss Indicate type of heparin or Direct inhibitor on Form
HIT screen	Sodium citrate Blood (green). Not refrigerated. Sample to lab immediately. No PP	Full sample	Sent to Coag, RHH Results available within 48 hours. Please phone if results needed more urgently	Citrate sample <1hr old	Sample must not be refrigerated	Sample has to be in lab within 1 hour Phone to laboratory in advance to discuss. Sheffield HIT form required.
Haemostasis investigations (Including Platelet function, von Willebrand screen and Factor Assays)	Telephone laboratory for advice	Samples need to arrive in the laboratory within one hour of venepuncture	Sent to Coag, RHH Results available in 2 weeks	Citrate samples <1hr old	Sample must not be refrigerated. Patient must not be on anticoags. Guidelines are available on request	Please discuss with Consultant Haematologist. It is preferable for the patient to attend a Haemostasis clinic. The laboratory MUST be informed in advanced. DO NOT use the air tube system to send samples

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Test	Sample type/ Special precautions (SP)/ Patient preparation (PP) (If required)	Min volume	Turnaround time (TAT)	Time limit for processing or adding this test request on existing sample	Known influential factors	Additional comments
Lupus Anticoagulant	Sodium citrate (green) x 4 EDTA x 1 Serum blood sample. Not refrigerated. Samples to lab immediately. Patient must not be anticoagulated	All coagulation samples <u>must</u> be filled to the fill line	2 weeks	Citrate samples <1hr old	Sample must not be refrigerated. Patient must not be on anticoags. Guidelines are available on request	Sample has to be in lab within 1 hour Interpretive comments given.
Thrombophilia screening	Telephone laboratory for advice	Samples need to arrive in the laboratory within one hour of venepuncture	Sent to Coag, RHH Results available in 6 weeks	Citrate samples <1hr old EDTA is required for genetic tests associate with the screen (includes PGM and FVL)	Sample must not be refrigerated. Patient must not be on anticoags. Guidelines are available on request	Please discuss with Consultant Haematologist. It is preferable for the patient to attend a Haemostasis clinic. The laboratory MUST be informed in advanced.

\* Although laboratory turnaround times are shown, experience has indicated that unexpected delays can occur in the transmission of results and occasions of analyser failure.

\*\* Estimated TAT's for referral laboratories are stated. This may be affected by factors such as a MDT being required for report release, staffing issues at referral sites, method of result release etc and lead to markedly increased TAT's. If a result is needed and not showing as available, please contact us.

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\*\*\* Please note that citrate samples must be filled to the level indicator on the bottle. Under filling or overfilling of coagulation samples could lead to erroneous results or requests being refused due to queries over validity of sample quality.

\*\*\*\* Not filling EDTA samples to the fill line could lead to insufficient sample to provide results.

\*\*\*\*\* If a result is not available and it is exceeding the TAT, please contact the laboratory ASAP.

#### Investigations requiring prior arrangement:

The investigations below either require a fresh sample taken at the time of investigation, specific phlebotomy technique or the availability of a specific member of staff to perform the particular investigation therefore it is essential that the laboratory is informed before any samples are taken:

- Immunophenotyping (Lymphocyte Cell Markers)
- Investigation of a haemostatic defect
- Thrombophilia investigations (including Factor V Leiden & Prothrombin Mutation (G20210A))
- G6PD & PK screens
- Heparin-induced thrombocytopaenia (HIT) screen
- Anti-Xa assay (for heparin derivatives e.g. Tinzaparin/Enoxaparin or direct oral-anticoagulants (DOACs) e.g. Rivaroxaban, Apixaban)
- Dabigatran assay
- Screen for Hereditary Spherocytosis (EMA)
- Any other molecular marker not indicated in the table above
- ADAMTS-13
- Alpha Thalassemia investigation

Please note: Information on blood group determination and associated blood transfusion information can be found in the Blood Transfusion User Handbook. Information with respect to haematinic assays can be found in the Biochemistry User Handbook

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# Normal ranges:

The normal ranges for all tests are not listed because some are age and sex dependent and some are modified according the batch of reagent used for its determination. The relevant normal ranges can be found on appropriate report or by telephoning the laboratory

Please note that laboratory measurement of uncertainty values are not routinely added to the reference ranges. They are used by the laboratory during the interpretation of clinically abnormal results and the actions and management required for those results. The document is available by request form the laboratory.

