Pathology Services

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

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Laboratory Handbook

Scan QR code for link to Pathology Website

Version - January 2023

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To obtain an up to date copy visit ***www.dbth.nhs.uk***

PATH-SOP-53 - Version 9
Document approver - Peter Taylor

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Welcome to the Pathology Laboratory Handbook.

The Pathology at Doncaster and Bassetlaw Hospitals encompass the Departments of Clinical Biochemistry, Immunology, Haematology, Cellular Pathology, Mortuary Services, Microbiology and Virology. An open access (not 24 hours) Phlebotomy service is also provided.

We have produced this handbook to provide information which will allow you to make best use of our services.

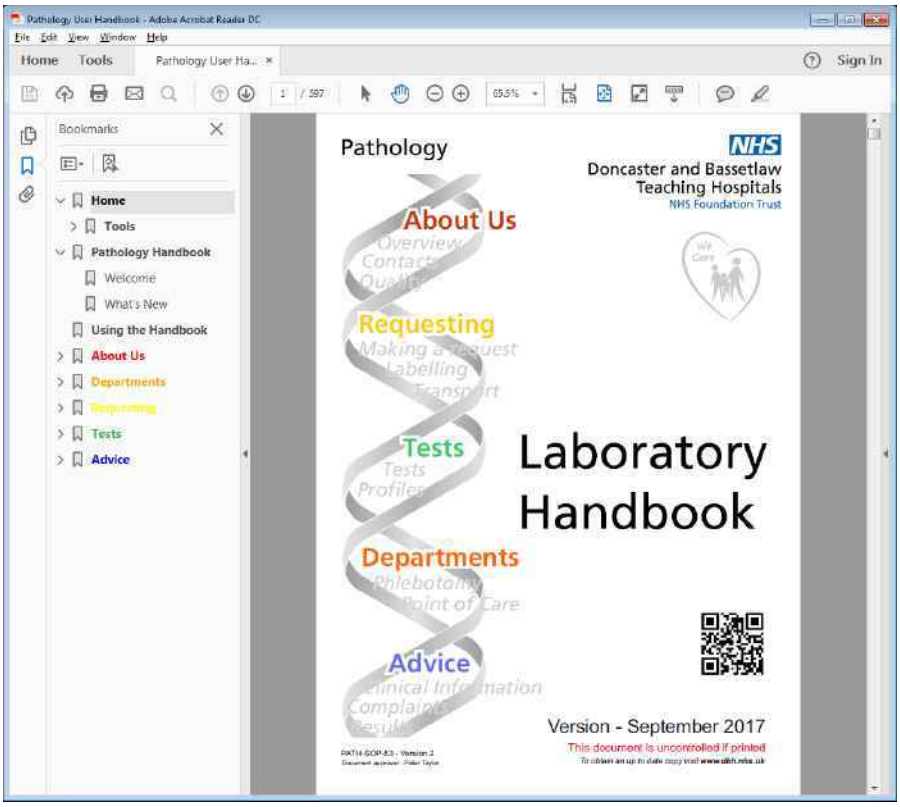
This new format handbook is designed to be used in an electronic format. Printed copies will not be available, as it is impossible to ensure that paper copies are kept current.

The handbook updates will always be available at the Doncaster and Bassetlaw Hospitals website **www.dbth.nhs.uk** and for trust users through the DBTH Intranet

Using the handbook

Pre-requisites

The Handbook is distributed in Adobe Acrobat format. It is capable of being read on a variety of devices which support this format. The reader is readily and freely available on the Adobe website. If you have difficult installing the reader, contact your IT support.



The handbook makes use of the facilities that are built into the Acrobat Reader software. As there are several versions of this software available, the look and feel of some of the functions may alter slightly, however the features of this handbook will all be available to users of Acrobat 5 or above.

When the handbook starts up, it will always open on the first page, and be zoomed so that it is possible to see the entire first page on screen at once.

Browsing

The page browser toolbar allows you to step from one page to the next.

The single blue arrows are to go forward and back to the next or previous pages.
The arrow and bar symbols are to go to the first or last pages in the document.
The green buttons are to go forward and back in visited pages.

Bookmarks

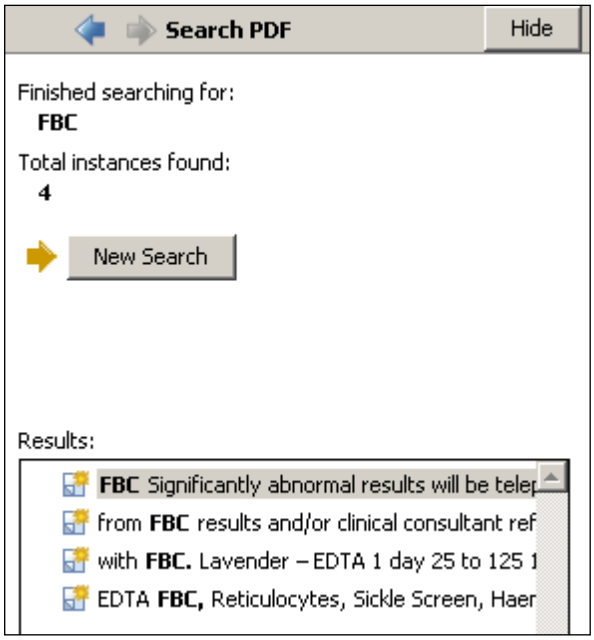
To the left of the handbook pages is a pane which shows the Bookmarks that have been created in the Handbook to make finding information more straightforward.
These colour coded bookmarks give shortcuts to the various sections within the Handbook, and then each section has subordinate markers which go to particular pages within the section. *This includes bookmarks for all tests that the directorate offers.*
Clicking the **X** at the top of the Bookmark pane will hide the bookmarks and allow you to have a larger view of the screen. Pressing the Bookmarks tab will open this pane back up again. *The handbook always opens with the Bookmarks pane showing.*

Searching

It is possible to use the Search facilities to find particular words or phrases in the handbook.

- Click on the Search Icon 

on the toolbar
- A second pane will pop up on the right of the screen.
- In the first box type in the phrase or word you wish to look for.
- Press Search. A list of matches then comes up in the pane.



The above example shows a search for FBC (Full Blood Count)

The software takes you to the first instance of the searched item. Clicking on each of the items in the results will take you to the page they are on, and will highlight the search text.

If you wish to do another search, press the **New Search** button.

When you have finished searching, use the **Hide** button to close the pane.

Pages

If you click the Pages tab to the side of the Bookmarks pane, the view will change to a set of thumbnails which show you what each page looks like. It is too small to see any text, but is useful for finding pages with graphical content such as the Maps in the Appendices.

Other toolbar functions

Zooming

Use the **Zoom** buttons 

to set the amount of each page that can be viewed. By default, the screen always fits to a page width, the view can be modified to zoom to a particular section (Use the magnifying glass tool), To page height, page width, or use the – and + buttons to zoom to a particular size.

Highlighting and copying text

If you wish to copy a piece of information from the handbook text, use the **Select** button 

. Once this is pressed, mark around the text by highlighting, and then press **Copy** from the **Edit** Menu on the menu bar. It is then possible to **Paste** this information into another document. Remember however that this will no longer be kept up to date.

Saving and Printing

The laboratory handbook is included as part of the Pathology Quality Management System. The copies found on the DBTH Trust Intranet and Trust Website are current and reflect those within the QMS. Any copies held offline by users or printed are uncontrolled. Wherever possible refer back to the current online copies of the document.

Any Problems?

If you have any problems with this application, please contact Peter Taylor at DRI (01302 644124)

What's New?

The following items have been revised since the last version of the Laboratory Handbook.

The latest release is dated October 2022

- Laboratory Tests
  The laboratory test pages have been reviewed. Please check to ensure that you are meeting the current requesting requirements.

- Schedule of UKAS Accredited Tests
  A full list of all accredited tests provided by each laboratory is detailed in our laboratory Schedule of Accreditation on the UKAS website.
  Some tests provided by the laboratory are not included within the Schedule of Accreditation. These tests are managed within the Laboratory Quality Management System. If further information is required please contact the laboratory via the contact details on the web page.
  Schedule of Accreditation (9550) Version 3 Issue 16th June 2022

- Contacts
  The laboratory contacts have been updated to reflect our current staffing arrangements.

- Pathology Policies
  Versions included align with those available through the intranet site

- Navigation
  The bookmarks have been modified and a signposting page has been updated to allow users quicker access to key information.

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Laboratory Handbook

About Us

Pathology Services is within the Clinical Specialties Division as part of Doncaster & Bassetlaw Teaching Hospitals NHS Foundation Trust (DBTHFT) which was formed on the 1st April 2001 and became a (first wave) Foundation Trust on 1st April 2004 with Teaching hospital status being achieved in January 2017.

Three hospitals are owned by DBTHFT which include Doncaster Royal Infirmary (DRI), Bassetlaw Hospital (BH), and Montagu Hospital (MMH). Retford Hospital provides outpatient services and is owned by NHS Bassetlaw CCG.

Pathology Services are responsible for the provision of pathology laboratory services to primary and secondary care throughout the Doncaster and Bassetlaw districts. Pathology is committed to providing a service of the highest quality and is aware of and takes into consideration the needs and requirements of its users.

It is a twin sited pathology service serving a network of hospitals plus two Primary Care Commissioning Groups serving a population of approximately 420,000.

The whole pathology service across all sites is operated under a single quality management system which ensures all the needs of the users are addressed as outlined by ISO 15189:2012 requirements.

The repertoire of tests provided by Pathology support the Trust requirements in its diagnostic and screening programmes. The test scope performed at each site is documented in the UKAS schedule of accreditation and is delivered by staff who rotate between sites where applicable. Some tests provided by the laboratory are not included within the Schedule of Accreditation. These tests are managed within the Laboratory Quality Management System. Further information is available via the Quality Manager.

Schedule of Accreditation (9550) Version 3 Issue 16th June 2022

All laboratory work is carried out on up to date equipment in modern laboratories which meet with all statutory requirements of a quality management system. The equipment and/or analyser platforms, procedures and performance characteristics of tests undertaken is common across all sites to ensure standardisation and consistency across the laboratories. All procedures are documented and available through the Q-Pulse quality management system software.

Pathology Services are fully computerised with all laboratories using ISS (Integrated Software Solutions) Omnilab Computer system with a fully integrated database across all pathology disciplines.

Pathology results are available electronically (ICE) via the Trust network at ward level or via the GP electronics links. Hard copy reports (if required) are returned daily Monday-Friday.

A central pathology telephone system based on the Doncaster Royal Infirmary site ensures a single point of enquiry for Pathology Service users to enquire about any aspects of the service.

In its pursuit of excellence and as part of its continuous quality improvement programme Pathology Services participates in all relevant internal and external quality assurance schemes.

Details of each site are shown in the table below including which Pathology services are available at each site:

	Doncaster	Bassetlaw	Mexborough
Address	Pathology Services Doncaster Royal Infirmary Armthorpe Road Doncaster DN2 5LT	Pathology Services Bassetlaw Hospital Blyth Road Kilton Worksop S81 0BD	Pathology Services Montagu Hospital Adwick Road Mexborough S64 0AZ
Tel:	01302 642870	01909 572453	01709 649196
Services	• Phlebotomy • Clinical Biochemistry • Haematology • Blood Transfusion • Blood Issue fridge • Immunology • Microbiology • Virology • Cellular Pathology • Andrology • Mortuary Services • Body Storage Facilities	• Phlebotomy • Clinical Biochemistry • Haematology • Blood Transfusion • Body Storage Facilities	• Phlebotomy • Blood issue fridge • Specimen Reception • Body Storage Facilities

All services and facilities provided by the Trust can be found on the Doncaster & Bassetlaw Teaching Hospitals NHS Foundation Trust website. http://www.dbth.nhs.uk/

More information on the services provided by Pathology Services, along with contact telephone numbers and location of all the pathology departments are all available in the Pathology Laboratory Handbook (PATH-SOP-53). This is available from the Pathology Services Offices and also via the hospital internet/intranet sites. http://www.dbth.nhs.uk/

Pathology Opening Hours

Department	Opening Hours		
Clinical Laboratory Sciences (Blood Sciences)	Routine Service	09:00 – 17:15	Mon-Fri
	Urgent requests	24 hours	Daily
Phlebotomy	DRI	Please see phlebotomy page below for further details. **Click Here**	
	BH		
	MMH		
	Eco Power Drive Through Phlebotomy		
Microbiology	Routine Service	08:00 – 17:15	Daily
	Restricted service**	17:15 - 22:00	
	On-Call service**	22:00 – 08:00	
	Virology	09:00 – 17:15	Mon - Fri
Cellular Pathology	Routine Service	08:00 – 17:00	Mon-Fri

* Morning ward phlebotomy service in addition to outpatient services.

** Urgent samples only.

Summary of Departmental Services

Clinical Laboratory Sciences (Blood Sciences)

The Clinical Laboratory Sciences service is provided on a 24 hour basis at DRI and BH, with the main laboratory site at DRI. The laboratory provides a 24/7 shift style system service at DRI and BH. The specimen reception area is shared between Clinical Laboratory Services and Microbiology. Clinically urgent requests are also available via a Fast Track system.

MMH contains a specimen reception office for preparation and transfer of pathology specimens for analysis at the Doncaster Royal Infirmary site. There is also a fully alarmed Blood Bank storage fridge on site which is co-ordinated via the Blood Transfusion service at the Doncaster Royal Infirmary site.

Consultant advice (separately for Clinical Biochemistry and Haematology) is available on-site on an open access basis during normal working hours and on an on-call basis at all other times. Consultant input to the Immunology service is via a Service Level Agreement (SLA) with Sheffield Teaching Hospitals.

The department participates in a variety of internal and external audit activities both within the Trust and region and also subscribes to national external quality assessment schemes.

The department is accredited to UKAS 15189:2012 standards (Ref. 9550) and BSQR Standards for Blood Transfusion services.

Phlebotomy
Phlebotomy service is provided at DRI, BH and MMH within the outpatient departments. At DRI and BH the phlebotomy ward service is available in the morning. There is also currently a drive through service in place located at Eco Power stadium (Previously known as Keepmoat)

Microbiology
The Microbiology Department services are provided from a centralised laboratory on the DRI site. The specimen reception area is shared between Clinical Laboratory Services and Microbiology. Specialist and Reference test services are used where necessary.

Consultant advice is available on-site on an open access basis during normal working hours and on an on-call basis at all other times. Consultant input to the Virology service is via an SLA with Sheffield Teaching Hospitals.

The Consultant Microbiologists contribute to the Infection Prevention Control (IPC) services of the Trust.

The department is accredited to UKAS 15189:2012 standards (Ref. 9550).

Cellular Pathology
All Histopathology and Non-gynae Cytology laboratory services are provided from a centralised laboratory on the Doncaster Royal Infirmary site (basement corridor). Histopathology have their own request forms and specimen reception arrangements. Mortuary services are provided at the Doncaster Royal Infirmary; Bassetlaw Hospital and Mexborough Montagu Hospital sites provide body storage facilities.

Histopathology and Non-gynae Cytology is processed and reported Monday to Friday 08:00 to 17:00. Consultant advice is available on-site on an open access basis during routine working hours.

Within Cellular Pathology there is a separate waiting/reception area for patients delivering semen samples to the department.

Mortuary Services are registered with the Human Tissue Authority for:

- The making of a post-mortem examination (DRI Site).
- The removal from the body of a deceased person of relevant material of which the body consists or which it contains, for use for a Scheduled Purpose other than transplantation (DRI site).
- The storage of the body of a deceased person, or relevant material which has come from a human body, for use for a Scheduled Purpose (DRI, BH & MMH sites).

HTA Licensing number – 12268

Designated Individual – is Paul Gravil (Head of Pathology Services)

Licence Holder - Doncaster & Bassetlaw Teaching Hospitals NHS Foundation Trust

Body storage facilities are available at all 3 main hospital sites on a 24 hour basis. A Bereavement Service is provided at DRI and BH.

The facility to view bodies is offered via a pre booked appointment that can be arranged Monday to Friday. At DRI viewing appointments are arranged through Bereavement services. At BH viewings can be arranged by telephoning the mortuary and at MMH viewings are arranged by the Service Supervisors. Times and availability may vary by site.

The mortuary facility at MMH provides operational and overflow (contingency) body storage.

Document MOR-SOP-1 (Mortuary Overview) details the facilities and managerial structure of the mortuaries.

The department is accredited to UKAS 15189:2012 standards (Ref. 9550) and was successfully inspected by the Human Tissue Authority (HTA) in 2018 against HTA standards.

Point of Care Testing
Pathology Services undertake the oversight of all point of care testing (POCT) within the Trust.

The Pathology Point of Care Co-ordinator and Trust POCT Lead report to the Trust Clinical Governance Committee on a 6 monthly basis and also attend Divisional/Specialty Clinical Governance meetings approximately twice a year to discuss POCT related issues.

This includes advice on suitable tests and equipment for use at the point of care, co-ordination of training, oversight of internal quality control and external quality assurance and review of DATIX reporting.

POCT currently covered under this remit include:
- Blood Gas Analysers
- Urine Pregnancy Testing
- Urinalysis
- INR (Coagulometers)
- Blood Glucose and Ketone Meters
- Hemocue Hb Meters
- Fetal Fibronectin
- HbA1c (Paediatrics)
- HIV Testing

All users of POCT equipment must adhere to the Trust policy CORP/RISK8 'Point of Care Governance Policy and Guidelines for Point of Care Testing'.

Users of POCT equipment are responsible for all the associated operational and maintenance costs.

Tests undertaken as POCT are not included in the Pathology Services workload statistics and costings.

Laboratory Accreditation (Schedule of Tests)

The laboratories within the Pathology Services provided at Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust work in line with ISO 15189:2012 Medical Laboratories – Requirements for quality and competence. The Pathology Service is a UKAS accredited testing laboratory No. 9550.

The ISO 15189 standard is an international standard which outlines the requirement for quality and competence for Medical Laboratories. ISO 15189:2012 standard has replaced the Clinical Pathology Accreditation (CPA) standards, which the laboratories have been accredited to since their introduction in 1996.

The accreditation process involves annual visits by the United Kingdom Accreditation Service (UKAS) to ensure compliance against the standard.

Accreditation provides assurance to the users of the Laboratory Medicine service that we are providing the best quality service.

A full list of all accredited tests provided by each laboratory is detailed in our laboratory Schedule of Accreditation on the UKAS website.

Some tests provided by the laboratory are not included within the Schedule of Accreditation. These tests are managed within the Laboratory Quality Management System. If further information is required please contact the laboratory via the contact details on the web page.

Schedule of Accreditation (9550) Version 3 Issue 16th June 2022

Clinical Advisory Services

Service users are advised of the use of services and choice of examinations through Pathology Services Handbook. There are also various clinical meetings e.g. focus groups, MDT meetings, Hospital Transfusion Committee, Patient Safety Review Group, Trust Clinical Governance Committee etc. where individual departments have the opportunity to promote effective use of Pathology services.

Consultants or Clinical Scientists are contactable in all departments during the stated working hours and via on-call services out of hours. Consultants and Clinical Scientists may provide clinical interpretative comments on laboratory reports, and are also available to advise on individual cases. For the relevant contact telephone numbers for individual consultants, please see pages 14-15, otherwise the relevant duty Consultant or Clinical Scientist can be contacted as follows:

- Duty Biochemist is available via Pathology Enquiries on 642870
- Consultant Haematologists are available via hospital switchboard on 366666
- Duty Immunologist is available via 07623 952682 or 0114 271 5552 (ask for Duty Immunologist to be paged)
- Histopathologists are available via Histology Secretaries on 642843

Advice is provided to users who are responsible for significant or consistent failures in the correct use of Pathology services, and where this is a risk to patient care it is escalated to the Trust Risk management department and or Clinical Governance Leads via the Trust DATIX system.

Laboratory Information Management

Pathology Services has established computerised information management systems (LIMS) in place to hold and process patient information and these are accessed via usernames/passwords.
This allows access to data and information to enable the provision of a service that meets the needs and requirements of users.
Laboratory information systems include:

- Laboratory information systems, which are currently Integrated Software Solutions Computer system, Werfen Modulab and Sunquest Ice
- DAWN 4S Anticoagulation System
- Bloodhound
- Q-Pulse quality management system software
- 'Standalone systems' that use generic software, e.g. speech recognition, word processing, spreadsheet and database applications

The Trust complies with the Data Protection Act 1998 and Freedom of Information Act 2000. This legislation is supported by Trust and Pathology Services policies and procedures that document arrangements to ensure the confidentiality of patient information is maintained at all times. Roles and responsibilities for information governance are described in the Trust Information Governance Policy.

Consent

The department is compliant with the DBTH Consent Policy.
Copies of this policy can be found on the DBTH website through this link
http://www.dbth.nhs.uk/document/patpa2/

Contacts

RESULT ENQUIRIES

IN ALL CASES FIRSTLY CHECK I.T. SYSTEMS FOR RESULTS

Doncaster Royal Infirmary

Clinical Biochemistry/Microbiology/Virology/Haematology:	**642870** Direct 01302 642870
Cellular Pathology:	642860
Mortuary Services:	642861
Blood Transfusion (Direct)	644044
Coagulation (Direct)	642880

Bassetlaw Hospital

Clinical Biochemistry/Microbiology/Virology/Haematology:	**642870** Direct 01302 642870
Blood Bank:	572452
Mortuary Services:	572814

Contact Telephone Numbers:

PATHOLOGY SERVICES

Mr P. Gravil	*Head of Pathology Services*	642822
Dr K. Agwuh	*Pathology Clinical Director*	644224
Mr. A. Wood	*Pathology Quality Manager*	644749
Miss. D. Ibbotson	*Pathology Business Manager*	644467
Mr P. Taylor	*Pathology IT Manager*	644124

DEPARTMENT OF CLINICAL LABORATORY SCIENCES

Clinical Biochemistry		**DRI**	**BDGH**
Dr. Paula Marchetti	*Consultant Biochemist*	642825	
Secretary to		642823	
Dr S. Spoors	*Consultant Biochemist Specialty Lead*	642824	572486
Secretary to Dr S. Spoors		642823	
Dr R. Stott	*Principal Biochemist*	642821	
Mrs. S. Bambrough	*Head BMS*	642829	
Mr P.Ward	*BMS 3*	644031	

Immunology

(Please note that all clinical Immunologists are based at Sheffield Northern General Hospital.)

		STH
Dr Ravishankar Sargur	Consultant Immunologist	0114 243 4343 (Via NGH Switchboard)
Secretary to Dr Sargur		0114 226 9020
Graeme Wild	Consultant Clinical Scientist	0114 271 5394
Duty Immunologist	Long Range Pager	07623952682 0114 271 5552 (ask for Duty Immunologist to be paged)

Other Useful Numbers

Results and Specimen Enquiry	642870	
Pathology Specimen Reception	644040	572450
Day Ward Booking	642823	
Fax numbers *(Internal)*	01302 642904	01909 572462

Haematology / Blood Transfusion / Coagulation		**DRI**	**BDGH**
Dr R. Medlock	*Consultant Haematologist*	644028	
	Specialty Lead	644028	
Dr A. Bobbili	*Consultant Haematologist*	644026	
	Consultant Haematologist	644025	
	Consultant Haematologist	644029	

**Denotes radiopage holder*

Haematology Secretaries *(Direct Line)*	644021 644024 644023 644022	
Mrs. S. Bambrough	*Head BMS*	642829
CLS BMS3s	*BMS 3*	644031

Other Useful Numbers

Results and Specimen Enquiry *(Direct Lines)*	642870	
Pathology Specimen Reception	644040	572450
Day Ward Booking	642823	

Fax numbers *(Internal)*		01302 642904	01909 572462
Blood Transfusion Laboratory *(Direct Line)*		644044	272452
Blood Transfusion Fax Number *(Internal)*			01909 530693

Cellular Pathology and Mortuary Services		**DRI**	**BDGH**
Dr A. Verghese	*Consultant Histopathologist Specialty Lead*	642851	
Dr M. Muzaffar	*Consultant Histopathologist*	642858	
Histology Secretaries		642843	
		642844	
		642845	
		642846	
Mrs A. Hall	*Head BMS*	642847	
Ms C. Copley	*BMS3*	642848	

Other Useful Numbers

Mortuary Services	642861	572814

Microbiology / Virology		**DRI**	**BDGH**
Dr K. Agwuh	*Consultant Microbiologist Pathology Clinical Director*	644244	
Dr L.A. Jewes	*Consultant Microbiologist*	*(pager 07659 500329)*	*572490*
Dr B. Subramanian	*Consultant Microbiologist*	642839	
Dr. P. Morris	*Consultant Infectious Diseases*	642833	
Microbiology Secretaries		642831	
Michael Leng	*Head BMS*	642830	
Michelle Poole		642838	
Bacteriology Laboratory		642835	
Virology Laboratory		642840	

External Links

Lab Tests On-line	http://www.labtestsonline.org.uk/
Labs are Vital	http://www.labsarevital.co.uk/
Specimencare	http://www.specimencare.com/
Health Protection Agency	http://www.hpa.org.uk/

Pathology Quality Policy

The Pathology Services is committed to providing an analytical, interpretative and advisory service of the highest quality and shall be aware and take into consideration the needs and requirements of its users.

In order to ensure that the needs and requirements of users are met, Pathology Services will:

- *Provide a diagnostic service in the following disciplines; Haematology, Blood Transfusion Services, Clinical Biochemistry, Immunology, Microbiology, Virology, Cellular Pathology and Mortuary Services*
- *Operate a quality management system to integrate Pathology procedures, processes and resources*
- *Set quality objectives and plans in order to implement this quality policy*
- *Ensure that all personnel are familiar with this quality policy to ensure user satisfaction*
- *Ensure that personnel are familiar with the contents of the quality manual and all procedures relevant to their work*
- *Commit to the health, safety and welfare of all its staff. Visitors to the department will be treated with respect and due consideration will be given to their safety while on site*
- *Uphold professional values and be committed to good professional practice and conduct*

Pathology Services will comply with standards and guidelines set by UKAS (ISO15189:2012), Medicines and Healthcare products Regulatory Agency (MHRA), and the Human Tissue Authority (HTA) and with relevant environmental legislation. Pathology Services is committed to:

- *Staff recruitment, training, development and retention at all levels to provide a full and effective service to its users*
- *The proper procurement and maintenance of such equipment and other resources as are needed for the provision of the service*
- *The collection, transport and handling of all specimens in such a way as to ensure the correct performance of laboratory examinations*
- *The use of examination procedures that will ensure the quality of all tests performed meets user requirements i.e. are fit for intended use*
- *Reporting results of examinations in ways which are timely, confidential, accurate and clinically useful*
- *Evaluation of all processes within Pathology to ensure continued quality improvement through internal audit, external quality assurance and assessment of user satisfaction*

Signed on behalf of the Pathology Services

Mr Paul Gravil
Head of Pathology Services

Date: 19/07/2022

Pathology Services

NHS
Doncaster and Bassetlaw
Teaching Hospitals
NHS Foundation Trust

Departments

Phlebotomy
Point of Care

Laboratory Handbook

PHLEBOTOMY SERVICE

Phlebotomy facilities

A phlebotomy service is available at all three hospital sites, Doncaster (DRI), Bassetlaw (BH) and Mexborough (MMH). We also currently have a drive through service in place located at Eco Power stadium (previously known as Keepmoat).

Patients requiring phlebotomy can access any of the sites listed, however some blood tests must be collected at the Doncaster site, and these are highlighted within the Laboratory Handbook.

Phlebotomy clinics on our hospital sites have facilities to accommodate patients with a waiting / reception area and access for disabled individuals. The separate phlebotomy cubicles provide privacy, recovery and first aid facilities for blood sample collection, and some cubicles can accommodate an accompanying adult if required. Toilet facilities are available in adjacent areas for patients.

Out Patient Service

A phlebotomy service is provided in the outpatient departments Monday to Friday excluding Bank Holidays. This service is available for the venepuncture of outpatient clinics and General Practitioner patients.

The opening times for DRI site are 07:30 to 16:30. (Limited availability until 16:45, advice attend by 16:30).

The opening times for BDGH site are 08:00 to 16:30. (Limited availability until 16:45, advice attend by 16:30)

The opening times for the Mexborough site are 08:00 to 16:30

The opening times for the Eco Power Drive Through Phlebotomy are 08:30 to 16:00 (over 16 years only).

It is not generally necessary to make an appointment for blood tests, except for blood tests that require special processing which will be highlighted within the Laboratory Handbook.

The preferred option is for patients who utilise the Hospital phlebotomy service is to attend with paperwork supplied by a GP or clinician.

Blood Forms should include patient's full name, date of birth, address, and requesting physician as well as the required tests.

Children

Patients under 16 years of age will not be bled by the Drive through Phlebotomy service.

Patients under 5 years of age will not be bled by the Phlebotomy Service at any site.

Children 5 or over can attend DRI or BDGH sites 08:00 to 12:00 then 13:00 to 16:00 only.

Children 5 or over can attend MMH site 09:00 to 12:00 only.

In-Patient Service

A morning's only phlebotomy service is available to the allocated wards at Doncaster and Bassetlaw seven days per week. Each allocated ward will be visited by a member of the phlebotomy team:

- At **07:00** the phlebotomists will generate a ward list accessed through ICE (View by location) which provides a list of patients on each ward which require bleeding.

- Ward staff should ensure the patient has the correct location identified on ICE to ensure they appear on the correct ward list.

- **Any patients added after 07:00 will be bled the following day.**

- The phlebotomist will then attempt to bleed patients on this list.

- If a patient does not have a wristband as required the phlebotomist will notify a member of the ward staff. **The phlebotomist will only bleed patients wearing a wrist band and who are available for bleeding.**

- The phlebotomist cannot return to a ward once they have vacated the ward area.

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

POINT OF CARE GOVERNANCE POLICY

POINT OF CARE TESTING POLICY AND GUIDELINES

This procedural document supersedes: CORP/RISK 8 v.6 – Policy and Guidelines for Point of Care Testing.

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor :	Dr Tim Noble
Author/reviewer: (this version)	Katherine Wright - Trust POCT Lead
Date written/revised:	August 2020
Approved by:	Policy Approval and Compliance Group (on behalf of the Patient Safety Review Group)
Date of approval:	13 January 2021
Date issued:	21 January 2021
Next review date:	August 2023
Target audience:	All staff, Trust-wide

Amendment Form

Please record brief details of the changes made alongside the next version number. If the procedural document has been reviewed without change, this information will still need to be recorded although the version number will remain the same.

Version	Date Issued	Brief Summary of Changes	Author
Version 7	21 January 2021	• Accreditation standards now United Kingdom Accreditation Service (UKAS)/ISO rather than Clinical Pathology Accreditation (CPA). • Reference to reporting and monitoring non-conformances via DATIX. • Changed references to Care Groups to Divisions. • Responsibilities of Medical Technical Services regarding PAT testing and maintenance of asset register. • Requirement to review SOPs. • Removed reference to Medical Equipment Training Policy. • Requirement for recertification of competency. • Additional monitoring in section 6 e.g. non-sense patient ID, blood gas analyser error reports and DATIX trend analysis. • Changes to Appendix 1 (Terms of Reference of POCT Clinical Governance Committee) and Appendix 4 (POCT Organisational Structure) to reflect changes in Clinical Governance reporting to Divisional CG meetings (agreed at Trust CG Meeting 20/4/18). • Minor changes to Appendix 2 and 3.	Miss K Wright
Version 6	27 March 2017	• Contents page amended. • Committee, departmental names and Trust title amended. • Revision of Associated Trust Procedural Documents. • Update of training requirements.	Dr J Wardell Mrs F Dunn Ms D Lee

Version 5	25 March 2014	• Reviewed and formatted POCT Policy in line with CORP/COMM 1 v.6 – APD Development and Management. Inclusion of revised Section 6 – Monitoring Compliance with Procedural Document.	Dr J Wardell Mrs F Dunn Ms D Lee
Version 4	March 2012	• Reviewed and formatted POCT Policy in line with CORP/COMM 1 v.5 – Development and Management of Procedural Documents Within the Trust • Clarification of roles, section 7.5 Managers of Areas Using POCT • Slight amendment to Appendix 3 to include entry for the proposed area of application/implementation • Minor changes made throughout for clarity	Dr J Wardell Mrs F Dunn Ms D Lee
Version 3	February 2009	• Reviewed and formatted in line with 'An organization -wide policy for the development and management of procedural documents' (NHSLA) • Introduction of an amendment form • More defined responsibilities • Introduction of a flowchart for implementation of POCT (appendix 2) • Introduction of a questionnaire (appendix 3) • Addition of a POCT organizational chart (appendix 4)	Mrs H Chapman
Version 2	March 2007	• Inserted 3.7 – Role of POCT Co-ordinator	Dr J Wardell Dr R Stott

Contents

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1. INTRODUCTION

For the purposes of this document point of care testing (POCT) refers to any form of diagnostic testing undertaken by a healthcare professional outside of an accredited laboratory environment. The requirements of this document apply when POCT is carried out in a hospital, clinic and by a healthcare organisation providing ambulatory care.

This policy is designed to ensure that all point of care testing (POCT) systems within the Trust are appropriately managed and quality assured in accordance with national guidelines and accreditation standards and that all risk and governance issues are addressed.

It is also designed to ensure that the introduction of new point of care testing technology within the Trust is appropriate and consistent.

1.1 Accreditation of POCT Governance

All POCT within Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust (DBTH) is subject to strict governance and must be performed to the quality standards as outlined in ISO 22870:2016 (United Kingdom Accreditation Service - UKAS) and the Medicines and Healthcare products Regulatory Agency (MHRA) recommendations. The service is not currently accredited under ISO 22870:2016 standards and is not covered by the Pathology ISO 15189:2012 accreditation.

2. PURPOSE

The aim of this document is to provide guidance for safe and effective management and use of POCT systems that are fit for their intended purpose and used by competent individuals on the correct patient, giving quality results which become part of the patient's record.

2.1 Rationale for the Use of Point of Care Testing Devices

Analysis of constituents in blood and other body fluids is a vital part of the decision making process associated with the diagnosis and management of disease. Typically specimens are sent to a laboratory for analysis with the results being returned by telephone, electronically or with a hard copy report. In some cases delays caused by sending the specimen to the laboratory are unacceptable to the clinical and/or operational situation; in these circumstances testing at the bedside, in the clinic or GP surgery is preferred. This type of testing is termed 'point of care' testing (POCT).

Improvements in technology have permitted a number of analyses, which previously could only be performed in the laboratory, to be carried out at the bedside or in the clinic. Like all new technologies, however, the apparent simplicity of POCT often belies its complexity and masks the need for attention to detail in order to achieve optimum and accurate results.

Situations in which point of care testing may be appropriate include:

a) Where clinical management in an acute or life threatening situation may be aided by the result of a diagnostic test.

b) Where availability of the result in the clinic may enable more effective counselling of the patient and/or change in therapeutic management.

c) Where the total attendance time for the patient can be reduced.

d) Where the clinician can assess the patient and initiate or change subsequent management in a single visit.

3. DUTIES AND RESPONSIBILITIES

The role and responsibilities of departments and individuals in the management of POCT devices are described below.

3.1 The POCT Governance Committee will:

Be accountable to the Trust Clinical Governance and Quality Committee for ensuring the delivery of a high quality POCT service.

3.2 The POCT Co-ordinator will:

a) Be responsible for day-to-day operational matters of all the point of care testing sited within DBTH.

b) Ensure the overall co-ordination and supervision of all POCT training and development of staff from various professions throughout the Trust in the use of POCT equipment. This ensures adherence to national standards in compliance with UKAS accreditation of POCT services.

c) Be responsible for the co-ordination, documentation and planning of the future POCT requirements of the Trust, on behalf of the Trust POCT Governance Committee.

d) Maintain effective communication between the POCT Governance Committee and Trust staff/ Trust Medical Technical Services Manager/ Trust Procurement.

e) Produce and review Standard Operating Procedures to ensure that systems are in place to enable quality standards to be maintained.

f) Ensure that internal quality control (iQC) and external quality assurance (EQA) procedures are in place and followed by all those involved in POCT.

g) Report and investigate DATIX incidents related to POCT.

3.3 End Users of POCT Devices will:

a) Be individually accountable for their practice and ensure that they acquire, and maintain skills in the use of POCT devices.

b) Ensure all POCT results are correctly documented in the patient records.

c) Ensure that POCT ID barcodes are NOT shared or used by other operators.

d) Report any adverse incidents/non-conformances through DATIX.

3.4 Managers of Areas using POCT will:

a) Ensure all requests for new POCT systems are made in accordance with the selection and procurement criteria as described in this policy.

b) Ensure that the General Manager of the Division in which the device is to be used is responsible for the authorisation of any business cases for the use of the POCT devices before submission to the Trust POCT Governance Committee.

c) Ensure that all users of POCT are competent and authorised to use the devices.

d) Ensure that each operator maintains competency and that training records are kept.

e) Ensure that quality assurance such as internal quality control (iQC) and external quality assurance (EQA) are performed in accordance with this policy.

f) Designate appropriate grade staff who will be responsible for ordering consumables and the upkeep and maintenance of analysers (as appropriate to that instrument). Assistance from the POCT coordinator (or the manufacturer of the device) should be sought if the need arises.

g) Designate a Ward Manager, Link person or Clinical Educator will be responsible for training of new users of the device, update training and upkeep of associated training records.

h) Report and investigate DATIX incidents related to POCT.

i) Ensure that instrument logs (iQC data, maintenance and calibration) are stored for the required period as instructed by the POCT committee in line with RCPath guidance.

3.5 Pathology Services will:

a) Support the POCT Co-ordinator.

b) Provide advice concerning the limitations of POCT devices and interpretation of POCT derived results.

3.6 The Medical Equipment Department will:

a) Maintain an up to date asset register of all POCT equipment/analysers.

b) Electrical safety testing of POCT equipment/analysers.

c) Distribute alerts from MHRA.

d) Report technical performance problems to MHRA.

e) Be involved in the purchase of new equipment.

3.7 The Trust Procurement Department will:

a) Liaise with the Trust POCT Governance Committee before any POCT equipment is acquired.

b) Lead in the tender and procurement process of any new POCT equipment.

c) Inform the POCT Governance Committee of any requests or purchasing intensions.

3.8 The IT Department will:

a) Advise on POCT data management and connectivity to appropriate host systems.

b) Liaise with suppliers and Pathology to set up network connections to the hospital and laboratory computer systems.

3.9 Patients Lacking Capacity

Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.
- Any act done for, or any decision made on behalf of a patient who lacks capacity must be done, or made, in the persons Best Interest.

- Further information can be found in the MCA policy, and the Code of Practice, both available on the intranet.

There is no single definition of Best Interest. Best Interest is *determined on an individual basis. All factors relevant to the decision must be taken into account, family and friends should be consulted, and the decision should be in the Best interest of the individual. Please see S5 of the MCA code of practice for further information.*

4. PROCEDURE

4.1 Choosing the POCT equipment

Advice regarding POCT should be sought before any equipment is considered. Approval by Trust POCT Governance Committee must be obtained before any equipment is purchased thus ensuring:

a) Results are comparable to results produced by the laboratory.

b) Reliability of equipment and spares.

c) Good cover by service engineers/maintenance procedures.

d) Reliability and regular supply of reagents.

e) Avoidance of multiple suppliers of similar equipment.

f) All clinical, cost effectiveness and practical aspects are covered adequately in the business case.

g) Connectivity requirements are met wherever possible.

h) Adherence to protocols established by the Trust's Procurement Department.

i) Enrolment into EQA schemes where available.

j) Ensure business continuity measures are in place e.g. UPS for electrical equipment.

k) All health, safety and infection control aspects are considered.

4.2 Equipment and Consumables Procurement

Initially, the need for POCT should be discussed with the POCT Co-ordinator. All decisions relating to POCT must then be made through the relevant Clinical Governance Committee ensuring post acquisition maintenance and operation will comply with Trust POCT policy.

The flow chart in Appendix 2 should be used to help the requestor before the process of implementing a new POCT device is considered.

The questionnaire in Appendix 3 must be completed and returned to the POCT Co-ordinator prior to the initiation of the procurement process.

4.3 Process of Procurement

A business case, where required, for the introduction of all POCT should identify the criteria required for the proposed service. The process of procurement should be in accordance with established protocol. Tenders for the business should be reviewed by the POCT Governance Committee to ensure that the necessary criteria are met. The cost effectiveness should be reviewed in consultation with the Trust's Procurement Department.

4.4 Standard Operating Procedures (SOP)

All techniques employed in the delivery of DBTH POCT service are subject to adherence to a Standard Operating Procedure (SOP). Each SOP should include or refer to the following:

a) Clinical relevance/purpose of examination.

b) Underlying principles of the test.

c) Correct preparation of the patient, specimen requirements and means of identification.

d) Equipment and special supplies.

e) Storage of reagents, standard or calibrators and internal control materials.

f) Calibration.

g) Instructions for the performance of the procedure.

h) Limitations of the procedure including interferences, cross reactions and reportable intervals.

i) Recording and documentation of results and appropriate action to be taken.

j) iQC procedures need to be documented ensuring that the results lie within the manufacturers reference range/criteria.

k) Patient reporting reference ranges.

l) Alert limits and critical values must be incorporated where appropriate.

m) Included in the responsibilities of personnel authorising, reporting and monitoring results, is the duty to identify abnormal results that must be brought to the immediate attention of a clinician.

n) Hazards and safety precautions to be highlighted, including disposal of consumables and cleaning of equipment.

o) Performance criteria.

A copy of the SOP is available for all staff using POCT. The SOP(s) should be kept close to the equipment used.

SOPs must be reviewed on a regular basis, minimum 2 yearly.

5. TRAINING/ SUPPORT

5.1 Personnel

Only appropriate members of staff who have achieved satisfactory levels of competence are able to use the POCT devices.

Each certificated operator must be recorded as having training and by implication understand the procedure that they use.

5.2 Training

1. Training for POCT devices will be based on guidelines given by ISO 22870:2016 Point-of-care Testing (POCT) – Additional Standards for POCT Facilities.

2. The manufacturer of the device will instruct and certify, in the first instance, the POCT coordinator and primary trainers in the correct use of the equipment. Cascade training will occur thereafter to other users of the device.

3. Evidence of training, i.e. a training record/register must be kept by the clinical area manager at a local level and produced for audit purposes.

4. The training programme will be tailored to the technology and its complexity, but should include understanding of:

   a) Basic principles of the analytical method, its limitations and the clinical relevance of the results produced. The latter should include knowledge of any results that must be made known to the clinician immediately, results which are indicative of an error, failure in the procedure or of a possible interfering substance.

   b) The correct procedure for the preparation of the patient.

   c) The correct procedure for checking and documenting the patient ID.

   d) The correct procedure for preparation of the reagents, devices and/or equipment e.g. warming of reagents stored in the refrigerator to room temperature before use, to ensure correct performance of the test.

   e) The correct procedure for performing a test and pitfalls associated with incorrect protocol.

   f) Agreed protocol for documentation/reporting of a result including the correct way to identify personal Operator ID as part of the patient's record. Identification of results which may have an adverse effect on the patient's treatment must be brought to the immediate attention of a clinician.

g) The correct quality control procedures which must be completed, validated and recorded before release of the patient result.

h) The correct procedure for the disposal of consumables, reagents and used analytical devices should be included in the programme. Awareness of any decontamination procedure required.

i) The processing of iQC and EQA samples.

5.3 Certification

When a member of staff has completed a training course, the trainer must assess the individuals competence to perform the POCT procedure.

A central record should be kept by the Clinical Area Manager in the Equipment Training Folder. This must be maintained of all those who have been shown to be competent. The record must be kept up to date and any individual whose competence fails must be removed from the register until their competence has been re-established.

The identification of each certified operator must be incorporated into POCT logs and/or entered into the patient's records.

No operator should:

a) Give their ID to another person in order for a test to be undertaken.

b) Use another person's ID.

c) Perform a point of care test without proper certification/ID.

5.4 Re-certification

Re-certification and assessment of competence is required at regular intervals as defined for each test and agreed by the Trust Clinical Governance Committee and/or Patient Safety Review Group.

If any operator is shown to be performing below the required standard, a supportive course of action should be implemented. In the first instance of poor performance the operator in question needs to be assessed by their identified trainer. Closer monitoring of performance should be implemented and re-assessment carried out. Should this fail then, certification must be withdrawn until competence can be demonstrated. If unresolved, escalation to the POCT coordinator may be necessary and corrective action will be implemented as appropriate.

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

What is being Monitored	Who will carry out the Monitoring	How often	How Reviewed/ Where Reported to
MONITORING PERFORMANCE Participation in internal quality control (IQC) and external quality assessment (EQA) is mandatory for all POCT and resources for this must be met by the user. Quality assurance is the duty of operators of POCT equipment. The exact nature of the procedures will depend very much on the technology and details will be documented in the Standard Operating Procedure for each method/device. - Quality Assurance			
IQC will be performed by the users of POCT equipment on a regular basis as specified in the Standard Operating Procedure for each particular POCT instrument. The recorded data should also identify the tolerance limits of acceptable performance. If IQC is within tolerance, and therefore acceptable, patient results may be released.	POCT co-ordinator.	Annual audit or in response to non-conformances.	Non-compliance will be reported to the Clinical Area Manager, in the first instance. Root cause should be resolved through for e.g. training needs analysis or changes to the duty rota. Any areas of persistent non-compliance will be escalated to the POCT Governance Committee via the POCT co-ordinator.
EQA must be performed by the users of POCT equipment. The results submitted to the POCT co-ordinator will be reviewed by the POCT Governance Committee. If poor performance, persistent non-participation or gross performance problems are not rectified, then it may result in withdrawal of the POCT equipment.	POCT co-ordinator.	Dependant on test - monthly, bi-monthly or quarterly.	Any non-returns or out of conformance results will result in a DATIX report which should be investigated by the Clinical Area Manager with support from the POCT co-ordinator. A summary of EQA results will be presented at the 6 monthly Clinical Governance meetings.

MONITORING COMPLIANCE - Documentation and Record Keeping			
Patient results along with the time and date of analysis, operator ID and the POCT equipment used, must be recorded within the patient's healthcare record. It is mandatory that procedures are in place to ensure the correct patient has been identified and correspond to patient notes or wrist band details. The requesting clinician must be made aware of the POCT result. Where possible, systems that allow the connectivity of POCT devices to the laboratory data system, including the electronic patient record must be used.	Clinical Area Manager	Periodic and local vertical audits by the Clinical Area Manager.	Documentation on request by POCT coordinator.
- Patient ID			
Incidence of blood glucose tests being undertaking using non-sense patient ID.	POCT co-ordinator	Monthly	% of non-sense patient ID reported to the 6 monthly Clinical Governance meetings. Persistent offenders will be escalated to Clinical Area Managers.
- Blood Gas Barcode Use			
GemWeb workload report looking for multiple uses of the same barcode over prolonged periods/number of tests carried out by users.	POCT co-ordinator	Monthly	Concerns will be raised with the relevant Clinical Area Manager.
- Blood Gas Error Reports			
GemWeb advanced reports detailing e.g. aborted samples, clotted samples.	POCT co-ordinator	Monthly	Concerns will be raised with the relevant Clinical Area Manager and re-training for the operator arranged where required.
- Instrument maintenance			
Records of instrument maintenance, faults and corrective action must be kept. It is essential that the routine	Clinical Area Manager, or identified link nurse, will be responsible for keeping local records. A	As and when.	POCT co-ordinator. Concerns will be raised with the relevant Clinical Area Manager and re-training for the

maintenance and/or calibration of equipment is carried out according to the manufacturer's instructions. Failure to properly maintain equipment may give misleading or dangerous results. Maintenance records must be kept for audit purposes.	copy should be supplied to the POCT coordinator.	.	operator arranged where required.
AUDITS All POCT procedures will be subject to regular audit.	POCT co-ordinator or Instrument Manufacturer/supplier.	Annually where practicably possible.	Non-conformances raised as DATIX reports for investigation by the Clinical Area Manager and POCT co-ordinator.
INCIDENT REPORTING Any adverse incidents associated with POCT should be reported via the Trust Incident Reporting System. - Trend Analysis Total number of incidents per Division. Number of incidents of each type e.g. EQA out of consensus, EQA non returns, incorrect patient ID, training issue, IT issue, analyser failure.	All staff. CORP/RISK 33 Incident Management Policy. POCT co-ordinator POCT co-ordinator	Please refer to CORP/RISK 33 Incident Management Policy. Monthly Monthly	Please refer to CORP/RISK 13 Policy For the Reporting and Management of Incidents and Near Misses. Reported monthly to Pathology Audit and Governance Meeting, and 6 monthly to Trust Clinical Governance and Divisional Clinical Governance Meetings.
CLINICAL GOVERNANCE STANDARDS COMMITTEE (CGSC) REPORT A 6 monthly report is presented to the CG&Q Committee.	POCT co-ordinator / POCT Lead	6 monthly	CG&Q Meeting.

7. DEFINITIONS

7.1 External Quality Assessment (EQA)

EQA is the process whereby samples with unknown values are tested. Results are then subject to peer group assessment and statistical analysis to compare results across different sites. EQA is a retrospective analysis of performance.

7.2 Internal Quality Control (IQC)

The analysis of a sample of known concentration, ensuring that the result obtained falls within acceptable performance limits. Analysis is carried out at regular intervals as detailed in the SOP.

7.3 POCT Equipment / Process

This refers to all equipment and processes used outside the laboratory to perform analytical testing. For the purpose of this policy the word 'device' is used to include the whole range of items from simple urine dipstick tests to sophisticated desktop analysers.

7.4 The User

The user is any person who handles a device whether it is used directly to produce results or for maintenance or quality control procedures. This includes clinicians, nursing staff, healthcare assistants and healthcare scientists.

8. EQUALITY IMPACT ASSESSMENT

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment For All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See appendix 5).

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- Approved Procedural Documents (ADPs) - Development and Management Policy - CORP/COMM 1
- Medical Devices Management Policy - CORP/PROC 4
- Medical Equipment Training for Trust Staff - CORP/ RISK 2
- Patient Identification Policy - PAT/PS 7
- Statutory and Essential Training (SET) Policy - CORP EMP 29
- Record Keeping Standards - CORP/REC 6
- Sharps Policy – Safe Use and Disposal - PAT/IC 8
- Waste Management Policy and Manual - CORP/HSFS 17
- Cleaning and disinfection of ward based equipment - PAT/IC 24
- Incident Management Policy - CORP/RISK 33
- Equality Analysis Policy - CORP/EMP 27
- Fair Treatment For All Policy - CORP/EMP 4
- Risk Identification, Assessment and Management Policy CORP/RISK 30

9.1 Risk Management

a) Health and Safety

All POCT should be undertaken in a way that does not place the patient or any member of the Trust's staff at additional risk. All Trust health and safety policies must be strictly adhered to.

The Standard Operating Procedure for each device should identify all specific health and safety precautions that must be taken to protect both patients and staff.

Any health and safety incidents must be reported to the Trust POCT Governance Committee via the Pathology POCT Coordinator.

A risk assessment by the Infection Prevention Control Team must be carried out before the installation of a new piece of POCT equipment and similarly before an existing piece of POCT equipment is moved to another location. A copy of all associated documentation must be forwarded to the POCT Co-ordinator.

b) Infection Control

Before purchasing any point of care equipment please ensure you have consulted with a member of the Infection Prevention & Control Team. The potential issues of storage and decontamination need to be considered before purchasing equipment.

Once you have obtained the approval of the Infection Prevention & Control Team and purchased the equipment, please include decontamination in your daily maintenance programme referring to the Decontamination Policy PAT/IC 24.

Please contact the POCT Co-ordinator or a member of the Infection Prevention & Control Team for further advice.

c) Adverse Incident Reporting

Any adverse incidents involving POCT devices e.g. instrument failure, health and safety issue or clinical incident must be reported in accordance with the Trust's Incident Reporting System (CORP/RISK 30 Risk Identification, Assessment and Management Policy).

An adverse incident is an event that causes, or has potential to cause, unwanted effects. In a POCT environment this may involve the health and safety of patients, users or other persons. Examples are an incorrect result which could lead to a delay in treatment, exacerbation of a life-threatening illness, cause serious deterioration in health or even death.

The Medical Devices Agency (MDA) is responsible for investigating adverse incidents associated with all medical devices. Safety Notices and Product Alerts are issued by the MHRA, circulated and disseminated by the Trust's Medical Devices Manager.

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the General Data Protection Regulation (GDPR) 2016.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

1. International Standard, ISO 22870 – Point-of-care Testing (POCT) – Additional Standards for Point of Care Testing (POCT) Facilities.

2. International Standard, ISO 15189 (2007) – Medical Laboratories – Particular Requirements for Quality and Competence.

APPENDIX 1

POCT GOVERNANCE COMMITTEE

TERMS OF REFERENCE

The POCT Governance Committee is responsible for overseeing all aspects of the delivery of point of care testing within the Trust. It may also be asked to take a similar responsibility for point of care testing in other environments where the Trust is responsible for the delivery of the pathology services.

Specifically:

- Has appointed core members:

  a) Trust POCT Lead - Consultant Biochemist

  b) Trust POCT Co-ordinator

These members report on a 6 monthly basis to the Trust Quality and Governance Committee and to each Divisional or Speciality Clinical Governance meeting as appropriate

- Other members will be consulted as required:

  c) Pathology Clinical Director

  d) Head of Pathology Services

  e) Pathology Quality Manager

  f) Pathology Clinical Governance Lead

  g) Representative from Procurement

  h) Representative from Medical Technical Services

  i) Specialists from specific Pathology disciplines related to the POCT test

  j) Clinical staff including Clinical Leads from the relevant area

  k) Nursing and/or clinical support teams from the relevant area

  l) General and/or Business Manager from the relevant area

  m) Representative from Finance

  n) Representative from IT

o) Representative from Estates

p) Other members of the Pathology Services Management Team

q) Representative from Training and Education

r) CCG representatives

For any new equipment tenders or introduction of new test, the following members of the committee should be consulted (as a minimum):

Trust POCT Lead - Consultant Biochemist
Trust POCT Co-ordinator
Representative from Procurement
Representative from Medical Technical Services (if equipment required)
Representative from finance
Clinical Representative from the relevant areas
General and/or business managers (budget holders) from the relevant areas
Representative from IT (if applicable)

The Committee is responsible for:

a) Agreeing the use of POCT

b) Working with the Trust's Procurement Department to ensure Procurement rules are adhered to and safeguard value for money whilst ensuring the needs of clinicians are always met.

c) Ensuring that all equipment is properly maintained.

d) Overseeing the maintenance of appropriate health and safety procedures in environments where POCT is performed.

e) Undertaking audits of POCT as appropriate to the needs of the Trust.

f) Withdrawing a POCT device if the agreed standards of operation are not met despite adequate training.

g) Submitting 6 monthly Divisional reports and a summary report to the Trust Quality and Governance Committee.

h) Disseminate information regarding contraindications/interferences in POCT systems in use within the Trust and Community.

i) Consider any other relevant business.

j) New business cases for POCT.

k) Quality control and quality assurance performance data.

l) Incident reports and action taken.

m) Status of staff training, certification and recertification requirements.

n) Standard operating procedures and modify as appropriate.

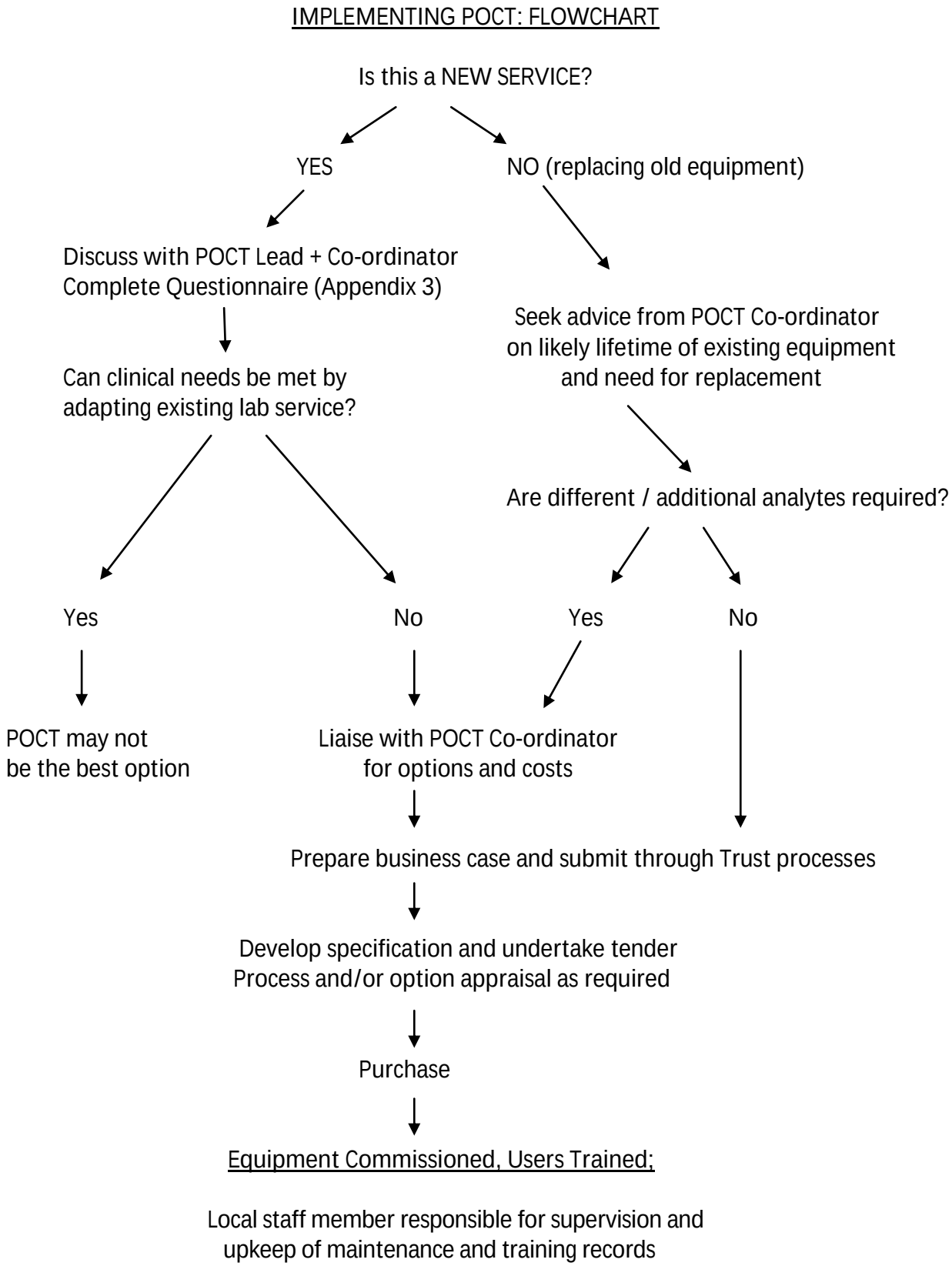
o) Suitability of trainers for each POCT procedure.

p) Review feedback from user or working groups.