Available reference ranges have been derived from various recognised sources and guidelines:

- "Practical Haematology" 2006, Tenth Edition, SM Lewis, B J Bain, L Bates.
- "Diagnosis in Paediatric Haematology", 1996, Harry Smith.
- "Blood Cells-A Practical Guide", 2002, Third Edition, Barbara J Bain.
- "Reference Intervals for a complete blood count determined on different automated haematology analysers", Clin Chem Lab Med 2002;40:69-73. Jan Van Bossche *et al*
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Department: Haematology QMS No : LI-HAEM-ADM-004

# **Clinical Haematology**

We offer a comprehensive service for the diagnosis and management of haematological disorders including acute leukaemia, myeloma and lymphoma.

# **Haematology Clinics**

Anticoagulant Clinics	Wednesday Morning	New Patient & Follow-Up
	Monday – Friday	New Patient, Nurse Led Thrombosis
		Clinic & Postal patients
Haematology Clinics	Monday am	New Patients (OPD) & Thrombosis Clinic (OPD) (fortnightly)
	Monday am	MGUS clinic (OPD)
	Tuesday pm	Venesection clinic
	Tuesday pm & Wednesday am	New & Follow-up patients (OPD)
	Wednesday pm	Consultant Haematologist Virtual clinic
	Wednesday am	ET clinic (OPD)
	Thursday pm	New & Follow-up patients (OPD)
	1	1
Haemostasis and thrombophilia	Wednesday Morning	As required
clinics	Thursday morning	As required

#### **New Patient Appointments:**

Patients may be referred via referral letters to any of the above clinics, with routine patients usually being seen within 7-8 weeks and urgent patients in 4 weeks. Patients with a suspected malignancy referred on a target wait form will be seen within 2 weeks or sooner if the clinical condition requires. Direct referral following discussion, for ill patients, is encouraged and may result in waiting times of less than one week. Referrals are taken on rotation by the Consultant Haematologists. Please address referral to "Haematology Consultant". Haematology appointments for all clinics are also available by Choose and Book.

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#### Haemostasis / Thrombosis Investigation:

The laboratory offers a comprehensive range of tests to investigate patients with either potential bleeding disorders or thrombotic tendencies (thrombophilia). These are arranged by referral letter to the Consultant Haematologists. As a consequence of either a strongly suggestive history or preliminary investigations, patients who are considered to require further investigation are seen on a Friday morning. Technical time has been set aside for these investigations, which are labour intensive. The results of haemostasis investigations are usually available within 14 working days, those for pre-thrombotic testing require 6 weeks. Patients with positive results are then seen by one of the Consultant Haematologists for counselling. Family studies can be arranged if appropriate.

#### **Anticoagulant Service:**

The anticoagulant team is comprised of Clinical Nurse Specialists, Laboratory staff, and the Consultant Haematologists. New patients may be referred to a Wednesday morning clinic, provided the hospital anticoagulation referral sheet is fully and comprehensively completed and signed.

All patients attending the clinic are issued with an anticoagulant therapy record which gives details of their dosage and test results and a yellow caution card for when the therapy record is sent in to the department for dosing. They are instructed to carry these with them at all times, (unless retained by the laboratory for testing), but particularly when requesting further medication from GPs. New patients and those with unstable INR results are always seen at the clinic. Once patients are stable they transfer to the postal system. Patients can attend for INR tests at appointed times, daily Monday to Friday during routine working hours. Those patients, whose INR results are stable, receive their anticoagulant therapy record after DAWN computer dosing with their Warfarin dose documented and returned by 1<sup>st</sup> class post. They are instructed to continue on the same dose of Warfarin until they receive their record. If immediate dose adjustment is required, the anticoagulation nurse will telephone the patient directly before the record is returned in the post.

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