Standard items in the 6 monthly reports to Clinical Governance Meetings include:

Review of equipment
Internal quality control
External quality control
DATIX summary
Compliance reports e.g glucose meter patient ID, blood gas barcode usage, error reports
Project reports
Training

APPENDIX 2 – FLOWCHART FOR IMPLEMENTATION OF POCT



APPENDIX 3 – PROPOSAL OF NEW POCT EQUIPMENT

PROPOSAL FOR NEW POCT EQUIPMENT

This proposal should be completed (as far as possible) for any proposed acquisition of new POCT equipment, this includes:

1. Tests not currently employed within the Trust
2. Replacement of existing POCT devices
3. Change of supplier/technology
4. Extension of existing POCT activities
5. Loan equipment for trial or evaluation purposes
6. Equipment or tests to support clinical trials

Completed forms should be sent to:

Point of Care Co-ordinator, Pathology Services, Doncaster Royal Infirmary.

for consideration by the POCT Governance Committee.

	Question	Answer
	Proposed Area of Application/Implementation : *Please include contact details of all relevant parties.*	
	Background Information	
1	What new POCT process/device is proposed?	
2	Does the proposal for equipment to be acquired, fully comply with the requirements of the Trust Point of Care Testing Policy?	
3	Is the test available in the laboratory?	
4	Why should the testing be done on the ward/unit rather than sending samples to the laboratory?	
5	Has discussion with the POCT Coordinator and/or relevant Department taken place?	
6	If so, with whom?	
7	What resources have been identified to support this POCT?	
8	Which group of patients need the test?	

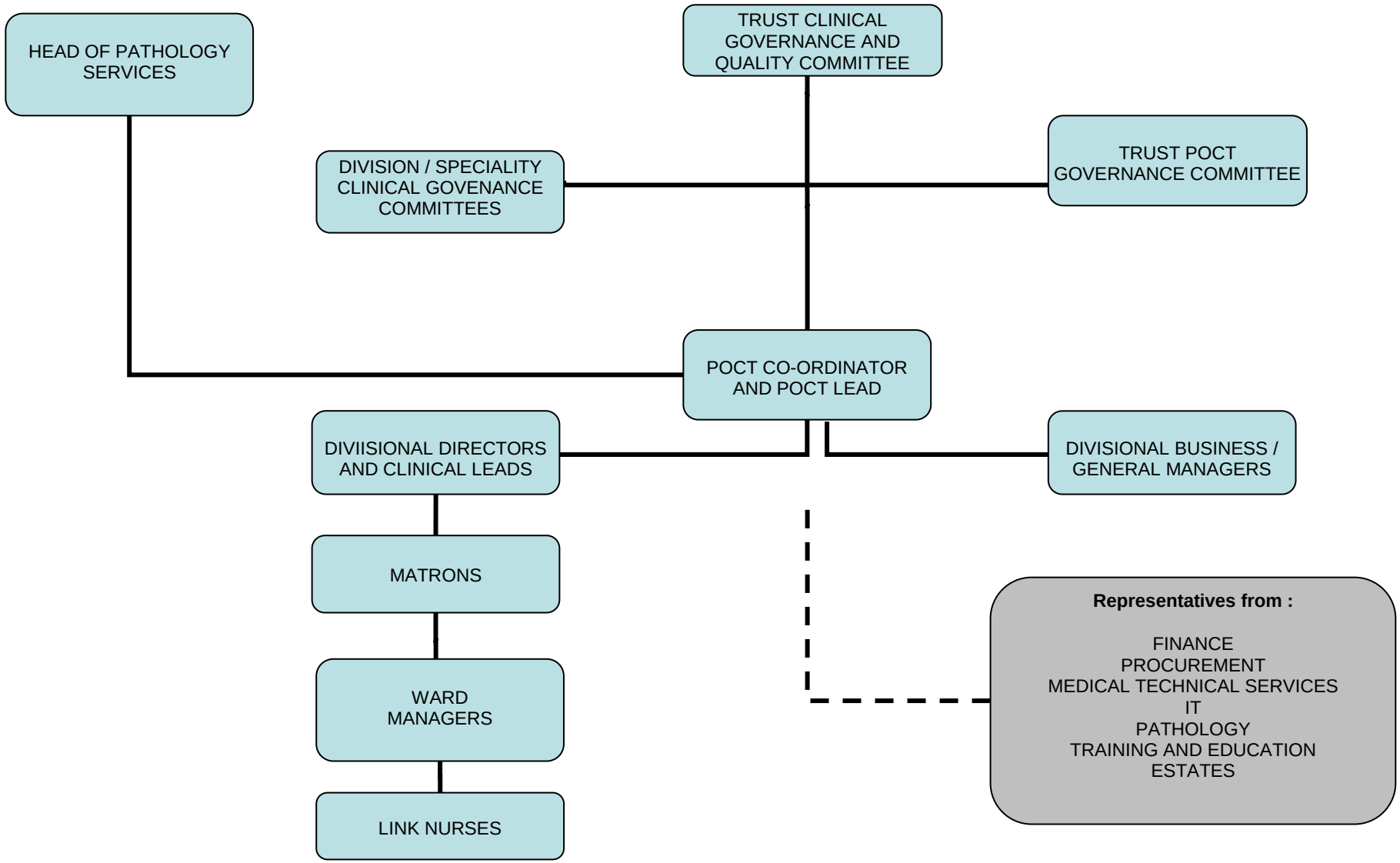
9	Is there a protocol or set of guidelines for selecting patients to test? *Please enclose a copy.*	
10	How many samples will be analysed per annum?	
11	Are any confirmatory/additional tests required: (a) Using POCT devices? (b) Or, in the laboratory? (c) If Yes, how will this be funded?	
12	What are the clinical benefits of POCT?	
	Costs	
13	What is the capital cost of the instrument (including VAT)?	
14	What is the annual consumable cost per annum? (Include all consumables, collection devices, quality control, external quality assurance costs as well as devices lease if applicable.)	
15	What are the maintenance/servicing costs after expiry of guarantee?	
16	Is the cost of interfacing the device to the laboratory or hospital computer system included in the cost?	
17	If not what is the cost to interface?	
18	Does an IT port need to be installed?	
19	Is the cost of software/hardware to monitor and control the device from the laboratory included?	
20	Have you considered what support you may require from Pathology?	
	Devices	
21	What device is most suitable for your purpose?	
22	Is the device CE marked?	
23	Has the equipment been evaluated by an external professional organization e.g. PASA or MDA?	
24	Will there be any health and safety problems? (A risk assessment by Infection Prevention & Control is mandatory prior to the approval of POCT equipment.)	
25	Are there adequate facilities for disposal of samples and consumables?	
26	What is the distance to the nearest hand-wash sink?	

27	Is room air-conditioning required?	
28	Are the appropriate amenities available e.g. power, water, electricity, network point?	
29	Does the device have a UPS (Uninterrupted Power Supply) unit?	
30	Where will the devices be located?	
31	Are there adequate facilities to perform POCT?	
32	What space is available for the storage of stock items/consumables?	
33	Can an engineer have easy access to the equipment?	
34	Will POCT device provide the required accuracy and precision?	
35	Is the instrument able to be password protected?	
36	What happens if devices/process breaks down?	
37	Who will manage the ordering of consumables including quality assurance materials?	
38	Who will take overall responsibility for the devices?	
39	Who will arrange maintenance contracts and emergency call-outs?	
	Staff/Personnel Requirements	
40	Who will be performing the tests?	
41	What extra staff time will be required? Are enough staff currently available?	
42	Is extra staffing resourced?	
43	Will the users be restricted to staff working in the location of the POCT process?	
44	Who will have responsibility for the necessary training?	
45	Will Pathology need to be involved?	
	Reports/Results	
46	Has Pathology been consulted with regard to units, reference ranges, sample types and correlation with laboratory results?	
47	Who will be responsible for interpretation of results and any clinical action based on the POCT result?	
48	How will the results be recorded and stored?	

49	Can the device be interfaced to the laboratory computer or the hospital information system?	
50	Do you need IT support?	
51	Has the IT department agreed to your requirements?	
52	Have you insured that the proposal for the equipment meets the requirements of the Trust POCT Policy fully?	
	Post POCT Committee Approval	
53	Have you applied to the Medical Equipment Group for approval?	

	Applicant signature	
	Print name	
	Position held	
	Division and Ward	

APPENDIX 4 – POINT OF CARE TESTING ORGANISATIONAL CHART



APPENDIX 5 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division/Executive Directorate and Department	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Point of Care Testing Policy CORP/RISK 8 v7	Clinical Specialties	Katherine Wright	Existing	10/08/2020

1) Who is responsible for this policy? Name of Division/Directorate: Clinical Specialities

Describe the purpose of the service / function / policy / project/ strategy? Who is it intended to benefit? What are the intended outcomes? The aim of this document is to provide guidance for safe and effective management and use of POCT systems that are fit for their intended purpose, used by a competent individual on the correct patient, giving quality results which become part of the patient's record.

2) Are there any associated objectives? ISO 22870:2016 (UKAS) - Currently not accredited

3) What factors contribute or detract from achieving intended outcomes? Trust and staff engagement, Compliance, Funding

4) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

- If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation]

5) Is there any scope for new measures which would promote equality? Not Required

6) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

7) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 √	Outcome 2	Outcome 3	Outcome 4

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form in Appendix 4

Date for next review: August 2023

Checked by: K. Wright Date: 10/08/2020

Pathology Services

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Doncaster and Bassetlaw
Teaching Hospitals
NHS Foundation Trust

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Specimen and Request Form Labelling Policy

This procedural document supersedes: PAT/T 8 v.7 - Specimen and Request Form Labelling Policy.

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor(s):	Abigail Trainer Deputy Chief Nurse
Author/reviewer: (this version)	Richard Stott
Date written/revised:	16/04/2020
Approved by:	Patient Safety Review Group 4/12/2020 Policy Approval and Compliance Group
Date of approval:	13 January 2021
Date issued:	21 January 2021
Next review date:	September 2023
Target audience:	Clinical staff, Trust-wide

Amendment Form

Please record brief details of the changes made alongside the next version number. If the procedural document has been reviewed without change, this information will still need to be recorded although the version number will remain the same.

Version	Date Issued	Brief Summary of Changes	Author
Version 8	21 January 2021	• New style format included. • Removal of references to Cytology as these samples are sent directly to the external laboratory. • Section 4.4.1 Includes phonetic patient names for unknown patients. • Section 4.5 Telephone contact re certain rejected samples in ED.	Dr Richard Stott
Version 7	24 October 2017	• New style format included. • Clarification of what constitutes a point of reference. • Revised monitoring section to reflect cessation of SQLAs and Clinical Governance Committee performance target for care groups. • Addition of learning from significant adverse events.	Dr Richard Stott
Version 6	17 October 2013	• New style format included. • Removal of reference to general numbers for neonates. • Addition of criteria for ICE order comms labels. • Link to HSE notice	Dr Richard Stott
Version 5	February 2011	• Use of district number for all Trust requests in place of other patient identification numbers. • Added sample labels consistent with the order communications software due to be introduced from April 2011.	Dr Richard Stott
Version 4	December 2009	• Amendment form and contents page added • Paragraphs numbered • Introduction - addition of - "and patient wrist band (if applicable)." • P7, addition of – "or 'Sharps' included"	Dr Richard Stott
Version 3	June 2009	Reviewed, no change – Short review time given to coincide with the introduction of new wristbands	Dr Richard Stott
Version 3	February 2007	• Alteration to minimum data sets for identification of specimen details (no change to minimum data sets for request form) • Histopathology sample containers should be handwritten • Pre-printed addressograph labels are NOT acceptable on sample containers • Labels printed contemporaneously, will be accepted on sample containers if they include the minimum sample data set and are initialed by the person taking the sample to confirm that they have verified identification with the patient. • Clarification that samples will not be analysed if additional essential information is incomplete	Dr Wardell

Contents

Page No.

1. INTRODUCTION

Correct sample identification and handling is a mark of good medical practice. Samples that cannot be properly identified because they fail to meet the criteria laid out in this policy are a risk to the patient.

In conjunction with the current version of the Trust's "Patient Identification Policy" (PAT/PS 7), this policy establishes the minimum identification criteria for Pathology specimens and request forms to be accepted for analysis.

Inadequately or inaccurately labelled specimens or forms will not be accepted unless they are considered to be 'unrepeatable'. A classification of 'unrepeatable' will be on an individual specimen basis following discussion with senior members of Pathology staff and in these cases the requestor may be required to come to the laboratory to amend the request information and document that they have done so. Any labelling discrepancy will be included on the pathology report.

All medical laboratories are required to have appropriate and effective policies and procedures in place to address the requirements of ISO/IEC 17025 and/or ISO 15189 such that that the integrity of samples is adequate for analysis, and results are reported accurately, clearly, unambiguously and objectively and, where necessary, include comments upon the quality or adequacy of the sample which may have compromised the result.

2. PURPOSE

This policy outlines the required information to provide patient identification criteria for Pathology specimens and request forms in order for them to be accepted by the laboratory for analysis.

3. DUTIES AND RESPONSIBILITIES

Pathology will make every effort to ensure requests are processed in a safe and timely manner but it is essential that request forms and samples are labelled appropriately and legibly in compliance with this policy. It is also important to clearly identify the investigations required with relevant supporting information.

- It is the responsibility of managers to ensure that –
    - Staff in their area of responsibility are aware of the content of this policy and the current version of the Trust's Patient Identification Policy (PAT/PS 7) and follow the required elements for all pathology requests.
    - All patients have been formally identified according to the appropriate sections of the Trust's Patient Identification Policy. In particular an ID band may be required.

- It is the requestor's responsibility to ensure that –
    - All requestor, location and patient details on the request form or computer screen are correct, clearly legible and that the request form is signed if required for the requested tests (eg blood transfusion related requests).
    - The investigations required are clearly identified with relevant supporting information.
    - Any required timings are clearly indicated (eg sample time relative to treatment).
    - All appropriate Health & Safety requirements are complied with as detailed in the Health and Safety Policy (CORP/HSFS 1).

- The person responsible for taking the specimen (whether medical, nursing or phlebotomy staff) MUST ensure that -
    - All the necessary information is present on the request form. Staff should NOT proceed with the specimen collection procedure if this is not the case.
    - Containers are legibly labeled with the correct details of the patient. In particular that the specimen details match those on the form and patient wrist band (if applicable).
    - Containers are securely packaged so they do not leak and are unlikely to be broken on the way to the laboratory.
    - Specimens to be transported by road are packaged in compliance with the Carriage of Dangerous Goods by Road (ADR) Regulations. For details see section 4.5 of the policy on collection & handling of Pathology Specimens (PAT/IC 11).
- All Pathology laboratory staff involved in the receipt and testing of specimens are required to ensure that samples and forms are labelled to the standards set out in this document before testing can proceed.

4. PROCEDURE

4.1 Minimum Data Set for Identification on ICE Pathology Requesting Labels.

Each of the following constitutes a single contributor to patient identification, normally all of these will be present on the ICE request form labels:

- District Number or NHS number (For primary care & other trusts patients)
- Patient Surname and Forename (in full, not initials)
- Date of birth (DOB)
- Gender
- Patient address
- Request number barcode

All of this data will correspond to that on CaMIS at the time the label is printed and the patient demographics should always be checked with the patient prior to taking samples.

Printed labels for attaching to sample tubes contain the following data –

- District Number or NHS number
- Patient Surname and Forename
- Date of birth (DOB)
- Request number barcode

If the correct procedures are being followed, ICE sample labels will have had their content checked against an ID band or confirmed by the patient at the time they are printed. The patient ID is transmitted electronically to the lab system as well as printed on the labels, therefore this method of requesting is more secure than, and should be used in preference to, hand written forms.

If the patient has moved location since the request was created on ICE it is essential to hand write the correct location on the request form, failure to do so will result in reports being handled as if the original location still applied and may delay action on critical results.

4.2 Minimum Data Set for Identification on a Written Request:

Each of the following constitutes a single contributor to patient identification. A minimum of 3 complete, accurate and legible items must be present on the request form to achieve unique identification of the patient.

- District Number and/or NHS number (For primary care & other trusts patients)
- Patient Surname and Forename (in full, not initials)
- Date of birth (DOB)
- Patient address if District Number /NHS number not supplied

A minimum of 3 identical patient identifiers must be present on both the request form and on each individual specimen container to demonstrate that it corresponds with the associated request.

Please note - A district number / NHS number must be provided on any transfusion related request (including antenatal screening).

In addition to the minimum data set for patient identification please ensure all other relevant fields of the request form are completed:

- Ward/ Practice, Consultant/GP
- Patient address
- Patient gender
- Date and time of collection
- Specimen type
- Investigation(s) required
- Name of requesting clinician and bleep number
- Relevant clinical details

- Current drug therapy
- Copy reports, if required
- Patient category (PP/ CAT 2 / NHS)

Samples may not be analysed if other essential information is incomplete. Please see additional department specific details in section 4.3 for information.
Please Note:

- Pre-printed addressograph labels are NOT acceptable on sample containers (except for samples labeled according to a safe patient identification procedure which has been pre-approved by Pathology).
- Addressograph labels are acceptable on request forms.
- Labels printed contemporaneously (i.e. beside patient and at the time that the sample is being taken) will be accepted on sample tubes if they include the minimum data set and are initialed by the person taking the sample to confirm that they have verified identification with the patient. (It is important that the size and thickness of labels placed on samples does not cause difficulties with sample testing. Therefore please seek guidance from the relevant pathology departments before using labels produced by clinical systems).

4.3 Additional Department Specific Details:-

Blood Transfusion and Blood Grouping Requests (see Hospital Blood Transfusion policy PAT/T2). Requests will be rejected (and only emergency group O blood packs made available) if the following additional requirements are not followed:-

- Person taking blood must sign specimen and request form to confirm patient identification has been checked.
- A unique patient identifier must be provided (NHS number / District number). This number must be referenced on trust systems ie we cannot accept another trust's locally assigned numbers.
- Request form must be signed by requesting Doctor.
- Latest Hb result and reason for transfusion, number of units required, time and date required, special requirements e.g. CMV negative or irradiated products required should be indicated on the form.
- Except for emergency transfusions there must be two independent samples tested to provide the patient's blood group and subsequent cross match.

Clinical Biochemistry

- For glucose and lipids, state fasting or non-fasting.
- For drug analysis, time of last dose and time of sample collection are required.
- For antenatal screening for Down's Syndrome and NTD, gestational age and patient weight must be provided.
- For pregnancy tests and female hormones, state LMP or day of cycle.
- Patient gender must be included for reference ranges to be included on report.

Haematology

- Patient gender must be included for reference ranges to be included on report.

Microbiology

- Include specimen type and site.
- For antibiotic assay levels e.g. Gentamicin, the relevant questions must be answered on the ICE system or a 'Gentamicin sticker' must be applied to the written request form and the following information completed:
  - Mg of last dose given
  - Date and Time of last dose
  - Date and time that sample was taken (pre and post dose samples required for multiple dosing).

  Please refer to Gentamicin guidance document. Gentamicin labels are available from Pathology reception.

Histopathology / Non Gynae cytology

- Include specimen type and site on both request form and specimen container.
- Indicate patient consent / objection to use of surplus tissue for education / Quality Control.

4.4 Additional Information

4.4.1 Unidentified Patient Requirements

The request form and samples must contain a unique identifier number (i.e. District number) and patient gender. Preferably, unknown patients will also be identified using a randomly assigned phonetic name (eg Hotel Bravo) and an estimated DOB. Where possible, the unique identifiers used should be registered on CaMIS. This enables results to be accessed on ICE by the clinical staff.

Prior registration on systems may not be possible in all cases (e.g. during a Major incident or failure of computer systems) and, in these cases the request will be entered on to the pathology computer system using a temporary number (T- prefix), either using the patient demographics provided or the district number as the surname and 'Unknown' as the forename. These results will only be available by searching systems via patient details. Please refer to the Trust's Major Incident policy (CORP/RISK 1).

No other data is required and any other data provided must be regarded as provisional until the patient is formally identified.

All request forms must be signed.

4.4.2 Genito-Urinary Medicine (GUM) Patients Requirements

Where name is not appropriate, then GUM number, DOB and gender will be acceptable. The GU med number, gender and date of birth are required and MUST match exactly on the form and sample (odd numbers are male patients).

For use with ICE, existing patients are given a new number which comprises their original numerical identity with a GL prefix. These numbers are registered on the Lilly system and the details are then communicated to ICE and the lab system to permit requesting of tests.

4.4.3 Paediatric Samples/Gas syringe Requirements

Use labels provided and attach to each sample tube

4.4.4 Health and Safety Requirements

In 2011 the HSE issued a reminder regarding the legal requirement to notify certain infection risks on pathology request forms (http://www.hse.gov.uk/safetybulletins/clinicalinformation.htm).

Affix 'Danger of Infection' stickers on samples and request forms from patients with the following conditions:

- Hepatitis B, Hepatitis C and HIV
- Cases of infective or suspected infective diseases of the liver
- Known or suspected cases of Mycobacteria (TB)
  Salmonella typhi / paratyphi (Typhoid / Paratyphoid)
  E.coli 0157
  Dysentery with Shigella dysenteriae
  Brucellosis
- Patients in at-risk groups

4.5 Inadequate and Incorrectly Labelled Requests and Unsuitable Samples

The Directorate will make every effort to ensure requests are processed in a safe and timely manner but it is essential that request forms and samples are labeled appropriately and legibly in compliance with this policy.

It is also important to clearly identify the investigations required with relevant supporting information.

If you have any doubts regarding this policy please ring the relevant department for further information.

Specimens will not be accepted for analysis if: -

- There is no unique identification of the patient i.e. they do not meet the minimum data set for identification.
- Blood transfusion requests without handwritten identification details on samples and signed form and sample.
- There is an incorrect sample type or tube.
- Incorrectly filled coagulation specimens (pale blue citrate tubes). ED will be telephoned about rejection of these if we are informed the patient is receiving anticoagulants.
- Incorrect transportation conditions.
- Sample is received in a hazardous condition e.g. leaking or sharps attached.
- Sample or request form is un-labelled or incorrectly labeled with less than the minimum data sets for patient identification.
- Request form does not include all of the essential additional information e.g. fully completed gentamicin label.
- Pre-printed addressograph label used on sample container (with the exception of samples labeled according to safe patient identification procedures and pre-approved by Pathology).
- Mismatch of details between the form and sample(s).
- The information provided is illegible.

5. TRAINING/ SUPPORT

This policy and the Patient identification policy are no-longer referenced during the Trust's induction.

The training requirements of staff will be identified through a training needs analysis. Role specific education will be delivered by the service lead responsible for the specific clinical skill.

- The Trust provides training in phlebotomy techniques and the additional requirements associated with transfusion samples. This training includes all relevant aspects of this policy.
- The Trust provides training on aseptic collection of microbiology specimens (Swabs, blood cultures and urines). This training includes all relevant aspects of this policy.
- Training in the use of the ICE order communications system is available via the IT trainers.

6. MONITORING COMPLIANCE WITH PROCEDURAL DOCUMENT

What is being Monitored	Who will carry out the Monitoring	How often	How Reviewed/ Where Reported to
Accuracy of request form and specimen container labelling. Suitability of samples for analysis.	Pathology reception staff.	Every request checked.	As detailed in section 4.5, breaches which prevent analysis will be recorded on outgoing reports in place of the results. Clinical staff may have to re-label unrepeatable specimens before they can be analysed.
Significant breaches are reported as incidents via DATIX.	Reported by Pathology reception staff	In real time via the DATIX process.	To Matrons, ward managers and relevant DATIX investigators.
Performance of individual divisions is monitored by pathology.	Logged by Pathology reception staff and analysed by senior staff.	All requests monitored.	Divisions are informed of breaches via the quarterly reports formerly sent as part of the Clinical Governance & Quality meeting's Pathology labelling improvement target. This report is received by Divisional Directors and Clinical Governance leads.

7. DEFINITIONS

ABBREVIATIONS LIST:

- Hb Haemoglobin
- CMV Cytomegalovirus
- NTD Neural Tube Defect
- LMP Last Menstrual Period
- ICE Integrated Clinical Environment

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment For All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (see Appendix 1).

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS & REFERENCES

- Blood Transfusion Policy - PAT/T 2
- Patient Identification Policy - PAT/PS 7
- Health and Safety Policy - CORP/HSFS 1
- Pathology Specimens – Collection and Handling of Pathology Specimens PAT/IC 11
- Major Incident Plan - CORP/RISK 1
- Fair Treatment for All Policy - CORP/EMP 4
- Equality Analysis Policy - CORP/EMP 27

NB - According to the Patient Identification Policy, any patients who are unable or unwilling to identify themselves to the required level must be handled by the requesting staff as an "unidentified patient". Therefore the Trust's Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)- PAT/PA 19 and the Privacy and Dignity Policy - PAT/PA 28 do not apply to application of this policy.

10 DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the General Data Protection Regulation (GDPR) 2016).

For further information on data processing carried out by the Trust, please refer to our Privacy Notices and other information which you can find on the trust website:
https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11 REFERENCES

HSE safety notice HID 5-2011 Provision of key clinical information on laboratory specimen request forms http://www.hse.gov.uk/safetybulletins/clinicalinformation.htm

European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) Regulations, 2021

ISO/IEC 17025

ISO 15189

APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Pathology labelling & requesting.	Clinical support services	Dr R Stott Pathology CG lead	Existing policy	16/4/2020

1) Who is responsible for this policy? Name of Division: Clinical support services

2) Describe the purpose of the service / function / policy / project/ strategy? Who is it intended to benefit? What are the intended outcomes? Policy is intended to ensure sufficient accurate patient information is provided on request forms and specimen containers to permit pathology staff to uniquely identify the patient and specimen, provide the required tests and report the results.

3) Are there any associated objectives? Legislation, targets national expectation, standards Identification as per Patient identification policy PAT/PS 7 v.5

4) What factors contribute or detract from achieving intended outcomes?

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? None of these are directly relevant to application of the policy however there are potential issues with handling of gender reassignment patients.

- If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation] The issue of data mismatches affecting gender reassignment patients has been an ongoing problem but has recently become much more difficult with staff being reluctant to assist in resolving issues due to increasing awareness of the gender reassignment legislation. This has been raised via trust governance processes as we are often the middle man between primary and secondary care WRT patients undergoing or following reassignment.

6) Is there any scope for new measures which would promote equality? [any actions to be taken

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	no	
b) Disability	no	
c) Gender	no	
d) Gender Reassignment	Patients are affected as a consequence of their treatment but no	• Many reference ranges will not apply to individual patients according to the "preferred gender" stated on requests and recorded on CaMIS. Results for some tests will always reflect the genetic / developmental characteristics of a patient (eg muscle mass). Others may reflect treatment but not necessarily achieve normal levels for the reassigned gender. Tests from prior to any change will be flagged inappropriately. Results for these individuals need to be reviewed with care by clinicians who are aware of any hormonal treatments being received and the issues involved with each test. • Similarly the gender provided on the request may alter certain aspects of patient care - eg blood group of products transfused and availability of gender specific tests eg PSA, CA125 Mismatches between patient data on request forms and the CAMIS system may delay reporting and/or prevent clinical teams from referring to results due to the need for reports to reflect details on request forms and specimens.

	impact of the policy.	
e) Marriage/Civil Partnership	no	
f) Maternity/Pregnancy	no	
g) Race	no	
h) Religion/Belief	no	
i) Sexual Orientation	no	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form in CORP/EMP 27

Date for next review: September 2023

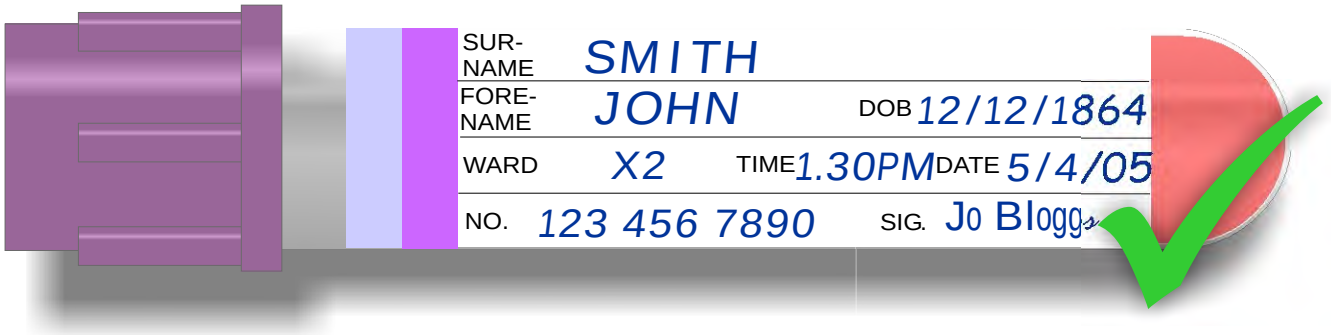
Checked by: R Stott Date: 16/4/2020

Pathology

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

Let's get it right !

Wherever possible use ICE to request & label Pathology tests



Follow the Trust policy (PAT/T8) and avoid mistakes by labelling all types of samples correctly with full name,date of birth and ID number

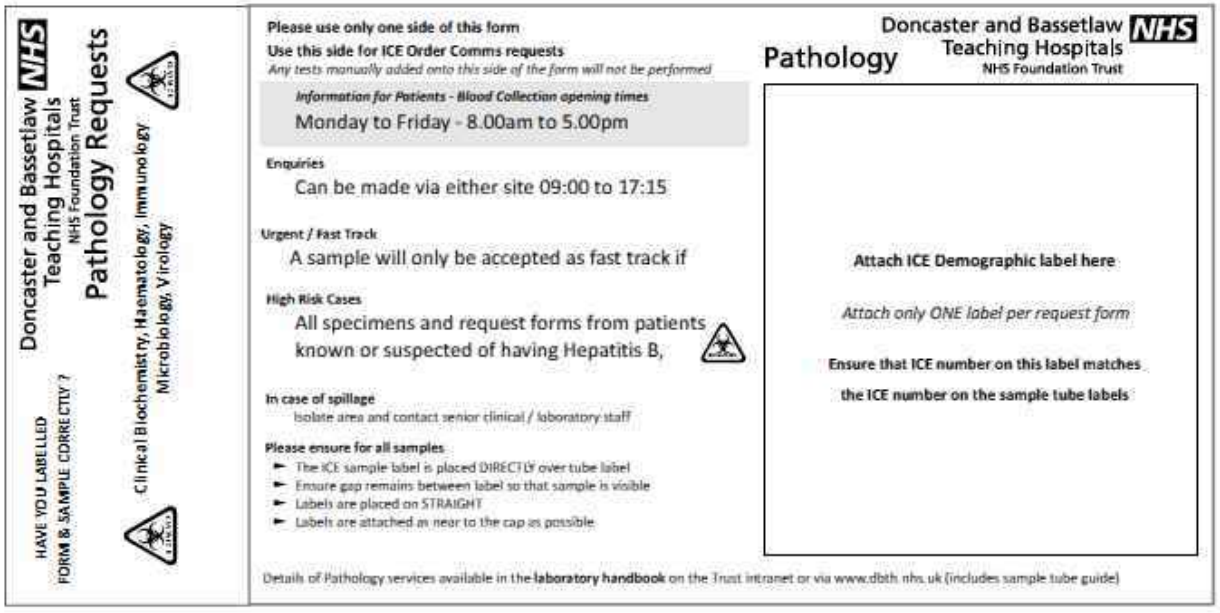
Note - Transfusion samples must have all details & be signed

General Pathology Request Form

Use this form for Clinical Biochemistry, Haematology, Immunology, Microbiology and Virology.

This form is being used as part of the ICE Order communications roll out. If access to ICE exists, please use ICE as the method of requesting and collecting specimens. ICE will create the necessary labels which can be applied to the front side of this form.

For non ICE orders, please use the reverse side of this form (which is the same as the previous form design). If the front side of the form is used for non ICE orders, the request may be rejected.



Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

Pathology Requests

Clinical Biochemistry, Haematology, Immunology, Microbiology, Virology

HAVE YOU LABELLED FORM & SAMPLE CORRECTLY ?

Please use only one side of this form

Use this side for ICE Order Comms requests

Any tests manually added onto this side of the form will not be performed

Pathology

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

Information for Patients - Blood Collection opening times

Monday to Friday - 8.00am to 5.00pm

Enquiries

Can be made via either site 09:00 to 17:15

Urgent / Fast Track

A sample will only be accepted as fast track if

High Risk Cases

All specimens and request forms from patients known or suspected of having Hepatitis B,

In case of spillage

Isolate area and contact senior clinical / laboratory staff

Please ensure for all samples

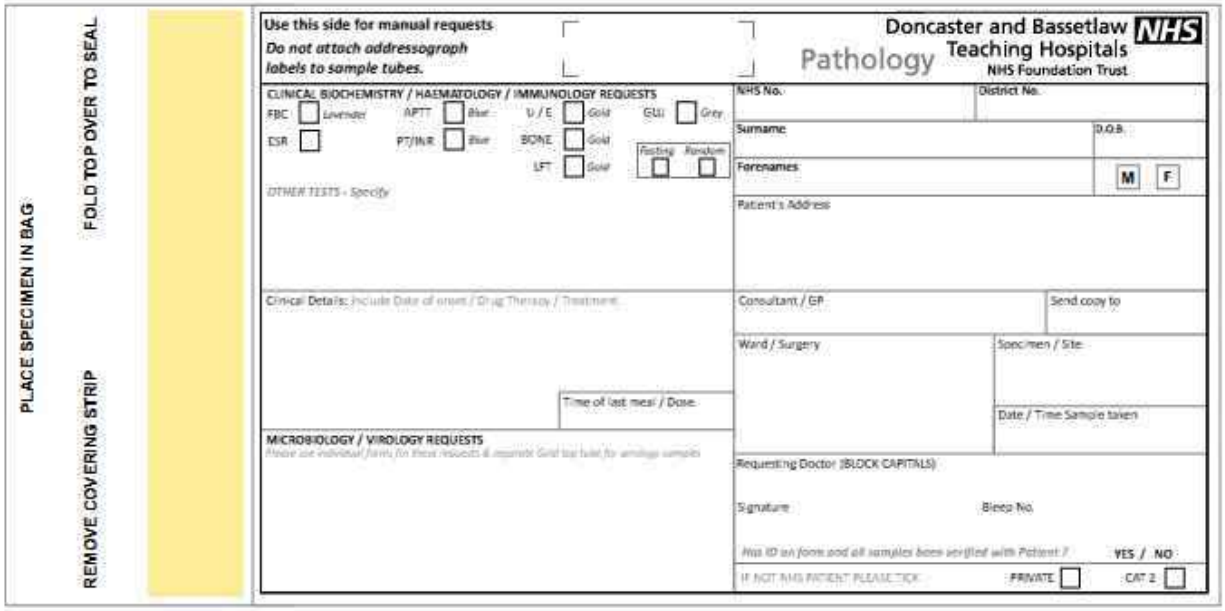
- The ICE sample label is placed DIRECTLY over tube label
- Ensure gap remains between label so that sample is visible
- Labels are placed on STRAIGHT
- Labels are attached as near to the cap as possible

Attach ICE Demographic label here

Attach only ONE label per request form

Ensure that ICE number on this label matches the ICE number on the sample tube labels

Details of Pathology services available in the **laboratory handbook** on the Trust intranet or via www.dbth.nhs.uk (includes sample tube guide)



PLACE SPECIMEN IN BAG

FOLD TOP OVER TO SEAL

REMOVE COVERING STRIP

Use this side for manual requests

Do not attach addressograph labels to sample tubes.

Pathology

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

CLINICAL BIOCHEMISTRY / HAEMATOLOGY / IMMUNOLOGY REQUESTS

FBC Lavender | APTT Blue | U / E Gold | GUL Grey

ESR | PT/INR Blue | BONE Gold | Fasting | Random

LFT Gold

OTHER TESTS - Specify

Clinical Details: Include Date of onset / Drug Therapy / Treatment

Time of last meal / Dose

MICROBIOLOGY / VIROLOGY REQUESTS

Please use individual forms for these requests & separate Gold top tube for serology samples

NHS No. | District No.

Surname | D.O.B.

Forenames | M | F

Patient's Address

Consultant / GP | Send copy to

Ward / Surgery | Specimen / Site

Date / Time Sample taken

Requesting Doctor (BLOCK CAPITALS)

Signature | Bleep No.

Has ID on form and all samples been verified with Patient ? YES / NO

IF NOT NHS PATIENT PLEASE TICK PRIVATE | CAT 2

Blood Bank Request Form

DO NOT USE TRANSPORT TUBE SYSTEM

HAVE YOU LABELLED FORM & SAMPLE CORRECTLY ?
DO NOT ATTACH ADDRESSOGRAPH LABELS TO SAMPLE TUBES

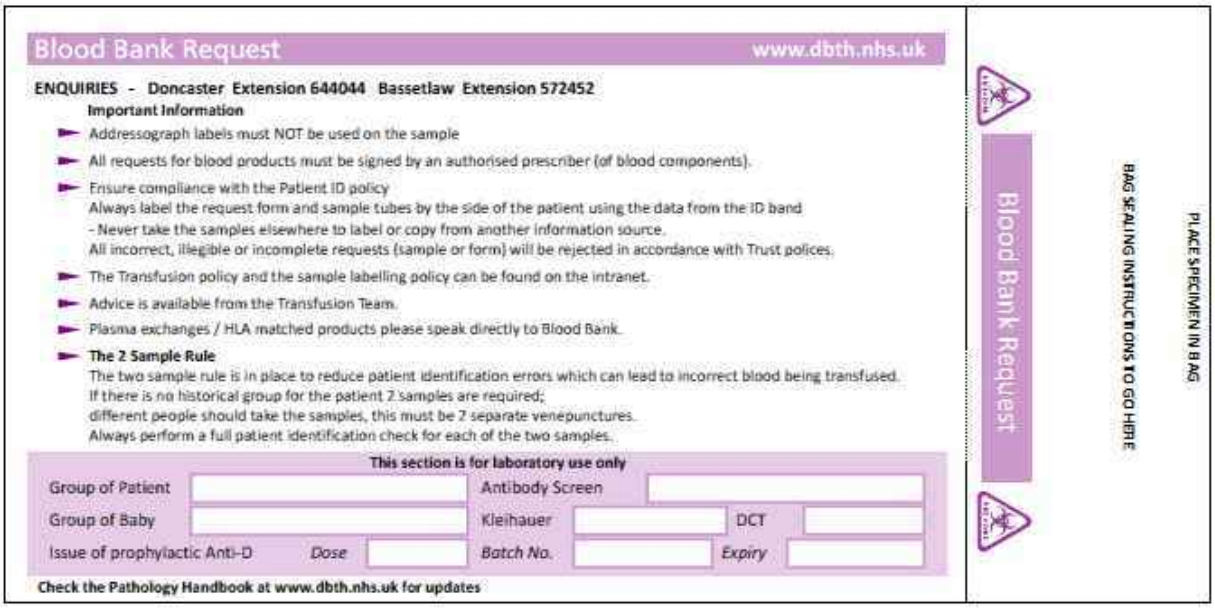
Blood Bank Request

Blood Bank Request

Doncaster and Bassetlaw Teaching Hospitals NHS
NHS Foundation Trust

NHS No. | District No.
Surname | D.O.B.
Forenames | M | F
Patient's Address
Consultant | Ward
Clinical Details
Latest Hb:
Is the patient pregnant? Yes | No | Unsure
Last Anti-D issue: Date | Dose
Sensitising event: Date | Time
Gestation
Previous Transfusions? Yes | No | Unsure | Date

Group & Screen | DAT | Kleihauer (FMH)
Enter the number of components required
Red Blood Cells | Platelets▼
Fresh Frozen Plasma▼ | Cryoprecipitate▼
▼ Name of Consultant Haematologist approving plasma product request
Date & Time required
Contact when ready | tick if required | Ext/Bleep | must be provided
Special Requirements
Irradiated | HEV Negative | CMV Negative
Reason
Name of Requestor
Signature
Bleep number
Date & Time of collection
*Sample taken by:
*Signature:
* I certify that I have taken the blood sample & identified the patient in compliance with DBTH 'BB-RT' Policy



Blood Bank Request www.dbth.nhs.uk

ENQUIRIES - Doncaster Extension 644044 Bassetlaw Extension 572452

Important Information

- Addressograph labels must NOT be used on the sample
- All requests for blood products must be signed by an authorised prescriber (of blood components).
- Ensure compliance with the Patient ID policy
  Always label the request form and sample tubes by the side of the patient using the data from the ID band
  - Never take the samples elsewhere to label or copy from another information source.
  All incorrect, illegible or incomplete requests (sample or form) will be rejected in accordance with Trust polices.
- The Transfusion policy and the sample labelling policy can be found on the intranet.
- Advice is available from the Transfusion Team.
- Plasma exchanges / HLA matched products please speak directly to Blood Bank.
- **The 2 Sample Rule**
  The two sample rule is in place to reduce patient identification errors which can lead to incorrect blood being transfused.
  If there is no historical group for the patient 2 samples are required;
  different people should take the samples, this must be 2 separate venepunctures.
  Always perform a full patient identification check for each of the two samples.

This section is for laboratory use only

Group of Patient | Antibody Screen
Group of Baby | Kleihauer | DCT
Issue of prophylactic Anti-D | *Dose* | *Batch No.* | *Expiry*

Check the Pathology Handbook at www.dbth.nhs.uk for updates

Blood Bank Request

BAG SEALING INSTRUCTIONS TO GO HERE

PLACE SPECIMEN IN BAG

Pathology

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

Sample Tube Guide

SODIUM CITRATE 1:9 *Fill to line essential*	Anticoagulation Dosing, Coagulation Screen, Prothrombin Time (INR), Thrombophilia Screen, Lupus Anticoagulant Screen, APTT
PLAIN (No Additive)	Procollagen III, Lamotrigine
SST	All Biochemistry not mentioned elsewhere (*1 Tube*), Microbiology (*1 Tube*), Immunology, Vitamin B12, Folate, Ferritin
HEPARIN	hsTroponin I, Chromosome Studies, Amino Acids, Synovial fluids for Crystals
EDTA	FBC, Reticulocytes, Sickle Screen, HbA1c,Haemoglobinopathy Screen, G6PD, ESR, GF Test, Malarial Parasites, HLA B27, Marker Studies, Lead,Complement, PCR Tests, HIV / CMV Viral loads, Kleihauer
EDTA (X-Match)	Blood Group, Save Serum, Crossmatch, Blood Group Antibodies, Cord Blood Samples
FLUORIDE OXALATE	Glucose, Ethanol (Alcohol), Lactate
PLAIN Trace Element Red Stripe	Copper, Selenium, Zinc
PLAIN Trace Elements Lilac Stripe	Chromium / Cobalt

First

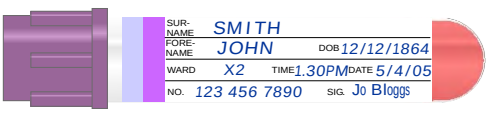
ORDER OF DRAW

Last

Sample Labelling

Wherever possible use ICE to request & label Pathology tests

Follow Trust policy (PAT/T8) and avoid mistakes by labelling all types of samples correctly with the full name,date of birth and ID number



Note - Transfusion samples must have all details & be signed

Paediatric Tube Guide

* Indicates a component of a group which may require little or no extra volume for multiple tests.

All volumes relate to whole blood and assume normal clotting and haematocrit.

TEST	TUBE	VOL
17-αHydroxyprogesterone		600
3-Hydroxybutyrate		600
ACTH		500
Alpha-1-antitrypsin	*Quantitation*	400
	Phenotype	600
	Genotype	4ml
Albumin*		400
Aldosterone		600
Alkaline Phosphatase*		400
Amino Acids		600
Ammonia		400
Amylase		400
Androstenedione		400
AST		400
B12/Folate		600
Bicarbonate		400
Bilirubin (D & I)*		400
Bilirubin (Total)*		400
Biotinidase		600
Blood Group & DCT (<6mo)		500
Blood Group & X-match (>6 mo	Adult tube	1ml
Bone Profile*		400
Caeruloplasmin		600
Caffeine		400
Carbamazepine		400
Chloride *		400
Cholesterol	Fasting	400
Cholesterol HDL	Fasting	400
Cholinesterase	Adult tube	2ml
Chromosomes	Genetics	2 x 600
	Karyotyping	2 x 600
CK		400

Copper	Adult tube	1ml
Cortisol		400
Cows Milk Antibodies		600
C-Peptide		600
CRP		400
DHAS		400
Digoxin		400
Electrolytes & Urea*		400
Ethanol		400
Factor Assays	**Contact Lab**	
Ferritin		400
Free Fatty Acids		600
Galactosaemia screen		400
Gliadin Antibodies		400
Glucose		400
Growth Hormone		400
HIV positive mother		2 x 600
IGF1		500
Immunoglobulins		400
IgE		600
Insulin (also send Glucose)	On Ice	600
Iron		400
Ketones		400
Lactate		400
LDH		400
Liver Function Tests (LFT)*		600
LFT & Bone*		600
LH & FSH		600
Magnesium		400
Meningococcal PCR		600
Microbial Serology		1.2ml
Oestradiol		600
Osmolality		400
Paracetamol		400

Phenylalanine		600
Phenobarbitone		600
Phenytoin		400
Phosphate*		400
Potassium*		400
Progesterone		400
Prolactin		400
Protein Electrophoresis		400
Protein (Total)*		400
PT/APTT/Coag Screen		1.3ml
More Complex Coag Tests	**Contact Lab**	
PTH		400
Renin		600
Salicylate		400
SHBG		400
Sodium*		400
Testosterone		600
Theophylline		400
Thyroid Function Tests		600
Triglyceride		400
TSH		600
TSH & Free T4		600
TSH, Free T4 & Free T3		1ml
U & E*		400
U & E, LFT*		600
U & E, LFT & Bone*		600
Urate		400
Urea*		400
Valproate		400
Zinc	Adult tube	1ml

TUBE COLOURS	Serum Gel	Li Heparin
Citrate Screw top	Fluoride Oxalate	EDTA
Trace metal tube		

Document Lead/Author: Peter Taylor
Title: Pathology Services Laboratory Handbook
Document No.: PATH-SOP-53

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

PATHOLOGY SPECIMENS

Collection & Handling of Pathology Specimens

This procedural document supersedes: PAT/IC 11 v.6 - Pathology Specimens – Collection and Handling of Pathology Specimens

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor (s)	David Purdue, Deputy Chief Executive & Chief Nurse
Author/reviewer: (this version)	Paul Gravil – Pathology Head of Service Dr. K. Agwuh – Consultant Microbiologist
Date written/revised:	March 2021
Approved by:	Infection Prevention and Control Committee
Date of approval:	15 April 2021
Date issued:	19 April 2021
Next review date:	April 2024
Target audience:	Trust-wide

PATHOLOGY SPECIMENS

COLLECTION & HANDLING OF PATHOLOGY SPECIMENS

Amendment Form

Version	Date Issued	Brief Summary of Changes	Author
Version 7	19 April 2021	• Change to Executive sponsor • Patients Lacking Capacity added page 4 • Change to guidance on obtaining cervical/ urethral samples and information on SDA test • Added updates on testing for SARS-CoV-2 • Data Protection section added – section 9	Paul Gravil Ken Agwuh
Version 6	26 June 2018	• Changes to urine sample containers • Changes to blood culture bottles • Reference to new swabs used for MRSA samples • Update to information on sepsis	Paul Gravil
Version 5	25 June 2015	• Policy produced in the new Trust format • Further information on viral haemorrhagic fever added • Reference to ICE order comms system • Equality Impact assessment added • References updated	Paul Gravil
Version 4	January 2012	• Section added on Education and Training – page 4. • Section added on "Equality Impact Assessment" – page 5. • Insertion of new procedure for blood culture specimens – page 6. • Item 7b Procedure Change for Virus Isolation – using "Green Viral Swab" – page 8.	Paul Gravil
Version 3	June 2010	• Insertion of Appendix 1 – Sepsis Screen Guidelines	Dr K Agwuh

Contents

Page No.

1. INTRODUCTION

All Pathology specimens must be obtained and transported with care, as accidents could result in the transmission of infection to clinical, laboratory and ancillary staff.

2. PURPOSE

The purpose of this policy is to establish the correct procedures for the collection, handling and transport of laboratory samples.

3. DUTIES AND RESPONSIBILITIES

Each individual member of staff within the Trust is responsible for complying with the standards set out in this Policy if they collect, handle and/or transport Pathology specimens. They need to be aware of their personal responsibilities in preventing the spread of infection and should also continually assess whether they personally meet the required standards.

It is the responsibility of Directors and Managers to ensure compliance with this policy.

PATIENTS LACKING CAPACITY
Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.
- Any act done for, or any decision made on behalf of a patient who lacks capacity must be done, or made, in the persons Best Interest.
- Further information can be found in the MCA policy, and the Code of Practice, both available on the Extranet.

4. PROCEDURE

This policy should be read in conjunction with other Trust Infection Control Policies, particularly:

- Hand Hygiene (PAT/IC 5)
- Standard Precautions (PAT/IC 19)
- Hospital Inoculation Policy (PAT/IC 14)
- Hazard Group 4 Viral Haemorrhagic Fevers (PAT/IC 32)

4.1 Standard Precautions

Standard precautions apply to the handling of all specimens.

- Always wash hands before and after obtaining and handling specimens
- Cover cuts and lesions with a waterproof dressing
- For your own protection, disposable (non-latex) gloves MUST be worn if there is any likelihood of contact with blood or body fluids. If individuals experience problems such as skin irritation or dermatitis they must be referred to the Occupational Health Department for appropriate advice and management.
- Only use the correct specified container for the specimen / test required. Take care not to contaminate the outside of the container with blood or other material. Tighten tops to prevent leakage
- Discard needles, Vacutainer holders and syringes safely into sharps boxes as per Trust Waste Policy CORP/HSFS 17.
- All staff taking blood samples or dealing with specimen transport must be familiar with the *Hospital Inoculation Policy* (PAT/IC 14).

Please Note: Additional precautions must be taken when a specimen is known, or suspected, to contain a hazard group 3 or 4 organism [(1)]. (See section 4.7).

4.2 Obtaining Specimens

Always ensure that the container and request form are labelled with the patient's name, date of birth, unit number, date and time of sample, and that adequate clinical information is provided on the form. (Specimens will only be analysed if they are labelled in accordance with the Trust Policy on Specimen and Request Form Labelling (PAT/T 8).

Clinical Laboratory Sciences and Virology - Place blood samples in the bags attached to the forms and ensure that they are correctly sealed. Several blood samples from each patient can be placed in the same bag; however, virology/serology samples require a separate form and bag.

Microbiology - Blood cultures, urines, swabs, fluids, sputum and faeces samples must not be mixed with blood samples. Specimens for culture should be obtained before starting antibiotics unless treatment is very urgent.

Histopathology - Request forms must not be placed within the same bag as the specimen, but the form and sample MUST be kept together (It is acceptable to place the form into the pocket of the specimen bag).

For more detailed information and training regarding venepuncture and blood samples refer to the Clinical Skills department who have a training package covering these aspects: http://intranet.win2000.doncri.nhs.uk/education_and_development/training_and_development/clinical_skills_Homepage.aspx

4.3 Taking Blood Culture Specimens

It is important that when taking blood cultures the following procedure is followed to ensure the best recovery of significant micro-organisms and to minimise contamination from skin flora.

For an adult use a set of green and orange top bottles and inoculate each bottle with 10mls - aerobic (green top) bottle first. For paediatric samples use a yellow top bottle and add up to 4mls.

Blood cultures must be taken from a venepuncture site specifically for this purpose. If a culture is being collected from a central venous catheter, disinfect the access port with a chlorhexidine swab (2% chlorhexidine in 70% isopropyl alcohol) swab. When blood is being collected for other tests, always inoculate blood culture bottles first.
Ensure that all necessary items are available: tourniquet, blood culture pack.

Procedure for collection and inoculation of bottles

- Identify patient
- Wash hands with soap & water, clean trolley & don apron
- Decant contents of blood culture pack
- Remove lids from bottles & clean with 2% Chlorhexidine in 70% Isopropyl alcohol wipe for 30secs, 1 swab for each bottle
- Place sterile towel under patients arm and apply disposable tourniquet
- Palpate chosen vein & clean skin using 2% Chlorhexidine in 70% Isopropyl alcohol in FREPP applicator for 30 seconds. Allow to air dry before venepuncture.

DO NOT RE-PALPATE AFTER CLEANING

- Using 70% Alcohol gel hands & apply gloves.
- Attach winged blood collection set to adaptor cap & insert needle into vein.
- Place adaptor cap over aerobic bottle (green) first & press down to pierce septum, repeat with anaerobic bottle (orange) Hold sample bottle below vein to allow fill - (approx. 10mls/ bottle).
- Release tourniquet prior to removal of needle & place swab over puncture site, apply pressure
- Dispose of safety butterfly & adaptor cap as a single unit into sharps bin.

- Remove gloves & gel hands, label bottles and complete microbiology form with patient's details.
- Do not remove barcode labels from bottles. (Specimens will only be analysed if they are labelled in accordance with the Trust Labelling Policy PAT/T 8).
- Record the procedure in the patient's records.
- Send samples to the laboratory as soon as possible and tidy away equipment.

Syringe and needle Method

- When using a syringe and needle draw 20mls and ensure 10mls of blood is added to each bottle, inoculating the green bottle first followed by the orange. Do not add more than 10mls to each bottle.

- Do not reduce the volume of blood for cultures (unless difficulty in obtaining sample) as this will affect the recovery of micro-organisms. If you have difficulty in obtaining a sample inoculate the green bottle only.

4.4 Other Samples

- Mid-stream urines: - the external genitalia should be cleaned first with soap and water or sterile saline. The patient passes the first and last part of the stream into a toilet, urine bottle or bedpan, and the middle 10-20ml into a red top urine primary tube, a pulp receptor to collect the urine if necessary. Ensure that the tube is filled to the dashed line. (Small paediatric samples may still be sent in universals).

- Catheter urines: - disinfect the sampling port with a 2% chlorhexidine/ 70% alcohol swab, then, using a syringe, aspirate 10ml urine into a red top urine primary tube. Ensure that the tube is filled to the dashed line.

- Swabs: - Cotton-tipped swabs [blue top for MRSA screens, black top for all other requests] must be used for routine sampling. The swab is inserted into the deepest part of the wound or lesion, before cleaning, and placed in the tube of charcoal transport medium. Throat swabs are taken from the tonsils and back of the naso-pharynx using a wooden spatula to depress the tongue. Nose swabs are taken from the anterior nares. Moisten the Swab by dipping it into the tube that contains the sterile charcoal. One swab used inside both anterior nares (fleshy-part of the nose). Wire shafted swabs should be used for male urethral and wherever a small cotton tip is required.

- Per nasal: - (for whooping cough) swabs are extra-long, wire-shafted.

- Naso-pharyngeal or combined nose and throat swab. For nasopharyngeal aspirate in universal transport pot, or for combined nose and throat swab – a single swab used for throat then nose into one pot of green top viral transport medium.

- Faeces samples: - use a faeces container and collect a walnut-sized amount (5 – 10ml if liquid) with the spatula provided in the container (blue capped universal). Gloves must always be worn.

- Sputum samples: - ask the patient to cough and expectorate into a sputum container and explain that sputum, NOT saliva, is required. Additional precautions are required for known or suspected pulmonary tuberculosis (see section 4.7).

- Fluids and pus: - aspirate with needle and syringe into a sterile universal container. Pus samples are preferable to swabs in serious infections. Sterile gloves must be worn when collecting these samples.

- Virus Isolation: - using the Green Viral Swab, ensure the container is sealed tightly.

- High vaginal and cervical swabs: - Black topped charcoal swabs should be used for routine sampling. Specific swabs are available for Chlamydia/N.gonorrhoeae SDA detection from the cervix, urethra and limited other sites. These swabs must be used for this purpose only. Note also that Chlamydia and N. gonorrhoeae can be detected in urine samples. Guidance is available from the Departments of Genitourinary Medicine for taking swabs from patients who are being investigated for any sexually transmitted infections.

4.5 Specimen Collection and Transport

Transport of Samples by Road

All road transport of samples must be in accordance with current Carriage of Dangerous Goods by Road legislation (ADR) [(2)]. Specimen bags must be placed in an appropriate secondary bag containing absorbent material. This secondary bag must be carried in an approved appropriately labelled transport box.

All vehicles transporting specimens must carry a spillage kit containing disinfectant, protective clothing, absorbent material and a clinical waste bag

Internal Sample Transport

To prevent spillage and to maintain patient confidentiality, specimens transported within the hospital, ie, not by road, MUST be carried in the Pathology approved specimen buckets with the lid in place. These buckets are fully labelled according to current legislation and are available in all wards and clinic areas.

Cleaning Transport Containers

All transport containers must be washed weekly in hot soapy water. If contaminated with blood/body fluids, wash and dry, then disinfect with a solution containing 10,000ppm available chlorine, (e.g. Haztabs).

4.6 Specimen Storage

- Blood samples: refer to laboratory handbook via Trust website or relevant ICE order comms information for test specific details
- Urine samples: Although rapid transport to the laboratory is always recommended, boric acid preservative is present in the red top primary tubes. Therefore urine is stable for 48 hours without refrigeration.
- Faeces and sputum samples, aspirates: refrigerate within one hour.
- Swabs: refrigerate within four hours.
- Blood cultures: incubate within one hour.
- Histology Samples containing Formalin: DO NOT REFRIGERATE

4.7 Precautions for High Risk Samples

The Approved List of biological agents is produced and regularly updated by the Advisory Committee on Dangerous Pathogens. The classifications in the Approved List assign each biological agent listed to a hazard group according to its level of risk of infection to humans, where Hazard Group 1 agents are not considered to pose a risk to human health and Hazard Group 4 agents present the greatest risk.

Hazard group 4

The main organisms in group 4 are the viruses causing the viral haemorrhagic fevers (VHF) e.g. Ebola and Lassa viruses. Advice from the Consultant Microbiologist or an Infectious Diseases Physician at the Royal Hallamshire Hospital MUST be sought before ANY specimens are obtained from a patient with suspect viral haemorrhagic fever[(3)].

Please refer to Trust Policy PAT/IC 32 – Hazard Group 4 Viral Haemorrhagic Fevers. This policy aims to assist staff working in accident and emergency as well as medical admission units in the hospital, who may assess patients with pyrexia of unknown origin (PUO) following a recent stay in countries where viral haemorrhagic fevers are endemic. Firm diagnosis solely on clinical grounds will be difficult, epidemiology is essential in assessing the feverish returning traveller with a history suggestive of VHF. It provides a brief guide to the assessment of such cases, and aims to provide efficient and timely management for patients, while preventing healthcare workers acquiring or exposing vulnerable patients to the infection.

Hazard Group 3

Group 3 organisms include

- Bacillus anthracis (anthrax)
- Brucella species (brucellosis)
- Chlamydia psittaci (psittacosis)
- Escherichia coli 0 157 (E.coli 0 157)
- Shigella dysenteriae (dysentery)
- Salmonella typhi and parathypi (typhoid and para-typhoid)
- Mycobacterium tuberculosis and other mycobacteria
- Human immunodeficiency virus (HIV)
- Hepatitis B and C
- Plasmodium falciparum (falciparum malaria)
- Rabies virus
- The prions causing all forms of Transmissible Spongiform Encephalopathies such as Creuzfeld Jacob Disease
- SARS virus (including SARS-CoV-2)

This list is not exhaustive. The full approved list of biological agents [4] can be found at www.hse.gov.uk/pubns/misc208.pdf

All specimens from patients with known or suspected group 3 infections must be designated as high risk, with the appropriate label. Precautions may be modified, on the advice of the Infection Control Team, when more information becomes available.

'Danger of Infection' labelling

It is the doctor's responsibility to decide which tests are to be done, provide adequate clinical information on request forms, and ensure that 'danger of infection' stickers are affixed to request forms and containers for all high-risk specimens.

Consent and counselling

Tests for HIV, hepatitis B and hepatitis C must be discussed with patients beforehand and patients must understand and consent to these tests. This must be documented in the notes. A counsellor from the Department of Genitourinary Medicine may be asked to see the patient. This is especially important for HIV testing. Testing without consent must only be done in exceptional circumstances and after discussion with the consultant in charge of the patient's care. The General Medical Council has provided guidance on consent and counselling [5].

Routine antenatal screening for blood-borne viruses must follow the guidelines available in the Maternity Department.

Collecting high risk specimens

- Nasopharyngeal (or combined nose and throat) swab for respiratory virus screen: For suspected respiratory virus such as SARS-CoV-2 or Influenza. Staff must ensure they are wearing appropriate PPE when swabbing patient. The swab should be in a viral transport media. All samples for COVID-19 testing should be packaged and transported in accordance with category B transportation regulations and labelling.
- Sputum and other samples in tuberculosis: - For suspected pulmonary tuberculosis, three sputum samples should be collected, preferably taken on waking. The request form must be marked 'acid-fast bacilli' (AFB) and a 'Danger of Infection' sticker affixed to the form and the container. Gloves must be worn for handling sputum. For investigation of tuberculosis at other body sites, pus or tissue in a sterile universal container or 2 universals full of urine for 3 consecutive days (early morning samples) are required.

- Creutzfeldt - Jakob disease – See separate policy "*Variant Creutzfeldt - Jakob disease (vCJD) and transmissible Spongiform Encephalopathy Agents (TSE): minimising The Risks of Transmission* (PAT/IC 4)".

- Viral Haemorrhagic Fever Samples - Please refer to Trust Policy PAT/IC 32 – *Hazard Group 4 Viral Haemorrhagic Fevers* for information on assessment and correct management of patient from endemic areas.

5. TRAINING/ SUPPORT

The training requirements of all staff will be identified through a training needs analysis. Role specific education will be delivered by the service lead or nominated person. Please refer to the Mandatory and Statutory Training Policy (CORP/EMP 29) for details of the training needs analysis, as staff will require different levels of training.

Infection Prevention and Control must be included in individual Annual Development Appraisal and any training needs for IPC addressed.

Each staff member is accountable for his or her practice and must always act in such a way as to promote and safeguard the wellbeing and interest of patients. Staff will receive instructions and

direction regarding infection prevention and control practice and information from a number of sources:-

- Trust Induction – New staff informed how to access the policy
- Trust Policies and Procedures available on the intranet
- Ward/departmental/line managers
- Clinical skills Training Package – Venepuncture. Accessed via the Clinical skills Department http://intranet.win2000.doncri.nhs.uk/education_and_development/training_and_development/clinical_skills_Homepage.aspx
- Pathology Handbook – accessed via the intranet or http://intranet.win2000.doncri.nhs.uk/Library/Pathology/Laboratory%20Handbook%20-%20Users.pdf
- Advice is also available from the Doncaster & Bassetlaw Teaching Hospitals internet sites.

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

It is the responsibility of all department heads/professional leads to ensure that the staff they manage adhere to this policy.
Incidents where non-compliance with this policy is noted and are considered an actual or potential risk must be documented on the Datix system.

What is being Monitored	Who will carry out the Monitoring	How often	How Reviewed/ Where Reported to
The policy will be reviewed in the following circumstances:-	APD Process Group IPCT	Every three years routinely, unless: • When new national or international guidance are received. • When newly published evidence demonstrates need for change to current practice.	Approved Procedural Document (APD) database Policy will be approved and ratified by the Infection Prevention and Control Committee
Compliance with policy	Pathology Management Team– monitored via Datix reports	Daily	Datix reports reviewed on a daily basis by relevant manager. Significant findings reported to IPC team

7. DEFINITIONS

ADR	Carriage of dangerous goods regulations
AFB	Acid Fast Bacilli – Microscopic appearance of M. tuberculosis
IPC	Infection Prevention and Control
PUO	Pyrexia of unknown origin
TSE	Transmissible Spongiform Encephalopathy
vCJD	Variant Creutzfeldt - Jakob disease
VHF	Viral Haemorrhagic Fever
PPE	Personal Protective Equipment

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment For All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See appendix 2).

9. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website:
https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

10. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- Hand Hygiene - PAT/IC 5
- Standard Infection Prevention and Control Precautions Policy - PAT/IC 19
- Management of sharps injuries and blood and body fluid exposure incidents - PAT/IC 14
- Hazard Group 4 Viral Haemorrhagic Fevers - PAT/IC 32
- vCJD and TSE: Minimising the Risks of Transmission – PAT/IC 4
- Waste Management Policy CORP/HSFS 17
- Specimen and Request Form Labelling Policy – PAT/ T8
- Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS) - PAT/PA 19
- Privacy and Dignity Policy - PAT/PA 28
- Equality Analysis Policy – CORP/EMP 27
- Fair Treatment for All Policy – CORP/EMP 4
- Adult In-Patient & ED Sepsis Screening & Action Tool – IPOC 1608 WPR44232

11. REFERENCES

1. *Biological agents: Managing the Risks in Laboratories and Health Care Premises.* Advisory Committee on Dangerous Pathogens, May 2005

2. *European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) Regulations,* 2013.

3. *The management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence:* Advisory Committee on dangerous Pathogens, July 2012.

4. *The Approved List of Biological Agents*. Advisory Committee on Dangerous Pathogens HSE, 2013

5. *Serious Communicable Diseases*. General Medical Council, October 1997. www.gmc-uk.org

APPENDIX 1 – SEPSIS SCREEN GUIDANCE

SEPSIS SCREEN GUIDANCE

1) AIM

The aim of this sepsis screen guidance is to ensure that relevant clinical specimens for culture and sensitivity testing are obtained prior to antimicrobial administration unless immediate empirical treatment is indicated.

2) CONTEXT

Historically, sepsis was referred to as infection of the blood. It is a life-threatening syndrome characterised by the body's inflammatory response to infection.

3) SCREENING & ACTIONS

The 'surviving sepsis' campaign suggested that for patients with severe sepsis, a series of therapeutic elements must be administered to reduce mortality. These elements or 'bundle' is known as the Sepsis Six:

1. Administer Oxygen
2. Take blood cultures (at least 2 sets)
3. Give IV antibiotics
4. Give IV fluids
5. Check serial lactates
6. Measure urinary output

For further information on sepsis screening and the Sepsis Six pathway, please refer to the trust Adult In-patient and ED Sepsis Screening & Action Tool (IPOC 1608 - WPR44232, March 2018)

4) MICROBIOLOGICAL INVESTIGATIONS / SAMPLES REQUIRED IN SEPSIS SCREEN:

- *Blood cultures* – when taking blood cultures two sets of blood cultures should be sent. Each set (2 bottles, except for paediatric patients) should be taken from separate venepuncture site if possible. For patients with suspected Central Venous line sepsis send a set (2 bottles) of blood cultures taken from each lumen plus a peripheral blood culture (PBC).

- *Urine Culture* – especially if patient has a positive urine dipstick or if catheterised.

- *CSF* – if meningitis suspected and if there is no contra-indication to perform a lumbar puncture.

- *Nasopharyngeal (or combined throat and nose swab)* – in a respiratory virus season or during a pandemic (e.g. influenza or SARS-CoV-2)

- *Sputum* – especially if patient is expectorating and respiratory tract infection suspected.

- *Swabs* – from skin lesions/discharges or ulcers associated with signs of inflammation or cellulitis. Swabs will produce better results if taken from deep sites rather than superficially sloughy areas.

- *Tissues* – are samples usually taken in sterile conditions especially during surgical procedure or investigation.

- *Abscess/Pus* – as above, or via ultra sound scan / CT guide.

- *Serological Investigations* – as discussed with Microbiologist.

Adequate clinical information on the request form is important, this helps in the laboratory processing and reporting of results.

5) REFRENCES

1) Saving Lives, High Impact Intervention: Antimicrobial Prescribing Care Bundle, Draft for Consultation, Principles by HCAI and Cleanliness Division, DH, 2010

2) Royal College of Physicians Healthcare Associated Infection Working Group. Short Guidelines for Optimal Hospital Antimicrobial Prescribing at http://www.rcplondon.ac.uk

3) Recognising Sepsis as a Global Health Priority. N Engl J Med, Aug 2017

4) Surviving Sepsis Campaign: http://www.survivingsepsis.org/guidelines

5) Sepsis Six – NICE Evidence https://www.evidence.nhs.uk/Search?ps=30&q=sepsis+six

6) DBTH Adult in-patient & ED sepsis screening & action tool (IPOC 1608 – WPR 44232)

APPENDIX 2 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/Strategy	Division/Executive Directorate and Department	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Pathology Specimens - Collection & Handling of Pathology Specimens	Corporate Nursing, Infection Prevention & Control	Paul Gravil & Ken Agwuh	Existing policy	March 2021

1) Who is responsible for this policy? Infection Prevention & Control

Describe the purpose of the service / function / policy / project/ strategy? To establish the correct procedures for the collection, handling and transport of laboratory samples.

2) Are there any associated objectives? No

3) What factors contribute or detract from achieving intended outcomes? None

4) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

- If yes, please describe current or planned activities to address the impact N/A

5) Is there any scope for new measures which would promote equality? N/A

6) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	Neutral
b) Disability	No	Neutral
c) Gender	No	Neutral
d) Gender Reassignment	No	Neutral
e) Marriage/Civil Partnership	No	Neutral
f) Maternity/Pregnancy	No	Neutral
g) Race	No	Neutral
h) Religion/Belief	No	Neutral
i) Sexual Orientation	No	Neutral

7) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 √	Outcome 2	Outcome 3	Outcome 4

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form in Appendix 4

Date for next review: April 2024

Checked by: B Bacon IPCP Date: March 2021

CONSENT TO A POST MORTEM EXAMINATION

The Human Tissue Act 2004 sets out a new legal framework for the storage and use of tissue from the living and for the removal, storage and use of tissue and organs from the dead. The Act also established the Human Tissue Authority (HTA) as a regulatory body for all matters concerning the removal, storage, use and disposal of human tissue for scheduled purposes. The Human Tissue Authority has issued codes of practice which are available on the HTA website.

The statutory requirements for consent are as follows:

The Living:

Consent for treatment and examination including removal is a common-law matter dealt with in the Department of Health's reference guide to consent for examination and treatment.

Consent from the living is needed for storage and use of tissue for obtaining scientific or medical information which maybe relevant to any other person now or in the future, research, public display and transplantation.

Consent from the living is not needed for storage and use of tissue for:

Clinical audit, educational training, performance assessment, public health monitoring.

The Deceased:

After a Coroner's post mortem, for the continued storage or use of material no longer required to be kept for the Coroner's purposes.

For the removal, storage and use for the following scheduled purposes:

Anatomical examination, to determine the cause of death, and establishing after a person's death the effects of any drug or other treatments administered to them.

To obtain scientific or medical information, public display, research, transplantation, clinical audit, educational training, performance assessment, public health monitoring and quality assurance.

Consent **is not** needed for:
Carrying out investigation into the cause of death under the authority of the Coroner.

Keeping material after post mortem under the authority of a Coroner for as long as the Coroner requires it.

Keeping material in connection with a criminal investigation or following a criminal conviction.

Post mortem examination is important for informing relatives, Clinicians and legal authorities about the cause of death. It can also inform bereaved relatives about possible acquired or genetic diseases which may need treatment and care. Post mortem examination may lead to improvements in clinical care, maintenance of clinical standards, increase our understanding of disease and prevent the spread of infectious diseases and may contribute to research and training.

Bereaved people should be treated with respect and sensitivity at all times, both to help them take important decisions at a difficult time and to ensure continuing improvements in care.

A post mortem examination may take place either because the Coroner (medical/legal autopsy) considers it necessary or because it has been agreed upon by the deceased person or their relatives (voluntary/consent autopsy).

Consent is not required for the carrying out of a Coroner's post mortem, consent is however required for the removal, storage and use of human tissue or organs. Voluntary post mortems require informed consent.

Discussing the post mortem with the family: who may seek consent?

The way in which a post mortem examination is discussed with the deceased person's relatives or close friends is extremely important. They need to be given honest, clear, objective information; the opportunity to talk to someone they can trust and whom they feel able to ask questions; reasonable time to reach decisions (about a hospital post mortem and about any donation of organs or tissue); privacy for discussion between family members if applicable and support if they need and want it. Only once relatives have had time to reach a decision should they be invited to sign the consent form.

Obtaining consent for a hospital (voluntary) autopsy should involve a team approach. The team should comprise a member of the bereavement staff, a member (preferably senior) of the clinical team involved in the care of the deceased and the pathologist who will be carrying out the examination. Those seeking consent for hospital post mortem examination should be sufficiently senior and well informed, with a firm knowledge of the procedure. They should have been trained in the management of bereavement and know the purpose and procedures of post mortem examinations.

Wherever possible, before the discussion with relatives, the responsible clinician should contact the Pathologist who will perform the post mortem examination. They can give accurate guidance on which if any tissue or organs are likely to be retained, for how long and for what purpose. There can then be an informed discussion with the relatives and bereavement staff in attendance, as to what type of examination is envisaged and what specimens may be required. They can then be guided through the consent process to make their decisions having been fully informed of all the options.

The current Trust consent forms (WPR32771) should be used as a basis for obtaining informed consent. There are accompanying explanatory leaflets (MOR-SOP-36, A simple guide to a Post Mortem Examination) which should be made available to the relatives. The various options such as limiting the post mortem examination and the consequence of this should be explained to the relatives.

The discussion with the relatives should include a basic explanation of what happens in a post mortem examination; the benefits of a post mortem examination and the questions to be addressed in any particular case. Possible alternatives to a full post mortem examination and any limitations of these alternatives should be explained. Information about tests needed and whether these might cause delays in the process (eg retention of the whole brain) should be explained. Options for what will happen to the body or remains and any organs or tissue removed including tissue blocks and slides should be discussed. The timing of burial or cremation should be established and discussions take place about the uniting of any material with the body for burial or cremation if the relatives so wish. Religious factors, such as the need for quick funerals in the jewish, muslim and hindu faiths should be taken into account. Relatives should be given a copy of the signed consent form and there should be a cooling off period during which relatives may change their mind.

Dr Suzanne Rogers
Consultant Pathologist

Useful Documents:

Guidance notes for completing a medical certificate of cause of death – guidance for doctors.

RC Path - Role of the medical examiner

Deaths which must be referred to the coroner:

The cause of death is unknown

The death was violent or unnatural, or there are suspicious circumstances

The death **may** be due to:

- accident
- suicide
- self-neglect
- neglect by others
- an industrial disease, or the deceased's employment

The death occurred during

- an operation, or before full recovery from an anaesthetic
- detention in police or prison custody, or shortly after release

There is no doctor who attended the deceased available to complete the MCCD

The deceased was not seen by the certifying doctor either after death or within 14 days before death

Pathology Services

NHS
Doncaster and Bassetlaw
Teaching Hospitals
NHS Foundation Trust

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Pathology Tests

This section covers the tests that Pathology Services offer according to the service repertoire agreed with our users.

A full list of all accredited tests provided by each laboratory is detailed in our laboratory Schedule of Accreditation on the UKAS website.

Some tests provided by the laboratory are not included within the Schedule of Accreditation. These tests are managed within the Laboratory Quality Management System. If further information is required please contact the laboratory via the contact details on the web page.

Schedule of Accreditation (9550) Version 3 Issue 16th June 2022

The laboratory performs many tests which are grouped into sets which are performed together. Examples include the Full Blood Count (FBC) or a Liver Function Test (LFT). This is the usual method for requesting these tests. Within this section all tests are referred to via their common requesting set name, and within each set description, the individual test components are detailed – These are the elements of the requesting set that are reported.

Certain tests are also requested individually. If you cannot find the test from the index list, then the test can be retrieved using a free text search on the handbook using the functionality built into Acrobat (Click the **Find** button on this page).

Time limits for requesting additional tests on already received samples do exist depending on sample type and analyte requested. Please contact the laboratory directly for any “add-on” requests required and advice will be given as to whether or not this can be done.

Information Available

For each test the following items of information are supplied within these pages.

- Department performing the test.
- Contact Telephone numbers for enquiry and advice.
- Which sample containers are required.
- Which request form should be used.
- What specimen is required for the test.
- When the test is available.
- Comments on the use of this test.
- If there are any special storage requirements.
- How long the sample is stable for prior to laboratory testing.
- Special Requirements for the performing of this test.
- Is this test performed at an external (reference) laboratory.

Please note that information regarding the clinical indications for each test, as well as the clinical and technical limitations, is available on request. For advice on minimum retest intervals, please refer to RCPath G147 National minimum retesting intervals in pathology.

Request form information

Request forms are designed to provide all relevant information required to provide a safe meaningful report including clinical details and advice, satisfying internal audit requirements and specific requests from clinicians.

There are a number of request forms available for all laboratory tests within the Directorate these take the form of hard copy or electronic requests (via ICE Ordercomms).
The departments of Clinical Biochemistry, Immunology, Haematology and Microbiology share the same request forms which are attached to a transport bag. Blood Transfusion and Histopathology departments have their own request forms and specimen reception arrangements.

Full completion of request forms is encouraged at medical staff induction and through guidelines given in the Pathology User Handbook and Trust Policy PAT/T8 Specimen and Request form Labelling Policy. When request form information is unclear, the laboratories cooperate with service users to clarify information and avoid wherever possible the need for requests to be rejected.
If a verbal request “add-on test” is made by a clinician then pathology procedure CLS-SOP-202 is then followed.

Requesting Urgent/Fast Track Samples
The urgent/fast track service is available from the departments during 09.00 - 17.00 Monday to Friday, outside this time on-call requesting arrangements operate.
A sample will only be accepted as fast track if the department receives a telephone call BEFORE the sample is received. Work will be analysed as routine if there is no phone call or if the sample is already in the laboratory when the phone call is received.
Processing time is subject to equipment availability, and is timed from when the sample arrives at the laboratory.

Protocol for Fast Track Samples

- ***Take the sample and complete the appropriate request form.***
- ***Write "FAST TRACK" on the request form.***
- ***Telephone Pathology Reception (DRI 642870 BDGH 572450) with the following information:***
- ***Your name and location, Patients name, Test(s) required and the reason for the urgent request***
- ***Details of route for result (Phone No./Bleep No.)***
- ***Send the sample to Pathology Reception either via the Air Tube delivery system or via Service Assistant***

Reference Intervals
Reference intervals for any test are specific to that test and laboratory methodology. They are also often age and sex specific. Reference intervals will be displayed with the patient results taking these factors into account. These will be available, whether the result is sent via paper, through ward/web enquiries or via the electronic links to General Practice.

Measurement Uncertainty
Pathology Services recognizes that many factors determine the correctness and reliability of the laboratory examinations performed and takes into account these factors in the selection of examinations procedures and equipment. Measurement uncertainty has been introduced as part of the verification/validation processes to ensure that examination procedures have analytical accuracy and precision that is appropriate for the clinical purpose(s) to which they are applied. An estimation of the inherent uncertainty of the examination procedure is determined for quantitative results, and non-quantitative results that have a measurement step that may impact on the result, wherever relevant and possible and is available to users upon request.

Laboratory Results
Pathology results are available electronically immediately after authorisation via the Trust network at ward level or via the GP electronics links. Hard copies of reports are produced and returned daily Monday-Friday, unless this service is specifically not required by the requesting clinician.

All laboratory results are returned to the requesting clinician who has ultimate responsibility for ensuring that all results are actioned and communicated to the patient as appropriate.

The laboratory has agreed procedures for results which require urgent telephone communication. An escalation process is also followed in the event that a particular doctor or location cannot be contacted see Trust policy PAT/T61.

Turnaround times
The laboratory continually monitors its turnaround times to ensure that it complies with its responsibilities within the patient pathway. The laboratory measures its turnaround times as the time from which the sample is booked into the laboratory computer system (which is largely equivalent to the time of receipt), until the point at which the result is authorised (at this point the result is available through direct enquiry and is available for transmission via GP links).

The expected turnaround times for each test are indicated on the individual test sheets. For detailed turnaround times for each test and actual performance, please contact the laboratory. Interrogation of the electronic systems allows for full audit of the reception, testing and reporting process, including time of report viewing and report printing.

Referred Tests
The laboratory provides a range of specialist testing which is undertaken at reference centres. These tests are indicated within this section. Please contact the laboratory for details of the tests offered, name and location of the testing laboratory and information regarding any special sample requirements.
The final report will indicate if a test has been performed at an external centre.

Primary sample collection and handling

General requirements

Primary sample collection by both medical, nursing, phlebotomy, clinical support staff and laboratory staff takes place on the wards and clinic areas, in the theatres and in the community at GP practices, HMP prisons, nursing homes and patients' homes. There are also blood collection facilities at all three hospital sites. Prior to sample collection, Trust policy is followed to confirm patient identity and ensure consent for the collection procedure is given wherever possible. To ensure the integrity of the sample, other elements of sample collection and handling for staff are included in the Pathology handbook. Where laboratory management has staff with responsibilities for specimen collection, departmental procedures apply.

If the user requires deviations to the original testing the laboratories will cooperate with service users as far as practicable to accommodate additional requests.

The Trust policy for Collection and Handling of Pathology Specimens ensures the safe and correct procedure for this task.

All healthcare staff follow the Trusts consent policy PAT/PA2. Phlebotomy is a low risk invasive procedure in the outpatient setting and is generally perfumed under assumed consent i.e. patient presents their arm and request form for the procedure.

The laboratory maintains records of all samples taken on the ICE system, regardless of source, as this is included as part of the sample collection process. The laboratory also records the identity of the taker for any samples collected by the laboratory on manual requests such as phlebotomy. For all other manual requests users are advised to keep records as to the identity of the taker, for example initialling the sample tube and signing of the Blood Transfusion request.

Sample transportation
The courier services are provided through a combination of locally managed, and contracted out services. The contracted service has an identified transport manager working with Head of Pathology Services via the Pathology Quality Manager and the Health & Safety Leads, to ensure conformity of:

- Packaging, labelling and despatch.
- Health and safety standards for courier, general public and receiving laboratory.
- Protection and security of specimens and data.
- Timely arrival of specimens at the correct destination to ensure integrity of samples and appropriate nature of the requested examinations.
- Procedures for the transport of specimens meet regulatory requirements

An information leaflet for the transport of specimens to Pathology (HS-SOP-16) has been designed for transport drivers. A technical agreement and audit activity ensure that the above requirements are complied with. Any incidents would follow the Trust and/or Pathology services nonconformity procedure.

Samples from wards and departments are transported to the laboratory by the Trust pneumatic chute system, maintained by Trust Estates department, or delivered by hand to specimen reception by nursing or portering staff. Instructions for the transport, packaging and labelling are available on the via the Pathology User Handbook and in Trust Policy for Collection and handling Pathology Specimens.

Sample reception
Sample reception procedures are in place to ensure accurate identification, recording of information, dealing with urgent specimens where appropriate, and ensuring the safety of personnel.

All samples received in the laboratory are time stamped and sorted by department. Clinical Laboratory Science samples are then prioritised, before entry to the LIS to ensure fast tracking of urgent work. Each request card is scanned for archival and auditing purposes. Histopathology, Microbiology and Blood Transfusion specimens are collected from Central Reception on a regular basis for data entry within their dedicated sample reception areas.

The department has introduced a generic approach to specimen rejection procedures and this is documented in the samples acceptance procedure. This procedure includes the need to include appropriate comments on reports when unsuitable samples are received, or for non-compliant precious samples received that the laboratory has chosen to process.

Department	Test Set	Common Name	Referred
Clinical Biochemistry	W662C	11 - Deoxycortisol	Referred
Clinical Biochemistry	W321R	17-Alpha-Hydroxyprogesterone	Referred
Clinical Biochemistry	E675	5 hr Glucose Tolerance Test	In-House
Clinical Biochemistry	W763C	5 Hydroxytryptamine	Referred
Clinical Biochemistry	W759R	5-Alpha-Dihydrotestosterone	Referred
Clinical Biochemistry	W433	7 Dehydrocholesterol	Referred
Clinical Biochemistry	C652	AccuSign Drugs of Abuse Screen	In-House
Clinical Biochemistry	W570	Acid Glycoprotein / Orosomucoid	Referred
Clinical Biochemistry	W865	Acyl Carnitine	Referred
Clinical Biochemistry	W482	Adalimumab Levels (& Antibody)	Referred
Clinical Biochemistry	C225	Adrenocorticotrophin	In-House
Clinical Biochemistry	W875	Aldosterone and Renin	Referred
Clinical Biochemistry	C998A	Alkaline Phosphatase Isoenzymes	In-House
Clinical Biochemistry	C266A	Alpha Feto Protein (Tumour Marker)	In-House
Clinical Biochemistry	W362R	Alpha galactosidase	Referred
Clinical Biochemistry	C613	Alpha-1-Antitrypsin	In-House
Clinical Biochemistry	W839R	Alpha-1-Antitrypsin Genotype	Referred
Clinical Biochemistry	W580	Alpha-1-Antitrypsin Phenotype	Referred
Clinical Biochemistry	W678	Aluminium	Referred
Clinical Biochemistry	W852	Amino Acids (CSF)	Referred
Clinical Biochemistry	W849	Amino Acids (Plasma)	Referred
Clinical Biochemistry	C714	Amino Acids (Serum)	In-House
Clinical Biochemistry	W852C	Amino Acids (Urine, quantitative)	Referred
Clinical Biochemistry	W317R	Amiodarone	Referred
Clinical Biochemistry	C505	Ammonia	In-House
Clinical Biochemistry	C119	Amylase	In-House
Clinical Biochemistry	C512	Amylase (urine)	In-House
Clinical Biochemistry	W144C	Amyloid Proteins	Referred
Clinical Biochemistry	W325	Androstenedione	Referred
Clinical Biochemistry	C882	Angiotensin Converting Enzyme	In-House
Clinical Biochemistry	W327R	Anti Mullerian Hormone	Referred
Clinical Biochemistry	C131	Aspartate aminotransferase	In-House
Clinical Biochemistry	C603	B-2-Microglobulin	In-House
Clinical Biochemistry	W418	Batten Disease Screen	Referred
Clinical Biochemistry	C103	Bicarbonate	In-House
Clinical Biochemistry	C707	Bile Acids	In-House
Clinical Biochemistry	C223	Bilirubin, conjugated	In-House
Clinical Biochemistry	W245R	Biotinidase	Referred
Clinical Biochemistry	W290R	Bone Alkaline Phosphatase	Referred
Clinical Biochemistry	C124	Bone Profile	In-House
Clinical Biochemistry	W289	Brivaracetam	Referred
Clinical Biochemistry	C255A	CA 125	In-House
Clinical Biochemistry	W351	CA 15-3	Referred
Clinical Biochemistry	W348R	Cadmium (blood)	Referred

Department	Test Set	Common Name	Referred
Clinical Biochemistry	W350	Caeruloplasmin	Referred
Clinical Biochemistry	W366C	Calcitonin	Referred
Clinical Biochemistry	C522	Calcium (random urine)	In-House
Clinical Biochemistry	W847C	Calprotectin	Referred
Clinical Biochemistry	C050	Carbamazepine	In-House
Clinical Biochemistry	W409R	Carbohydrate Deficient Transferrin Alcohol	Referred
Clinical Biochemistry	W179B	Carbohydrate Deficient Transferrin Neurology	Referred
Clinical Biochemistry	C660	Carboxyhaemoglobin	In-House
Clinical Biochemistry	C260A	Carcinoembryonic Antigen	In-House
Clinical Biochemistry	W728R	Carotene	Referred
Clinical Biochemistry	C600	Catecholamines - Adrenaline, Noradrenaline, Dopamine (24	In-House
Clinical Biochemistry	C745	Catecholamines (paediatric random urine)	In-House
Clinical Biochemistry	C096	Chloride	In-House
Clinical Biochemistry	W891	Cholinesterase (activity and phenotype)	Referred
Clinical Biochemistry	W567C	Chromium and Cobalt (Blood)	Referred
Clinical Biochemistry	W649C	Chromogranin A	Referred
Clinical Biochemistry	W636C	Clobazam	Referred
Clinical Biochemistry	W301	Clonazepam	Referred
Clinical Biochemistry	E123	Combined Pituitary Function Test	In-House
Clinical Biochemistry	W310	Copper	Referred
Clinical Biochemistry	W833	Copper (urine)	Referred
Clinical Biochemistry	C230	Cortisol	In-House
Clinical Biochemistry	V496	Covid Antibody	In-House
Clinical Biochemistry	C401	C-Reactive Protein	In-House
Clinical Biochemistry	C120	Creatine Kinase	In-House
Clinical Biochemistry	C297	Creatinine (urine)	In-House
Clinical Biochemistry	C298	Creatinine Clearance	In-House
Clinical Biochemistry		CSF ACE	Referred
Clinical Biochemistry	C165	CSF Glucose and Protein	In-House
Clinical Biochemistry		CSF LDH	Referred
Clinical Biochemistry	W855	Cyclosporin	Referred
Clinical Biochemistry	W566C	Cystic Fibrosis Genotype	Referred
Clinical Biochemistry	C721	Cystine/Homocystine Screen (urine)	In-House
Clinical Biochemistry	W060	Cytogenetics	Referred
Clinical Biochemistry	C275	Dehydroepiandrosterone Sulphate	In-House
Clinical Biochemistry	C052	Digoxin	In-House
Clinical Biochemistry	C671	Ethanol	In-House
Clinical Biochemistry	W560	Ethylene Glycol	Referred
Clinical Biochemistry	W530	Faecal Elastase	Referred
Clinical Biochemistry	C999	Faecal Occult Blood	In-House
Clinical Biochemistry	Y018	Ferritin	In-House
Clinical Biochemistry	W857	FK506 Tacrolimus	Referred
Clinical Biochemistry	W545C	Flecanide	Referred
Clinical Biochemistry	C725	Fluid Analysis	In-House

Department	Test Set	Common Name	Referred
Clinical Biochemistry	Y017	Folate	In-House
Clinical Biochemistry	C202	Follicle Stimulating Hormone	In-House
Clinical Biochemistry	W783	Free Light Chains	Referred
Clinical Biochemistry	C157	Free T3	In-House
Clinical Biochemistry	W264	Fructosamine	Referred
Clinical Biochemistry	C585	Galactosaemia Screen	In-House
Clinical Biochemistry	C132	Gamma Glutamyl Transferase	In-House
Clinical Biochemistry	C105	Glucose	In-House
Clinical Biochemistry	E002	Glucose Tolerance Test	In-House
Clinical Biochemistry	W849R	Glycogen Storage Disorders	Referred
Clinical Biochemistry	C722	Glycosaminoglycans, GAGs (Urine)	In-House
Clinical Biochemistry	E825	Growth Hormone	In-House
Clinical Biochemistry	W745A	Gut Hormone Screen	Referred
Clinical Biochemistry	C625	Haptoglobin	In-House
Clinical Biochemistry	W342	Homocysteine	Referred
Clinical Biochemistry	C234	hs Troponin	In-House
Clinical Biochemistry	C250	Human Chorionic Gonadotrophin (Tumour Marker)	In-House
Clinical Biochemistry	C126	Immunoglobulins (IgG, IgA, IgM)	In-House
Clinical Biochemistry	W481	Infliximab Levels and Antibody	Referred
Clinical Biochemistry	W358C	Inhibin	Referred
Clinical Biochemistry	W556	Insulin and C-Peptide	Referred
Clinical Biochemistry	C605	Insulin-like Growth Factor	In-House
Clinical Biochemistry	W854C	Intermediary Metabolites	Referred
Clinical Biochemistry	C253	Iron	In-House
Clinical Biochemistry	W430	Karyotype	Referred
Clinical Biochemistry	C680	Lactate	In-House
Clinical Biochemistry	C681	Lactate (CSF)	in-House
Clinical Biochemistry	W853C	Lactate (CSF)	Referred
Clinical Biochemistry	C121	Lactate Dehydrogenase	In-House
Clinical Biochemistry	C727	Lactate Dehydrogenase (fluid)	In-House
Clinical Biochemistry	W395	Lamotrigine	Referred
Clinical Biochemistry	W393R	Laxative Screen (Urine)	Referred
Clinical Biochemistry	W895	Lead (blood)	Referred
Clinical Biochemistry	C145	Lipid Profile	In-House
Clinical Biochemistry	C175	Lithium	In-House
Clinical Biochemistry	C127	Liver Function Test	In-House
Clinical Biochemistry	C821	Luteinising Hormone	In-House
Clinical Biochemistry	C581	Macroprolactin	In-House
Clinical Biochemistry	C526	Magnesium (24 hr urine)	In-House
Clinical Biochemistry	C525	Magnesium (random urine)	In-House
Clinical Biochemistry	W302R	Manganese	Referred
Clinical Biochemistry	W899	Mercury (blood)	Referred
Clinical Biochemistry	W349C	Mercury (urine)	Referred
Clinical Biochemistry		Metabolic Screen (Urine)	In-House

Department	Test Set	Common Name	Referred
Clinical Biochemistry	W561	Methanol	Referred
Clinical Biochemistry	W435	Methotrexate	Referred
Clinical Biochemistry	W389R	Methylmalonate	Referred
Clinical Biochemistry	C661	Microalbumin	In-House
Clinical Biochemistry	W407	Neuron-Specific Enolase	Referred
Clinical Biochemistry	C274	NT Pro Beta Natriuretic Peptide	In-House
Clinical Biochemistry	W540	NTx (Bone Marker)	Referred
Clinical Biochemistry	C206	Oestradiol	In-House
Clinical Biochemistry	W390	Organic Acids (urine)	Referred
Clinical Biochemistry	C630	Osmolality (serum)	In-House
Clinical Biochemistry	C635	Osmolality (urine)	In-House
Clinical Biochemistry	W756C	Otoblot	Referred
Clinical Biochemistry	W558R	Oxalate (plasma)	Referred
Clinical Biochemistry	W555	Oxalate (urine)	Referred
Clinical Biochemistry	W038R	P1NP	Referred
Clinical Biochemistry	C113	Paediatric Split Bilirubin	In-House
Clinical Biochemistry	C169	Paracetamol & Salicylate	In-House
Clinical Biochemistry	C270	Parathyroid Hormone	In-House
Clinical Biochemistry	C054	Phenobarbitone	In-House
Clinical Biochemistry	C056	Phenytoin	In-House
Clinical Biochemistry	W478R	Pipecholic Acid (CSF or Plasma)	Referred
Clinical Biochemistry	C233	Pituitary Function Tests	in-house
Clinical Biochemistry	W861	Placental Alkaline Phosphatase	Referred
Clinical Biochemistry	W240R	Plasma Metanephrines	Referred
Clinical Biochemistry	C732	Porphobilinogen Screen	In-House
Clinical Biochemistry	C245A	Pregnancy Test (serum)	In-House
Clinical Biochemistry	C410	Pregnancy Test (urine)	In-House
Clinical Biochemistry	C213	Progesterone	In-House
Clinical Biochemistry	C217	Prolactin	In-House
Clinical Biochemistry	C181	Prostate Specific Antigen	In-House
Clinical Biochemistry	C500	Protein (24hr urine)	In-House
Clinical Biochemistry	C507	Protein (random urine)	In-House
Clinical Biochemistry	C148	Protein Electrophoresis (serum)	In-House
Clinical Biochemistry	C749	Protein Electrophoresis (urine)	In-House
Clinical Biochemistry	W391B	Purines and Pyrimidines	Referred
Clinical Biochemistry	C713	Reducing Substances TLC (urine and faeces)	In-House
Clinical Biochemistry	W749C	Referred Porphyria - Full Screen	Referred
Clinical Biochemistry	W876	Renin	Referred
Clinical Biochemistry	C422	Rheumatoid Factor	In-House
Clinical Biochemistry	W382	Risperidone	Referred
Clinical Biochemistry		Salivary Cortisol	Referred
Clinical Biochemistry	W300	Selenium	Referred
Clinical Biochemistry	C277F	Sex Hormone Binding Globulin	In-House
Clinical Biochemistry	C278M	Sex Hormone Binding Globulin	In-House

Department	Test Set	Common Name	Referred
Clinical Biochemistry	C415	SFLT/PLGF Ratio	In-House
Clinical Biochemistry	W754	Sialic Acid (Urine)	Referred
Clinical Biochemistry	W408R	Sirolimus	Referred
Clinical Biochemistry	W911	Stone Analysis	Referred
Clinical Biochemistry	C912	Sweat Test	In-House
Clinical Biochemistry	W565	Tau Protein	Referred
Clinical Biochemistry	C222F	Testosterone - Female	In-House
Clinical Biochemistry	C222M	Testosterone - Male	In-House
Clinical Biochemistry	C058	Theophylline	In-House
Clinical Biochemistry	W525	Thiopurine Methyltransferase	Referred
Clinical Biochemistry	C151	Thyroid Function Tests	In-House
Clinical Biochemistry	W319R	Topiramate	Referred
Clinical Biochemistry	C112	Total Protein & Albumin	In-House
Clinical Biochemistry	W299R	Trace Metals	Referred
Clinical Biochemistry	C601	Transferrin	In-House
Clinical Biochemistry	W959R	Trimethylamine	Referred
Clinical Biochemistry	C094	Urea & Electrolytes	In-House
Clinical Biochemistry	C510	Urea & Electrolytes (24hr urine)	In-House
Clinical Biochemistry	C515	Urea & Electrolytes (random urine)	In-House
Clinical Biochemistry	C125	Uric Acid	In-House
Clinical Biochemistry	C530	Uric Acid (24 hr urine)	In-House
Clinical Biochemistry	C532	Uric Acid (random urine)	In-House
Clinical Biochemistry	W457C	Urinary Free Cortisol	Referred
Clinical Biochemistry	W590	Urinary Steroid Profile	Referred
Clinical Biochemistry	W486	Urinary Sulphocysteine	Referred
Clinical Biochemistry	C711	Urine Dipstix	In-House
Clinical Biochemistry	W529R	Urine Heavy Metal Screen	Referred
Clinical Biochemistry	C060	Valproate	In-House
Clinical Biochemistry	W870	Very Long Chain Fatty Acids	Referred
Clinical Biochemistry	W444C	Vigabatrin	Referred
Clinical Biochemistry	W898	Vitamin A & E	Referred
Clinical Biochemistry	W440	Vitamin B1	Referred
Clinical Biochemistry	Y016	Vitamin B12	In-House
Clinical Biochemistry	W621C	Vitamin B6	Referred
Clinical Biochemistry	W904	Vitamin C	Referred
Clinical Biochemistry	W402	Vitamin D 1,25 OH	Referred
Clinical Biochemistry	C402	Vitamin D 25 OH	In-House
Clinical Biochemistry	W359C	White Cell Enzymes	Referred
Clinical Biochemistry	C163	Xanthochromia Screen	In-House
Clinical Biochemistry	W305	Zinc	Referred
Haematology	X005	Activated Partial Thromboplastin Time	In-House
Haematology	W022	Adamts-13 Activity	Referred
Haematology	X108	Anti Phospholipid Antibodies	In-House
Haematology	J903	Anti-D Issue (Sensitising - SADI)	In-House

Department	Test Set	Common Name	Referred
Haematology	W170	Anti-thrombin	Referred
Haematology	X751	Anti-Xa (Apixaban Assay)	In-House
Haematology	X753	Anti-Xa (Edoxaban Assay)	In-House
Haematology	X750	Anti-Xa (LMWH)	In-House
Haematology	X752	Anti-Xa (Rivaroxaban Assay)	In-House
Haematology	W550	APC-R	Referred
Haematology	J238	Auto Antenatal Antibody Screen	In-House
Haematology	J355	Automated Antenatal Group	In-House
Haematology	W487A	BCR-ABL	Referred
Haematology	H500	Blood Film	In-House
Haematology	J307	Blood Group	In-House
Haematology	W497	CAL R Gene Exon 9 Analysis	Referred
Haematology	W097	CD 34	Referred
Haematology	W098	CD4/8	Referred
Haematology	W059	Cell Markers (Blood)	Referred
Haematology	W058	Cell Markers (Marrow)	Referred
Haematology	X011	Clotting Screen	In-House
Haematology	J179	Crossmatch (Diamed)	In-House
Haematology	J888	Cryoprecipitate Issue	In-House
Haematology	X061	D-Dimer	In-House
Haematology	X056	DIC Screen	In-House
Haematology	H100	Differential WBC	In-House
Haematology	J170	Direct Antiglobulin Test	In-House
Haematology	W019	Double Negative T-Cell test	Referred
Haematology	H800	Erythrocyte Sedimentation Rate	In-House
Haematology	W136	Erythropoietin	Referred
Haematology	W640	Factor Assays	Referred
Haematology	W510	Factor V Leiden	Referred
Haematology	W203	Factor VIII Complex	Referred
Haematology	X030	Fibrinogen	In-House
Haematology	H994	FOQ Referral - Antenatal	In-House
Haematology	J334	Fresh Frozen Plasma Issue	In-House
Haematology	H005	Full Blood Count	In-House
Haematology	J812	Full HLA Type	Referred
Haematology	H015	Glandular Fever Test	In-House
Haematology	W330	Glucose-6-Phosphate Dehydrogenase	Referred
Haematology	C130	Haemoglobin A1c	In-House
Haematology	W052	Haemoglobinopathy Screening	Referred
Haematology	W334	Hereditary Spherocytosis Screen	Referred
Haematology	W499B	HFE Gene Analysis	Referred
Haematology	W505	HIT Screen	Referred
Haematology	J823	HLA A29	Referred
Haematology	J818	HLA B17	Referred
Haematology	J811	HLA B27	Referred

Department	Test Set	Common Name	Referred
Haematology	J821	HLA B5	Referred
Haematology	J817	HLA B51	Referred
Haematology	J815	HLA B57	Referred
Haematology	J819	HLA Cw6	Referred
Haematology	J814	HLA DQ2 & DQ8	Referred
Haematology	J816	HLA DR4	Referred
Haematology	B506	INR & Anti Coagulant Dosing	In-House
Haematology	W498	Jak-2	Referred
Haematology	W495	JAK2 Gene Exon 12 Analysis	Referred
Haematology	J700	Kleihauer	In-House
Haematology	W123	Lymphocyte Subsets	Referred
Haematology	H712	Malaria Screen	In-House
Haematology	W496	MPL Gene Analysis	Referred
Haematology	W062	NPM1/FLT3 Gene Analysis	Referred
Haematology	J950	Octaplas	In-House
Haematology	W061	P53 Gene	Referred
Haematology	W079	PFA Platelet Function Tests	Referred
Haematology	W190	Plasma Viscosity	Referred
Haematology	J150	Platelets Issue	In-House
Haematology	W013	PNH Screen	Referred
Haematology	W175	Protein C	Referred
Haematology	W177	Protein S	Referred
Haematology	X016	Prothrombin Time	In-House
Haematology	W552	PT Allele	Referred
Haematology	W333	Pyruvate Kinase Screen	Referred
Haematology	J958	Renal NBS Investigation	Referred
Haematology	H175	Reticulocytes	In-House
Haematology	J235	Rhesus and K Phenotype	In-House
Haematology	H060	Sickle Cell Test	In-House
Haematology	W017	T-Cell Gene Rearrangement	Referred
Haematology	X125	Thrombin Time	In-House
Haematology	W180	Thrombophilia Screen	Referred
Haematology	W063	Tyrosone Kinase Mutation	Referred
Haematology	J887	Uncrossmatched Blood Issue	In-House
Haematology	W501	Von Willibrands Screen	Referred
Histology	W-6017	>5 blocks polypectomy/mucosal resection colon, non-screer	In-House
Histology	W-7009	Adrenal bx	In-House
Histology	W-7010	Adrenal excision	In-House
Histology	W-6009	Anal bx	In-House
Histology	W-5009	Any upper GIT Bx with colon bx, see colon bx	In-House
Histology	W-6011	Appendicectomy	In-House
Histology	W-1410	Aspiration cytology NOS	In-House
Histology	W-1018	Axillary nodes only NOS	In-House
Histology	W-1406	Bile cytology	In-House

Department	Test Set	Common Name	Referred
Histology	W-7001	Bladder Bx	In-House
Histology	W-7002	Bladder TURB	In-House
Histology	W-1101	Bone	In-House
Histology	W-6024	Bowel Scope bx screening - >3 specs	Referred
Histology	W-6021	Bowel Scope bx screening - 1 spec	Referred
Histology	W-6022	Bowel Scope bx screening - 2 specs	Referred
Histology	W-6023	Bowel Scope bx screening - 3 specs	Referred
Histology	W-1019	Breast aspiration cytology non-screening	In-House
Histology	W-1020	Breast aspiration cytology screening	In-House
Histology	W-1022	Breast core + axilla core/FNA non-screening	In-House
Histology	W-1023	Breast core + axilla core/FNA screening	In-House
Histology	W-3006	Bronchial brushings	In-House
Histology	W-3002	Bronchial bx + 1 cytology	In-House
Histology	W-3003	Bronchial bx + 2 cytology	In-House
Histology	W-3004	Bronchial bx + 3 or more cytology	In-House
Histology	W-3001	Bronchial bx only	In-House
Histology	W-3005	Bronchial washings	In-House
Histology	W-3007	Bronchial washings + brushings	In-House
Histology	W-8012	Cervix Loop/cone - >5 spec	In-House
Histology	W-8009	Cervix Loop/cone - 1 spec	In-House
Histology	W-8010	Cervix Loop/cone - 2/3 spec	In-House
Histology	W-8011	Cervix Loop/cone - 4/5 spec	In-House
Histology	W-8008	Cervix punch - >5 spec	In-House
Histology	W-8005	Cervix punch - 1 spec	In-House
Histology	W-8006	Cervix punch - 2/3 spec	In-House
Histology	W-8007	Cervix punch - 4/5 spec	In-House
Histology	W-5011	Cholecystectomy	In-House
Histology	W-6013	Colectomy benign	In-House
Histology	W-6014	Colectomy tumour	In-House
Histology	W-6004	Colonoscopic bx non-screening- >5 spec	In-House
Histology	W-6001	Colonoscopic bx non-screening- 1 spec	In-House
Histology	W-6002	Colonoscopic bx non-screening- 2/3 spec	In-House
Histology	W-6003	Colonoscopic bx non-screening- 4/5 spec	In-House
Histology	W-6008	Colonoscopic bx screening - >5 spec	In-House
Histology	W-6005	Colonoscopic bx screening- 1 spec	In-House
Histology	W-6006	Colonoscopic bx screening 2/3 spec	In-House
Histology	W-6007	Colonoscopic bx screening 4/5 spec	In-House
Histology	W-1001	Core Biopsy non-screening	In-House
Histology	W-1002	Core Biopsy screening	In-House
Histology	W-1403	CSF cytology	In-House
Histology	W-7003	Cystectomy	In-House
Histology	W-4015	DIF only	In-House
Histology	W465M	Direct Immuno Fluorescence (DIF)	Referred
Histology	W-5003	Duodenal bx	In-House

Department	Test Set	Common Name	Referred
Histology	W-1027	Encore Breast biopsies - Non Screening	In-House
Histology	W-1025	Encore Breast biopsies - Screening	In-House
Histology	W-3012	Endobronchial Ultrasound	In-House
Histology	W-8023	Endometrial curettings with other e.g. cervical polyp/bx	In-House
Histology	W-8014	Endometrial currettings/pipelle	In-House
Histology	W-8013	Endometrial/endocervical polyp	In-House
Histology	W-8022	Fallopian tube	In-House
Histology	W-1301	Frozen section - not parathyroid	In-House
Histology	W-5010	Gastrectomy	In-House
Histology	W-5002	Gastric bx	In-House
Histology	W-5006	Gastric bx + Duodenal bx	In-House
Histology	T030	Histology / Non Gynae Cytology	In-House
Histology	W-7011	Kidney biopsy	In-House
Histology	W-2004	Laryngeal bx cucumber	In-House
Histology	W-2005	Laryngectomy	In-House
Histology	W-5012	Liver Bx - inflammatory	In-House
Histology	W-5013	Liver Bx - tumour	In-House
Histology	W-1013	Lump excision NOS - no nodes	In-House
Histology	W-3010	Lung/mediastinal needle core bx	In-House
Histology	W-1407	Lymph node aspiration cytology	In-House
Histology	W-9002	Lymph node excision bx	In-House
Histology	W-1008	Mastectomy - no nodes	In-House
Histology	W-1012	Mastectomy + ANC	In-House
Histology	W-1011	Mastectomy + ANS	In-House
Histology	W-1009	Mastectomy + SNB	In-House
Histology	W-1010	Mastectomy + SNB+ANS	In-House
Histology	W-2001	Mouth Bx incl lip, tongue, gum, buccal, dental	In-House
Histology	W-2002	Nasal bx, incl PNS, or ear canal bx	In-House
Histology	W-2011	Neck dissection bilateral	In-House
Histology	W-2010	Neck dissection unilateral	In-House
Histology	W-7012	Nephrectomy/Nephrouretectomy	In-House
Histology	W-1021	Nipple cytology	In-House
Histology	W-5009	Oesophagectomy	In-House
Histology	W-5001	Oesophagus bx	In-House
Histology	W-5005	Oesophagus bx + duodenal bx	In-House
Histology	W-5004	Oesophagus bx + gastric bx	In-House
Histology	W-5007	Oesophagus bx, gastric bx, duodenal bx	In-House
Histology	W-5015	Omental/peritoneal bx	In-House
Histology	W463	Oncotype DX (Histology)	Referred
Histology	W-1202	Other vascular bx	In-House
Histology	W-8021	Ovary (not accompanied by uterus)	In-House
Histology	W-5014	Pancreas biopsy	In-House
Histology	W-2009	Parathyroid frozen sections	In-House
Histology	W-7015	Penis biopsy/foreskin	In-House

Department	Test Set	Common Name	Referred
Histology	W-1402	Peritoneal fluid cytology	In-House
Histology	W-2003	Pharynx/larynx/tonsil biopsy	In-House
Histology	W-8016	Placenta for histology	Referred
Histology	1001	Placenta Single SCH	Referred
Histology	1002	Placenta Twin SCH	Referred
Histology	W-3011	Pleural bx	In-House
Histology	W-1401	Pleural fluid cytology	In-House
Histology	1003	Post mortem foetus/interuterine death SCH	Referred
Histology	W-1304	Post mortem tissue HMC Doncaster - <5 blocks	In-House
Histology	W-1308	Post mortem tissue Hospital PM	In-House
Histology	W-8015	Products of conception	In-House
Histology	W-7005	Prostate chippings/TURP	In-House
Histology	W-7004	Prostate core bx	In-House
Histology	W-7016	Prostate core bx - multiple blocks	Referred
Histology	W-7006	Prostatectomy	In-House
Histology	W-3008	Pulmonary needle aspiration cytology	In-House
Histology	W-6015	Rectal excision benign	In-House
Histology	W-6016	Rectal excision tumour	In-House
Histology	W-1409	Salivary gland aspiration cytology	In-House
Histology	W-2008	Salivary gland excision	In-House
Histology	W-7013	Semen - infertility	In-House
Histology	W-7014	Semen - post vas	In-House
Histology	P125	Semen Analysis - BPAS	In-House
Histology	P100	Semen Analysis - Fertility	In-House
Histology	P150	Semen Analysis - Post Vasectomy	In-House
Histology	W-4014	Skin inflammatory - with DIF	In-House
Histology	W-4013	Skin inflammatory - no DIF	In-House
Histology	W-4008	Skin malig tumour NOS - >5 spec	In-House
Histology	W-4006	Skin malig tumour NOS - 2/3 spec	In-House
Histology	W-4007	Skin malig tumour NOS - 4/5 spec	In-House
Histology	W-4005	Skin malig tumour NOS -1 spec	In-House
Histology	W-4012	Skin melanoma/dysplastic naevus >5 specs	In-House
Histology	W-4009	Skin melanoma/dysplastic naevus 1 spec	In-House
Histology	W-4010	Skin melanoma/dysplastic naevus 2/3 spec	In-House
Histology	W-4011	Skin melanoma/dysplastic naevus 4/5 spec	In-House
Histology	W-4004	Skin NOS > 5 spec	In-House
Histology	W-4001	Skin NOS 1 spec	In-House
Histology	W-4002	Skin NOS 2/3 spec	In-House
Histology	W-4003	Skin NOS 4/5 spec	In-House
Histology	W-5016	Small bowel resection	In-House
Histology	W-6012	Small bowel resection	In-House
Histology	W-1103	Soft tissue core bx	In-House
Histology	W-1104	Soft tissue excision e.g. lipoma	In-House
Histology	W-1303	Specimen from elsewhere for review	In-House

Department	Test Set	Common Name	Referred
Histology	W-1302	Specimen number issued only but no further work	In-House
Histology	W-9003	Spleen	In-House
Histology	W-3009	Sputum cytology	In-House
Histology	W-1102	Synovial bx	In-House
Histology	W-1405	Synovial fluid analysis	In-House
Histology	W-1201	Temporal artery bx	In-House
Histology	W-7007	Testis excision	In-House
Histology	W-1408	Thyroid aspiration cytology	In-House
Histology	W-2007	Thyroidectomy	In-House
Histology	W-2006	Tonsillectomy	In-House
Histology	W-7017	Transperitoneal Prostate Biopsies	In-House
Histology	W-1404	Urine cytology	In-House
Histology	W-8018	Uterus with adnexa	In-House
Histology	W-8020	Uterus with adnexa, plus any cytology	In-House
Histology	W-8017	Uterus without adnexa	In-House
Histology	W-8019	Uterus without adnexa, plus any cytology	In-House
Histology	W-1026	Vacora Breast biopsies - Non Screening	In-House
Histology	W-1024	Vacora Breast biopsies - Screening	In-House
Histology	W-7008	Vas deferens	In-House
Histology	W-8004	Vulva/vagina bx - >5 spec	In-House
Histology	W-8001	Vulva/vagina bx - 1 spec	In-House
Histology	W-8002	Vulva/vagina bx - 2/3 spec	In-House
Histology	W-8003	Vulva/vagina bx - 4/5 spec	In-House
Histology	W-1003	WLE/TWLE - no nodes	In-House
Histology	W-1007	WLE/TWLE + ANC	In-House
Histology	W-1006	WLE/TWLE + ANS	In-House
Histology	W-1004	WLE/TWLE + SNB	In-House
Histology	W-1005	WLE/TWLE + SNB+ANS	In-House
Immunology	W425	Acetylcholine Receptor Antibodies	Referred
Immunology	W951	Adrenal/Ovarian/Testes Antibody	Referred
Immunology	C973	Allergy Testing	In-House
Immunology	W385	Allergy Testing (referred)	Referred
Immunology	W280R	Alternative Pathway Haem Complement (AP50)	Referred
Immunology	C952	Anti Cardiac Muscle Antibodies	Referred
Immunology	C471	Anti Cardiolipin Antibodies	In-House
Immunology	C425	Anti CCP Antibodies	In-House
Immunology	W295R	Anti Epidermal Antibodies	Referred
Immunology	W576	Anti Ganglioside Antibodies	Referred
Immunology	W427	Anti Gliadin Antibodies	Referred
Immunology	W712R	Anti Histone Antibodies	Referred
Immunology	W535	Anti Insulin Antibodies	Referred
Immunology	W328R	Anti MUSK Antobodies	Referred
Immunology	W971	Anti Myelin Sheath Antibodies	Referred
Immunology	C482	Anti Neutrophil Cytoplasmic Antibodies (MPO and PR3)	In-House

Department	Test Set	Common Name	Referred
Immunology	C431	Anti Nuclear Antibodies	In-House
Immunology	W445	Anti-Basal Ganglia Antibodies	Referred
Immunology	W591	Anti-Retinal Antibodies	Referred
Immunology	W785	Aquaporin 4 Antibodies	Referred
Immunology	C495	Aspergillus Precipitins	In-House
Immunology	W332R	Avian Precipitins	Referred
Immunology	W562	B2 Glycoprotein Antibody	Referred
Immunology	W450R	C1 Esterase Inhibitor (functional)	Referred
Immunology	W793R	Complement C1Q	Referred
Immunology	W968R	Complement C5-C9 Levels	Referred
Immunology	W721C	Complement Haemolysis 50	Referred
Immunology	C440	Complement Levels (C3 and C4)	In-House
Immunology	W375	Cows Milk Antibodies	Referred
Immunology	C901	Cryoglobulins	In-House
Immunology	C986	Endomysial Antibodies (IgA)	In-House
Immunology	W949	Eosinophilic Cationic Protein	Referred
Immunology	C489	Extractable Nuclear Antibodies	In-House
Immunology	W361	Extractable Nuclear Antibodies (Referred)	Referred
Immunology	W460	Farmers Lung Precipitins	Referred
Immunology	W149C	GABA Receptor and AMPA Receptor Antobodies (CSF)	Referred
Immunology	W434R	Glomerular Basement Membrane Antibodies Quantitative	Referred
Immunology	W406	Glutamic Acid Decarboxylase Antibodies	Referred
Immunology	W356	IgG Subclasses	Referred
Immunology	C369	Immunoglobulin E	In-House
Immunology	W412	Immunoglobulins (CSF)	Referred
Immunology	Y025	Intrinsic Factor Antibodies	In-House
Immunology	W410	Islet Cell Antibodies	Referred
Immunology	C433	Liver, Kidney and Smooth Muscle Antibodies	In-House
Immunology	W853C	M2 Antibodies	Referred
Immunology	W515A	Myositis Screen	Referred
Immunology	W416	Nerve Cell Antibodies	Referred
Immunology	W048	Neutrophil Function - Di- Hydrorhodamine Test (DHR)	Referred
Immunology	W329R	NMDA Receptor Antibodies	Referred
Immunology	C958	Ovarian Antibodies	Referred
Immunology	C960	Parathyroid Antibodies	Referred
Immunology	W371	Pituitary Antibodies	Referred
Immunology	W326R	Salivary Gland and Salivary Duct Antibodies	Referred
Immunology	W554R	Skeletal Muscle Antibodies	Referred
Immunology	C962	Skin Antibodies	In-House
Immunology	W119	Split Skin Antibodies	Referred
Immunology	C856	Tacrolimus	Referred

Department	Test Set	Common Name	Referred
Immunology	W471	Thrombospondin Type-1 Domain containing 7A Antibodies	Referred
Immunology	C461	Thyroid Antibodies	In-House
Immunology	C984	Tissue Transglutaminase (IgA TTG)	In-House
Immunology	W414	Tryptase	Referred
Immunology	W315	TSH Receptor Antibodies	Referred
Immunology	W373	Type 1 DM Antibodies (ZnT8, IA-2, GAD)	Referred
Immunology	W563R	Voltage Gated Calcium Channel Antibodies	Referred
Immunology	W564C	Voltage Gated Potassium Channel Antibodies	Referred
Microbiology	V454	Acanthamoeba Culture	Referred
Microbiology	V426	Bacterial/Fungal Molecular Identification	Referred
Microbiology	M530	Blood Culture	In-House
Microbiology	M965	Carbapenamase Molecular Test	Referred
Microbiology	M728	Carbapenemase Screen	In-House
Microbiology	M306	Chlamydia/GC SDA (Dual Test)	In-House
Microbiology	M704	Clostridium Difficile Screen	In-House
Microbiology	M150M	CSF Microscopy	In-House
Microbiology	M280A	Endoscopy Water	In-House
Microbiology	M751	Enterobius Microscopy	In-House
Microbiology	M820	Faecal Parasites	In-House
Microbiology	M721	Faeces Microscopy	In-House
Microbiology	M876	Gentamicin Assay	In-House
Microbiology	M380A	Gonorrhoea Culture	In-House
Microbiology	M301A	Group B Streptococcus Screen	In-House
Microbiology	M385A	GUM GC Identification	In-House
Microbiology	M335D	GUM Microscopy & Culture	In-House
Microbiology	M300A	High Vaginal Swab	In-House
Microbiology	M046	Moxifloxacin Assay	Referred
Microbiology	M105	MRSA Screen	In-House
Microbiology	V431	Mycobacterium PCR	Referred
Microbiology	M850	Mycology Microscopy	In-House
Microbiology	M713	Norovirus	In-House
Microbiology	M040	Pharmacy Sterility Tests	In-House
Microbiology	M285A	Pool Water Analysis	In-House
Microbiology	V264	Procalcitonin	In-House
Microbiology	V430	Pseudomonas aeruginosa Antibody Test	Referred
Microbiology	M570	Quantiferon	In-House
Microbiology	M041	Radiopharmacy Sterility Tests	In-House
Microbiology	M660	Respiratory Culture	In-House
Microbiology	M705	Rotavirus	In-House
Microbiology	M719	Rotavirus	In-House
Microbiology	M060	Settle Plates	In-House
Microbiology	M793	Sink Culture	In-House
Microbiology	M988	Staph aureus Additional Testing	Referred

Department	Test Set	Common Name	Referred
Microbiology	M605	Swab Microscopy	In-House
Microbiology	M585	TB Culture	In-House
Microbiology	M580	TB Microscopy	In-House
Microbiology	M597	TB T-Spot	Referred
Microbiology	M836	Teicoplanin Assay	Referred
Microbiology	M825	Tissue / Fluid Culture	In-House
Microbiology	M835	Tobramycin Assay	Referred
Microbiology	M200A	Urine Microscopy	In-House
Microbiology	M015	Vancomycin Assay	In-House
Microbiology	M728	Vancomycin Resistant Enterococci	In-House
Virology	V464	Adenovirus PCR	Referred
Virology	V330A	Anti-streptolysin O	In-House
Virology	V424	Aspergillus Serology	Referred
Virology	V447	Bartonella (Cat scratch fever)	Referred
Virology	V490	Beta Glucan	Referred
Virology	V457	BK Virus PCR	Referred
Virology	V412	Bordetella pertussis	Referred
Virology	V446	Borrelia burgdorferi (Lyme disease)	Referred
Virology	V448	Brucella	Referred
Virology	V190	Calprotectin (Diasorin)	In-House
Virology	V487	Campylobacter Serology	Referred
Virology	V409	Chlamydia Serology	Referred
Virology	V495	COVID PCR	In-House
Virology	V450	Coxiella (Q-fever)	Referred
Virology	V414	Cryptococcal Investigations	Referred
Virology	V292A	Cytomegalovirus Antibody	In-House
Virology	V445	Diptheria Antibody	Referred
Virology	V437	Enterovirus PCR	Referred
Virology	V483	Enterovirus Serology	Referred
Virology	V440	Epstein Barr (EBV) Confirmation	Referred
Virology	V482	Epstein Barr Virus PCR	Referred
Virology	V300A	Epstein Barr Virus Serology	In-House
Virology	V470	Filaria	Referred
Virology	V466	Haemophilus Molecular Testing	Referred
Virology	V443	Haemophilus Vaccine Response	Referred
Virology	V995	Helicobacter Pylori Antigen	In-House
Virology	V140B	Hepatitis A IgG	In-House
Virology	V130B	Hepatitis A IgM	In-House
Virology	V150D	Hepatitis B Antibody (post Vacc)	In-House
Virology	V091	Hepatitis B Confirmation	Referred
Virology	V104C	Hepatitis B Core Antibody	In-House
Virology	V090	Hepatitis B Surface Antigen	In-House
Virology	V474	Hepatitis B Viral Load PCR	Referred
Virology	V110A	Hepatitis C Antibody	In-House

Department	Test Set	Common Name	Referred
Virology	V117A	Hepatitis C Confirmation	Referred
Virology	V477	Hepatitis C Genotyping and Subtyping	Referred
Virology	V491	Hepatitis C Polymorphism	Referred
Virology	V476	Hepatitis C Viral Load PCR	Referred
Virology	V460	Hepatitis D PCR	Referred
Virology	V459	Hepatitis E	Referred
Virology	V410	Herpes Group Serology	Referred
Virology	V438	Herpes PCR	Referred
Virology	V488	HIV Avidity	Referred
Virology	V120D	HIV Combined AbAg	In-House
Virology	V462	HIV Confirmation	Referred
Virology	V463	HIV Genotypic Resistance	Referred
Virology	V135	HIV Maternal Transmission Investigation	Referred
Virology	V423	HIV Oral Screen	Referred
Virology	V478	HIV Tropism Investigation	Referred
Virology	V461	HIV Viral Load	Referred
Virology	V493	HSV PCR	In-House
Virology	V458	HTLV	Referred
Virology	V428	Hydatid Serology	Referred
Virology	V465	Legionella Serology	Referred
Virology	V926	Legionella Urine Antigen	In-House
Virology	V415	Leishmania Screening	Referred
Virology	V449	Leptospira (Weil's disease)	Referred
Virology	V473	LGV Specific PCR	Referred
Virology	V453	Listeria PCR	Referred
Virology	V480	Measles PCR	Referred
Virology	V432	Measles Serology	Referred
Virology	V451	Meningococcal PCR	Referred
Virology	V433	Mumps Serology	Referred
Virology	V479	Mumps Virus PCR	Referred
Virology	V270A	Mycoplasma Antibody	In-House
Virology	V411	Mycoplasma Serology	Referred
Virology	V435	Parvovirus Confirmation	Referred
Virology	V170	Parvovirus Serology	In-House
Virology	V452	Pneumococcal PCR	Referred
Virology	V467	Pneumococcal Serotype Specific Study	Referred
Virology	V444	Pneumococcal Vaccine Response	Referred
Virology	V455	Pneumocystis	Referred
Virology	V456	Polyoma JC Virus PCR	Referred
Virology	V486	Rabies	Referred
Virology	V425	Rare Imported Pathogen Screening	Referred
Virology	V489	Rare Imported Pathogen Screening	Referred
Virology	V402	Respiratory PCR Screen	Referred
Virology	V550	Respiratory Syncitial Virus	In-House

Department	Test Set	Common Name	Referred
Virology	V413	Rubella Confirmation	Referred
Virology	V050C	Rubella IgG	In-House
Virology	V055A	Rubella IgM	In-House
Virology	V422	Schistosoma Serology	Referred
Virology	V421	Strongyloides Serology	Referred
Virology	V066	Syphilis Confirmatory Testing	Referred
Virology	V064E	Syphillis Antibodies	In-House
Virology	V070	Syphillis Monitoring	In-House
Virology	V442	Tetanus Vaccine Response	Referred
Virology	V484	Toxocara Serology	Referred
Virology	V436	Toxoplasma Confirmation	Referred
Virology	V286	Toxoplasma IgG/IgM	In-House
Virology	V485	Toxoplasma PCR	Referred
Virology	V400a	Toxoplasmosis	In-House
Virology	V492	Trichomonas PCR	Referred
Virology	V469	Ureaplasma Molecular Testing	Referred
Virology	V439	Varicella zoster (Chicken pox) Confirmation	Referred
Virology	V160	Varicella zoster (Chicken pox) IgG	In-House
Virology	V481	Varicella zoster (Chicken pox) PCR	Referred
Virology	V471	Whipples Disease PCR	Referred

Interpreting Results of Thyroid Function Tests

	High TSH	Normal TSH	Low TSH
High FT4	• Sporadic compliance with thyroxine therapy • TSH-secreting tumour • Thyroid hormone resistance	• Euthyroid with high binding globulin, e.g. pregnancy, OCP	• Thyrotoxicosis • Thyroiditis
Normal FT4	• Subclinical hypothyroidism	• Euthyroid	**Elevated FT3** • Thyrotoxicosis • Thyroidtis **Normal FT3** • Recovering Graves' • Ophthalmic Graves' • Thyroid nodules
Low FT4	• Primary hypothyroidism	• Sick euthyroid • Low binding globulin • Secondary hypothyroidism	• Secondary hypothyroidism

- In overt primary hyperthyroidism TSH is nearly always below 0.10 mU/L and in overt primary hypothyroidism plasma TSH is always increased above 10 mU/L.
- In mild (subclinical) disorders, TSH will be the most sensitive indicator of failing thyroid function since plasma FT4 and FT3 are often normal. Before the diagnosis of subclinical thyroid disorders can be made, causes of an abnormal TSH other than thyroid disorders must be excluded

"Non-thyroidal illnesses" and the "sick-euthyroid syndrome"
Patients suffering from chronic or acute non-thyroidal illnesses, may show abnormalities in thyroid function tests even though they are clinically euthyroid.

- In hospitalised patients a TSH <0.10 mU/L is at least twice as likely to be due to non-thyroidal illness as hyperthyroidism.
- In hospitalised patients an increased TSH is as likely to be associated with recovery from illness as hypothyroidism.
- ***Because of the poor predictive value of thyroid function tests in hospitalised patients, these tests should only be requested if there is a clinical reason for suspecting a thyroid problem.***

Pregnancy
In the first trimester a TSH of <0.10 mU/L may be found. FT3 and FT4 values fall thoughout pregnancy.

Effect of Drugs on Thyroid Function Tests

Drugs may interfere with TSH secretion or the production, secretion, transport and metabolism of thyroid hormones. The tables below list some drugs that may produce abnormal thyroid function tests.

Drugs which cause hyper- / hypo-thyroidism

Drug		Mechanism
Cholestyramine Cholestapol Aluminium hydroxide Ferrous sulphate	Sucralfate Calcium carbonate Soy protein Proton pump inhibitors	Impaired absorption of thyroxine from GI tract
Interleukin 1 Interferon α	Interferon β TNF α	Alter autoimmunity

Drugs which produce abnormal TFTs but patients remain clinically euthyroid

Amiodarone	Dopamine	Iodide	Oestrogens
Anabolic steroids	Dopaminergic agents	Iopanoic acid	Phenytoin
Androgens	Fenclofenac	Lithium	Propranolol
Barbiturates	Frusemide	Mefenamic acid	Radiocontrast dyes
Beta antagonists	Glucocorticoids	Methadone	Raloxifene
Carbamazapine	Heparin	Non-steroidal AIDs	Rifampacin
Clofibrate	Heroin	Octreotide	Salicylates
Cytokines			Tamoxifen

Lithium

Lithium can cause hypothyroidism and hyperthyroidism in up to 10% of patients. Patients with positive TPOAb are particularly at risk. Patients taking lithium should have their TFTs measured at 6-12 month intervals or earlier if goitre develops.

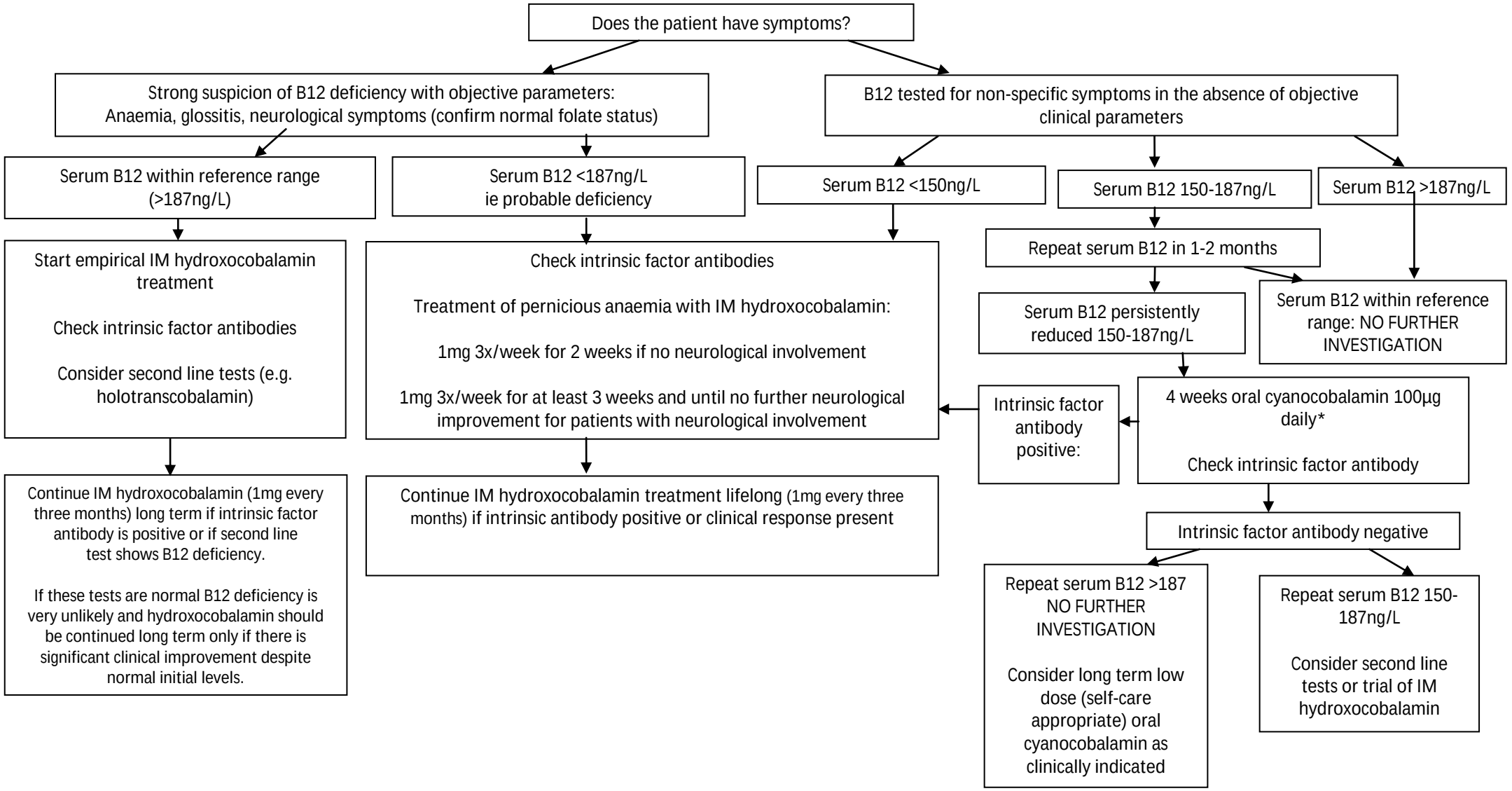
Amiodarone

Amiodarone has complex effects on thyroid metabolism and may also induce a destructive thyroiditis. Patients may have an altered thyroid hormone profile without thyroid dysfunction but up to 20% of patients taking amiodarone develop clinically significant hypothyroidism or thyrotoxicosis. Because of the long half-life of amiodarone, clinical problems may occur up to a year after stopping the drug.

It is important to evaluate patients before they commence therapy with amiodarone. This should include clinical examination and a basal measurement of TSH and TPOAb, together with FT4 and FT3. After starting treatment these tests should be repeated every 6 months, including up to a year after the drug is stopped

Further reading: UK Guidelines for the Use of Thyroid Function Tests, developed by The Association for Clinical Biochemistry, the British Thyroid Association and the British Thyroid Foundation, published 2006.

INTERPRETATION & ACTION FOR LOW SERUM B12 LEVEL



INTERPRETATION & ACTION FOR LOW SERUM B12 LEVEL

- These guidelines are adapted from BSH guideline: Guideline for the diagnosis and treatment of cobalamin and folate disorders: http://onlinelibrary.wiley.com/doi/10.1111/bjh.12959/full

- The interpretation of serum B12 relies heavily on the clinical picture as there is no gold standard test to define B12 deficiency.
- Neurological presentation (peripheral neuropathy, sub-acute combined degeneration of the cord) may occur in the absence of haematological changes, and early treatment is essential to avoid permanent neurological disability.
- Low B12 levels of uncertain significance may occur with non-specific symptoms and no anaemia (tiredness, neuro-psychiatric, and blood done for "screening").
- Patients with strong clinical features of B12 deficiency may have serum B12 levels that lie within the reference range (false normal B12 level).
- Serum B12 levels should be measured concurrently with folate levels given the biochemical pathways and clinical picture of these deficiencies are similar.
- Raised MCV, oval macrocytes and hypersegmented neutrophils may be helpful in confirming B12 deficiency.
- The absence of a raised MCV does not exclude B12 deficiency- neurological impairment can occur with a normal MCV in 25% of cases.
- When treating with oral cyanocobalamin the patient should be counselled to report any symptoms of neuropathy immediately. If neuropathy occurs then treat as pernicious anaemia.
- There is no need to repeat the B12 assay while the patient is on parenteral B12 supplement. The effects should be assessed by FBC only.
- If the patient is treatment refractory (rare) or has a persistent macrocytic anaemia, consider referral to Haematology.

SPECIAL GROUPS:

Medicines

- Metformin is associated with reduced serum B12 levels; no specific recommendations for monitoring or treatment can be made
- PPIs and H_2RAs may be associated with vitamin B12 deficiency. Review continuing need for acid suppression therapy.
- Oral contraceptives and HRT:
  These agents also cause a reduction in serum B12 levels, but may not be significant in low dose contraceptives and HRT.
  Women with borderline results (150-187ng/L) do not require further investigation and should be advised to review their intake of B12 rich foods

Pregnancy

- During pregnancy B12 level is usually lower than normal and testing should be discouraged unless there a clinical suspicion.
- In the presence of strong clinical suspicion, anti-intrinsic factor antibodies should be checked and treat as pernicious anaemia if positive.
- If a low B12 result has been found in the presence of negative anti-IFAB, but with strong clinical suspicion of deficiency, in order to limit extensive investigation with resultant anxiety and to treat potential fetal deficiency, three injections of hydroxocobalamin are suggested to cover the pregnancy, with serum B12 levels being checked 2 months post-partum to ensure resolution to normal levels.

Chronic Kidney Disease: Modification of the eGFR calculation

In accordance with NICE clinical guidance CG182: Chronic Kidney Disease (CKD) in adults- assessment and management, DBH Pathology Services uses the nationally recommended CKD Epidemiology Collaboration (CKD-EPI) creatinine equation to estimate GFRcreatinine on all adult U&E requests (i.e. patients aged of 18 years and over). The following terminology has also been adopted for the different categories of GFR:

GFR (mL/min/1.73m²)	Stage	*Terms	NICE Advice/Comment on Report
≥90	G1	Normal and high unless there is existing laboratory or clinical evidence of kidney disease	Use an increase in serum creatinine level of more than 20% to infer significant reduction in kidney function
60 – 89	G2	Mildly reduced kidney function unless there is existing laboratory or clinical evidence of kidney disease	Interpret with caution bearing in mind that estimates of GFR become less accurate as the true GFR increases
45 - 59	G3a	Mild to moderately reduced kidney function	Confirm result (if not previously tested by repeating within 2 weeks)
30 – 44	G3b	Moderate to severely reduced kidney function	
15 – 29	G4	Severely reduced kidney function	
< 15	G5	End stage kidney failure	

*These terms are only applicable in patients with stable renal function and should be interpreted with caution in people with extreme muscle mass, e.g.:

- Malnourished patients
- Muscle wasting disease states
- Amputees
- Bodybuilders

Estimated Glomerular Filtration Rate (eGFR) Calculator

Calculator corrected for DBTH Creatinine Values

Press <TAB> to update values

DBTH Creatinine	50
Patient Age (years)	50
eGFR (Male)	120
eGFR (Female)	109

NICE guidance also recommends advising people not to eat any meat in the 12 hours before having a blood test for eGFRcreatinine.

The revised guideline has adopted the KDIGO (Kidney Disease Improving Global Outcomes) GFR and ACR (albumin:creatinine ratio) categories to identify people at risk of developing CKD and/or at risk of CKD complications and progression. A table outlining the different classifications can be found in the NICE guidance and, for ease, has been reproduced below (see Table 1).

For further information on identifying and managing CKD please refer to the NICE guidance: https://www.nice.org.uk/guidance/cg182

Classification of chronic kidney disease using GFR and ACR categories

GFR and ACR categories and risk of adverse outcomes			ACR categories (mg/mmol), description and range			
			<3 Normal to mildly increased	3 – 30 Moderately increased	>30 Severely increased	
			A1	A2	A3	
GFR categories (ml/min/1.73m^2), description and range	≥90 Normal and high	G1	No CKD in the absence of markers of kidney damage			Increasing risk ↓
	60 – 89 Mild reduction related to normal range for a young adult	G2				
	45 – 49 Mild - moderate reduction	G3a[1]				
	30 – 44 Moderate – severe reduction	G3b				
	15 – 29 Severe reduction	G4				
	<15 Kidney failure	G5				

Increasing risk →

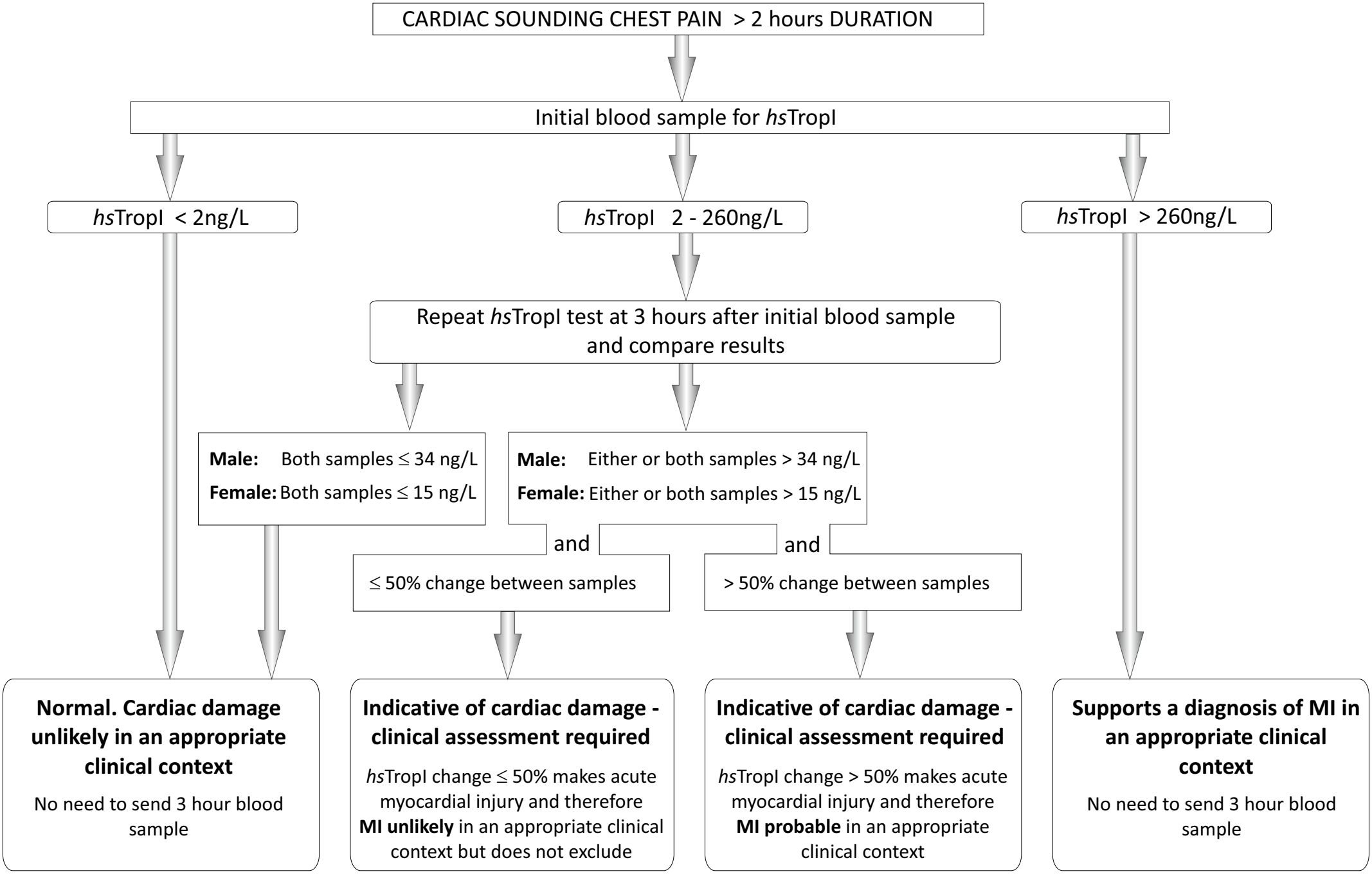
[1]Consider using eGFRcystatinC for people with CKD G3aA1

Abbreviations:
ACR, albumin:creatinine ratio; CKD, chronic kidney disease; GFR, glomerular filtration rate

Adapted from Kidney Disease: Improving Global Outcomes

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

Algorithm for the investigation of NSTEMI using *high sensitivity* Troponin I



MOLECULAR TESTING FOR MSI AND BRAF/NRAS IN LYNCH SCREENING

Background Information:

Testing for MSI and BRAF as part of the Lynch Syndrome Screening pathway in Colorectal Cancer is performed on the Biocartis Idylla System.

The Biocartis Idylla™ System covers the entire process from sample to result with fully integrated sample preparation followed by PCR amplification and detection of the targeted sequences. The Idylla™ System consists of the Idylla™ Console connected to one or more Idylla™ Instruments. Idylla™ Cartridges, designed for specific applications, can be processed by the Idylla™ System using Assay specific software (Test Type Package, TTP).

The Assay procedure and data analysis have been optimized for FFPE tissue sections.

Interpretation

The Idylla™ MSI Assay detects a novel panel of seven monomorphic biomarkers: ACVR2A, BTBD7, DIDO1, MRE11, RYR3, SEC31A, SULF2. Where mutations are found in 2 or more of these biomarkers the result is MSI-H (Microsatellite Instability-High). Otherwise, the result will be MSS (Microsatellite Stable).

The Idylla™ NRAS-BRAF Mutation Test detects mutations in codons 12, 13, 59, 61, 117, 146 of the NRAS gene and in codon 600 of the BRAF gene.

Nomenclature of BRAF mutations detected by the Idylla™ NRAS-BRAF Mutation Test

GENE	EXON	CODON	MUTATION	PROTEIN	NUCLEOTIDE CHANGE	GENETIC CALL
BRAF	15	600	V600E	p.Val600Glu	c.1799T>A	V600E/D
					c.1799_1800delinsAA	
			V600D	p.Val600Asp	c.1799_1800delinAC	
			V600K	p.Val600Lys	c.1798_1799delinsAA	V600K/R
			V600R	p.Val600Arg	c.1798_1799delinsAG	

Nomenclature of NRAS mutations detected by the Idylla™ NRAS-BRAF Mutation Test

GENE	EXON	CODON	MUTATION	PROTEIN	NUCLEOTIDE CHANGE	GENETIC CALL
NRAS	2	12	G12D	p.Gly12Asp	c.35G>A	G12D
			G12C	p.Gly12Cys	c.34G>T	G12C
			G12S	p.Gly12Ser	c.34G>A	G12S
			G12A	p.Gly12Ala	c.35G>C	G12A/V
			G12V	p.Gly12Val	c.35G>T	
		13	G13D	p.Gly13Asp	c.38G>A	G13D
			G13R	p.Gly13Arg	c.37G>C	G13R/V
			G13V	p.Gly13Val	c.38G>T	
	3	59	A59T	p.Ala59Thr	c.175G>A	A59T
		61	Q61K	p.Gln61Lys	c.181C>A	Q61K
			Q61R	p.Gln16Arg	c.182A>G	Q61R
			Q61L	p.Gln61Leu	c.182A>T	Q61L
			Q61H	p.Gln61His	c.183A>C	Q61H
					c.183A>T	
	4	117	K117N	p.Lys117Asn	c.351G>C	K117N
					c.351G>T	
		146	A146T	p.Ala146Thr	c.436G>A	A146T/V
			A146V	p.Ala146Val	c.437C>T	

Above nomenclature taken from Biocartis Instructions for Use Idylla™ NRAS-BRAF Mutation Test (A0030/6)

For any further information, please contact the Histopathology Laboratory.

Special Instructions for Chlamydia trachomatis (CT) and Gonorrhoea Culture (GC)

CT Tests - Sens / Spec by specimen type in low-high prevalent populations* (n=993)

Sample	Sensitivity*	Specificity*
Male Swab (urethral)	90.9% - 100%	96.7% - 100%
Male neat urine	95.8% - 100%	98.3% - 100%
Male urine (received in UPT)	95.8% - 100%	98.3% - 100%
Female swab (ecx)	85.7% - 96%	96.2% - 100%
Female vaginal swab	77.8% - 100%	96.8% - 100%
Female neat urine	82.4% - 100%	97.6% - 100%
Female urine (received in UPT)	82.4% - 100%	97.7% - 100%

GC Tests - Sens / Spec by specimen type in low-high* prevalent populations (n=774)

Sample	Sensitivity*	Specificity*
Male Swab (urethral)	100%	95.7% - 100%
Male neat urine	100%	95.7% - 100%
Male urine (received in UPT)	100%	97.9% - 100%
Female swab (ecx)	93.8% - 100%	98.5% - 100%
Female vaginal swab	100%	97.1% - 100%
Female neat urine	50% - 100%	97.8% - 100%
Female urine (received in UPT)	93.8% - 100%	98.8% - 100%

The BD Viper® CT/GC Q^x amplified DNA assay has been validated and FDA approved only for cervical, urethral and urine samples. Chlamydia trachomatis and or *Neisseria gonorrhoeae* can be found in several non-genital body parts (incl. biopsies). None of these 'other' samples have been validated by Becton-Dickinson.

Note: All positive GC tests are confirmed by a second molecular method.

Instructions for self-taken vaginal swabs:

- Wash hands with soap and water, rinse and dry.
- Twist the cap to break seal
- Pull the cap with attached swab from the tube (**Do Not** touch the soft tip or lay it down – if you do this, discard the swab and request a new one)
- Hold the swab by the cap with one hand so it is pointing towards you
- With your other hand, gently spread the skin outside the vagina. Insert the swab into the vaginal opening.
- Point the tip toward your lower back and relax your muscles.
- Gently slide the swab no more than 2 inches (5cm) into your vagina.
- If the swab does not slide easily, gently rotate the swab as you push. If it is still difficult, DO NOT attempt to continue.
- Make sure that the swab touches the walls of the vagina so that moisture is absorbed by the swab
- Rotate the swab for 10-15 seconds.
- Withdraw the swab without touching skin
- Place the swab into the tube and cap it securely.
- After collection, wash your hands with soap and water, rinse and dry.
- Return the swab inside the tube to your Health Care Professional who will send it to the laboratory for testing.

Production and delivery of a semen sample for Post-Vasectomy semen analysis.

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NHS Foundation Trust

In order to be able to cease using contraception after a vasectomy, you will usually be asked to provide semen samples for analysis.

An initial sample should be provided at approximately 16 weeks after your vasectomy operation. During this time, you should have had at least 24 ejaculations.

Your clinician will provide you with more specific information at the time of your operation.

You must:

- Obtain a completed and signed request form from your clinician.
- Obtain a patient pack from the Histopathology department by phoning 01302 642860; a pack will be posted out to your home and will contain a toxicity tested container, laboratory form and specimen bag
- On receipt of your patient pack contact the department on 01302 642860 to make an appointment for the semen analysis. Semen analysis is performed on an appointment only basis.
- Use the specimen container provided. Please do not clean it or wash it out prior to use.
- Label the container with the details of the male that has produced the sample.

  A minimum of three patient identifiers are required:

  - Name
  - Date of birth
  - Address
  - NHS/ Hospital number

We care

- Provide a complete/whole sample:
  - Incomplete of leaking samples will not be examined as they may result in inaccurate results and /or inappropriate treatment pathways
  - Only a single ejaculate should be provided for examination.
  - Produce the sample by hand masturbation. Samples produced by interrupted intercourse or by using a condom are not suitable for analysis and will be rejected.
- Refrain from sexual intercourse or masturbation for at least 48 hours prior to producing your sample but wait no longer than seven days before producing your sample.
- Deliver the sample directly to the Histopathology Specimen Reception at DRI within 2 hours of production. Samples delivered to other facilities will not meet the acceptance criteria and will not be accepted.

Additional information.

- Please note there are no facilities on site for the production of semen samples. Sample must be produced at home and delivered directly to Histopathology at DRI.
- It is advisable to keep the sample as close to body temperature as possible by placing the container close to the skin or in a pocket. Samples should not be subjected to extremes of temperature as this may affect the sample.
- Additional information about the sample is required for analysis; please ensure that the highlighted areas on the laboratory form are completed prior to you appointment. Samples will not be analysed without this information.
- Results will take up to 14 days to become available. Your clinician will advise you how and when to obtain your results.

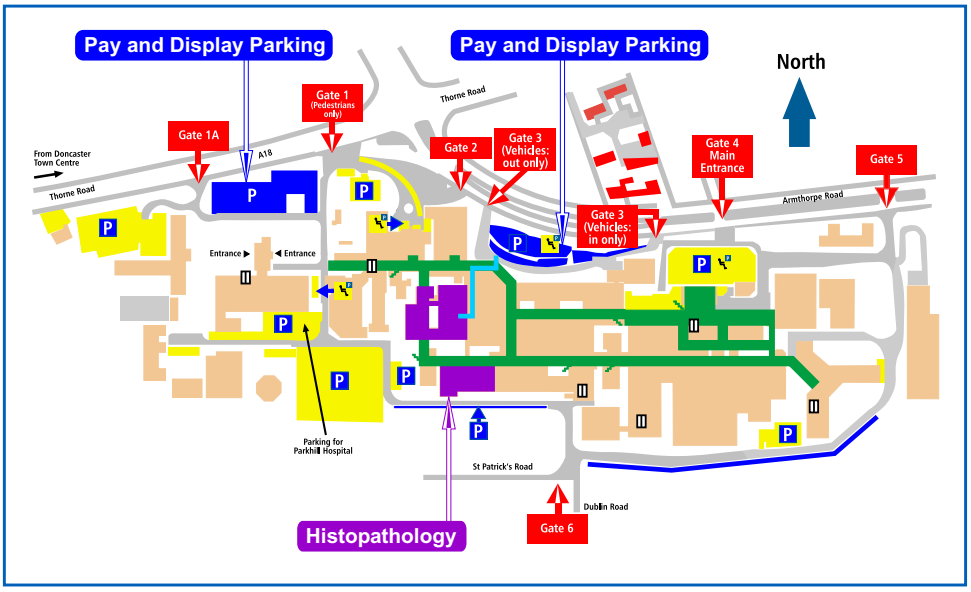
- Parking enforcement is operational across all hospital sites. Failure to adhere to Trust car parking terms and conditions will result in a Parking Charge Notification (PCN) issue.

If you have any queries with these requirements or wish to speak to someone regarding the production of a semen sample for post-vasectomy semen analysis please contact the Histopathology department on Tel: 01302- 642860.

Directions to Histopathology specimen reception, Doncaster royal Infirmary (see map below).

Enter the hospital via the A&E entrance, turn right and take the first turning on your left, follow signs for Histopathology specimen reception. Continue to the end of the corridor.

Turn right and go through the double doors and down a flight of stairs onto the basement corridor. The Histopathology department is immediately on the left hand side, ring the bell for attention.



Appointment for Semen Analysis:	
Location - Histopathology DRI:	
Date:	Time:

Patient Advice and Liaison Service (PALS)

The team are available to help with any concerns/complaints you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are:

Telephone: 01302 642764 or 0800 028 8059
Email: dbth.pals.dbh@nhs.net

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NHS Foundation Trust

Production and delivery of a semen sample for fertility investigations.

This leaflet has been produced for patients who have been asked to produce a semen sample for fertility investigations.

Analysis of a semen sample for fertility investigations is completed by the Histopathology Department at Doncaster Royal Infirmary (DRI) and is by appointment only.

There are no facilities on site for production of a semen sample, the sample must be produced at home and delivered directly to the department within 50 minutes of production.

You Must:

- Provide a signed request form from your clinician; failure to provide this will result in your sample being rejected for analysis.
- Obtain a patient pack from the Histopathology department by phoning 01302 642860; a pack will be posted out to your home and will contain a toxicity tested container, laboratory form and specimen bag
- On receipt of your patient pack contact the department on 01302 642860 to make an appointment for the semen analysis. Semen analysis is performed on an appointment only basis.
- Use only the pot provided, do not clean or wash the pot prior to use.
- Label the container with details of the male that has produced the sample. A minimum of three of the following identifiers are needed:
  - Name
  - Date of birth
  - Address
  - NHS/ hospital number

We care

- Provide a complete/whole sample
    - Incomplete or leaking samples will not be examined as they may result in inaccurate results and/ or inappropriate treatment pathways.
    - Only a single ejaculate should be provided for examination
- Produce the sample by hand masturbation. Samples produced by interrupted intercourse or by using a condom are not suitable for analysis.
- Refrain from sexual intercourse or masturbation for at least 48 hours prior to producing your sample but wait no longer than seven days before producing your sample.
- Deliver the sample directly to the Histopathology Specimen Reception at DRI within 50 minutes of production. Guidelines state that analysis should occur within one hour of production. Samples delivered to other facilities will not meet the required acceptance criteria and will not be analysed.

Additional Information

- It is advisable to keep the sample as close to body temperature as possible by placing the container close to the skin or in a pocket. Samples should not be subjected to extreme temperatures as this may affect the sample.
- Parking enforcement is operational across all sites,failure to adhere to Trust car parking terms and conditions will result in a Parking Charge Notification (PCN) issue.
- Within your patient pack is a laboratory form; prior to your appointment you should fill out all of the highlighted fields. This additional information about your sample is essential for the semen analysis. Samples received without all of this information will not be analysed.

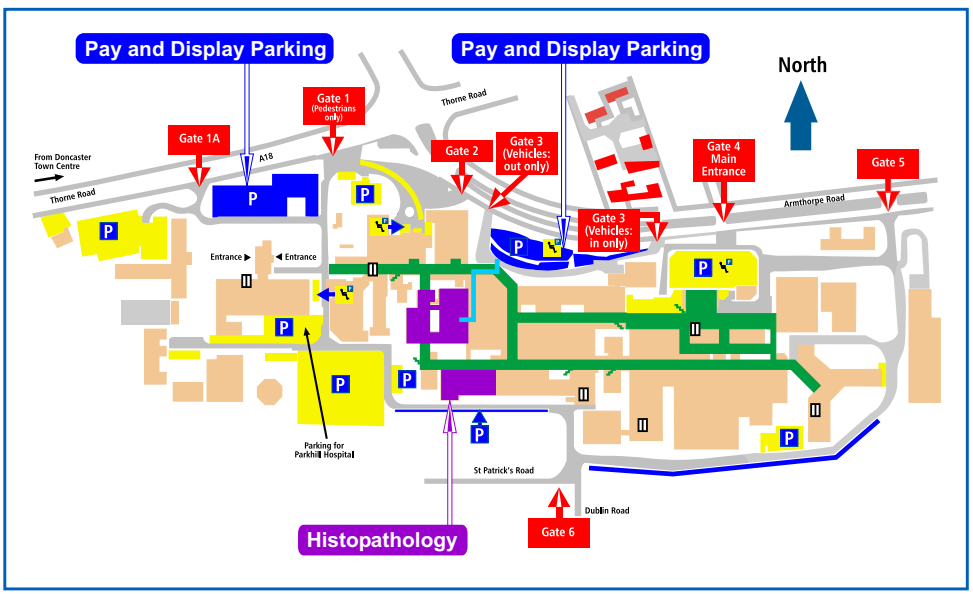
- Results will take up to 14 days to become available. Your clinician will advise you how and when to obtain your results.

If you have any queries with these requirements or wish to speak to a member of staff regarding production of a semen sample for fertility investigations please contact the histopathology department on the number above.

Directions to Histopathology specimen reception, Doncaster royal Infirmary (see map below).

Enter the hospital via the A&E entrance, turn right and take the first turning on your left, follow signs for Histopathology specimen reception. Continue to the end of the corridor.

Turn right and go through the double doors and down a flight of stairs onto the basement corridor. The Histopathology department is immediately on the left hand side, ring the bell for attention.



Histopathology

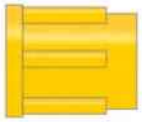
Appointment for Semen Analysis:	
Location - Histopathology DRI:	
Date:	Time:

Patient Advice and Liaison Service (PALS)

The team are available to help with any concerns/complaints you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are:

Telephone: 01302 642764 or 0800 028 8059
Email: dbth.pals.dbh@nhs.net

Test Panel	**5-Alpha-Dihydrotestosterone**		
Synonyms	DHT		
Abbreviation		*Lab Test Code*	W759R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Dihydrotestosterone :	nmol/L	W2564	Dihydrotestosterone :	
	Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	5-Alpha-Dihydrotestosterone
ISS Code	W759R
ISS Test Name	5-Alpha-Dihydrotestosterone Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Dihydrotestosterone :	Female	16 Years	50 Years		<0.52	nmol/L	01/09/2021
Dihydrotestosterone :	Male	16 Years	100 Years	0.28	2.51	nmol/L	01/09/2021
Testosterone (LC-MS/MS)	Female	0 Months	6 Months		<0.4	nmol/L	01/09/2021
Testosterone (LC-MS/MS)	Female	16 Years	100 Years	0.3	2.1	nmol/L	01/09/2021
Testosterone (LC-MS/MS)	Male	0 Months	6 Months		<13.9	nmol/L	01/09/2021
Testosterone (LC-MS/MS)	Male	16 Years	100 Years	8.3	33	nmol/L	01/09/2021
Testosterone:DHT Ratio	Female	16 Years	110 Years	0.9	6.5		01/01/2021
Testosterone:DHT Ratio	Male	16 Years	110 Years	6.2	17.2		01/01/2021

Test Panel	**5-Hydroxyindoleacetic Acid**		
Synonyms	5-HIAA		
Abbreviation	**5-HIAA**	*Lab Test Code*	W480R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Test used in the diagnosis of carcinoid tumours. Samples will be rejected if pH of 24hr urine >3.5.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	24 Hour Urine with Acid Preservative		
Containers	 24hr Urine with Acid Preservative		Choose an item.
	24 Hour Urine with Acid Preservative		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
24 hr Urine Volume	Litres	C5225	CATVOL	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
24hr 5HIAA	umol/24hr	W5240	24hr 5HIAA	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**5-Hydroxytryptamine**		
Synonyms	Serotonin		
Abbreviation		*Lab Test Code*	W763C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Send FBC result with sample		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

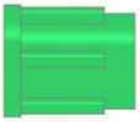
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Serotonin	nmol/10*9 platelets	W7845	Serotonin :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	5-Hydroxytryptamine
ISS Code	W763C
ISS Test Name	Serotonin Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Serotonin :	Female	0 Years	110 Years	0	7	nmol/10*9 platelets	03/03/2011
Serotonin :	Male	0 Years	110 Years	0	7	nmol/10*9 platelets	03/03/2011

Test Panel	**7-Dehydrocholesterol**		
Synonyms			
Abbreviation		*Lab Test Code*	W433
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	For diagnosis of Smith Lemli Opitz Syndrome		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 Heparin		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

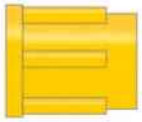
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
7-DEHYDROCHOLESTEROL	umol/L	W6098	7DHC	
CHOLESTEROL	mmol/L	W6099	CHOL..	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	7 Dehydrocholesterol
ISS Code	W433
ISS Test Name	7-Dehydrocholestrol Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
7-DEHYDROCHOLESTEROL	Female	0 Years	110 Years		<2	umol/L	01/01/2011
7-DEHYDROCHOLESTEROL	Male	0 Years	110 Years		<2	umol/L	01/01/2011
CHOLESTEROL	Female	0 Days	90 Days	1.5	4	mmol/L	01/01/2011
CHOLESTEROL	Female	3 Months	36 Months	1.2	4.7	mmol/L	01/01/2011
CHOLESTEROL	Female	3 Years	16 Years	2.8	6	mmol/L	01/01/2011
CHOLESTEROL	Female	16 Years	19 Years	2.8	5.7	mmol/L	01/01/2011
CHOLESTEROL	Male	0 Days	90 Days	1.5	4	mmol/L	01/01/2011
CHOLESTEROL	Male	3 Months	36 Months	1.2	4.7	mmol/L	01/01/2011
CHOLESTEROL	Male	3 Years	16 Years	2.8	6	mmol/L	01/01/2011
CHOLESTEROL	Male	16 Years	19 Years	2.8	5.7	mmol/L	01/01/2011

Test Panel	**11 - Deoxycortisol**		
Synonyms			
Abbreviation		*Lab Test Code*	W662C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

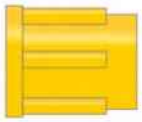
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	11-Deoxycortisol :	nmol/L	W7524	11-Deoxycortisol :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	11 - Deoxycortisol
ISS Code	W662C
ISS Test Name	11-Deoxycortisol Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
11-Deoxycortisol :	Female	0 Years	100 Years	0.7	2.7	nmol/L	01/09/2021
11-Deoxycortisol :	Male	0 Years	100 Years	0.7	2.7	nmol/L	01/09/2021

Test Panel	**17-Alpha-Hydroxyprogesterone**		
Synonyms	17-OHP		
Abbreviation	17OHP	*Lab Test Code*	W321R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	To screen for, detect, and monitor treatment for congenital adrenal hyperplasia (CAH). In the new-born, the test should be performed on infants more than 48 hours old. In older patients suspected of mild CAH, contact laboratory for advice.		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements	Blood sample should be collected between 8.00 and 9.30 am		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
17 OH Progest (Old method) :	nmol/L	W1322	17 OH P :	
17 OH Progesterone	nmol/L	W1324	17:OHP (LCMS)	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	17-Alpha-Hydroxyprogesterone
ISS Code	W321R
ISS Test Name	17-ALPHA-HYDROXYPROGESTERSONE RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
17 OH Progesterone	Female	1 Days	14 Days	0	9.2	nmol/L	01/03/2016
17 OH Progesterone	Female	14 Days	91 Days	0	8.7	nmol/L	01/03/2016
17 OH Progesterone	Female	3 Months	12 Months	0	5.7	nmol/L	01/03/2016
17 OH Progesterone	Female	1 Years	11 Years	0	2.9	nmol/L	01/03/2016
17 OH Progesterone	Female	11 Years	15 Years	0	4.5	nmol/L	01/03/2016
17 OH Progesterone	Male	1 Days	14 Days	0	9.2	nmol/L	01/03/2016
17 OH Progesterone	Male	14 Days	91 Days	0	8.7	nmol/L	01/03/2016
17 OH Progesterone	Male	3 Months	12 Months	0	5.7	nmol/L	01/03/2016
17 OH Progesterone	Male	1 Years	11 Years	0	2.9	nmol/L	01/03/2016
17 OH Progesterone	Male	11 Years	15 Years	0	4.5	nmol/L	01/03/2016
17 OH Progesterone	Male	15 Years	110 Years	0	6	nmol/L	01/03/2016

24hr Urine Collection Bottles

Following a recent audit, the Pathology Dept would like to clarify the correct procedure for requesting a 24hr urine bottle. If you are requesting a 24hr urine collection on a patient, you need to provide the Pathology Dept with a copy of the request form so we can issue the appropriate 24hr urine collection bottle as follows:

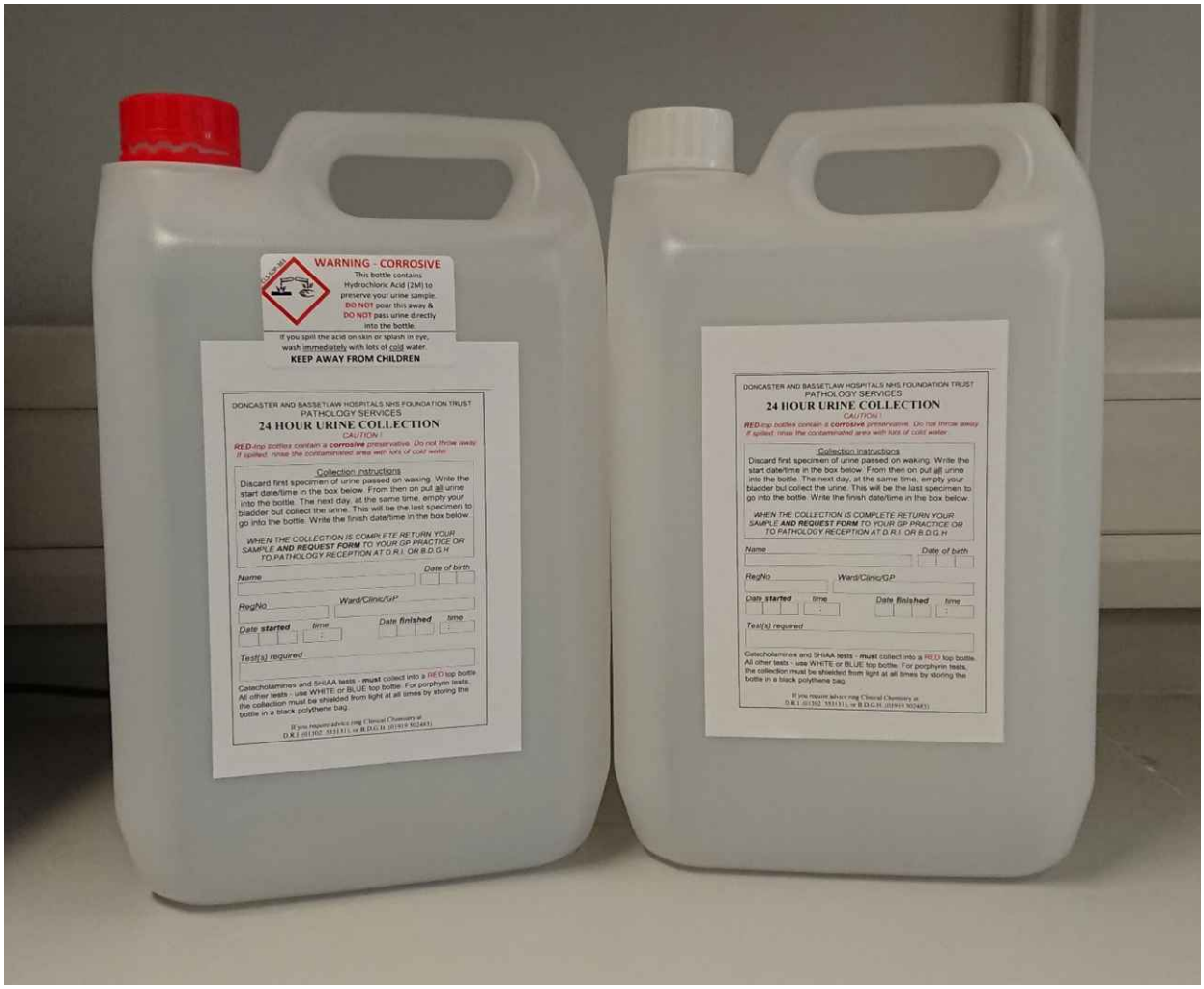
1) Generate an ICE or handwritten request form, ensuring you provide a copy of the form (or A4 diagnostics token) to the patient.

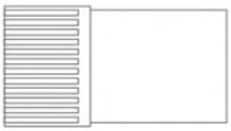
2) If the patient or a member of staff is collecting the bottle from Pathology Reception at DRI/BDGH, they should bring a copy of the request form (or A4 diagnostics token) with them. This allows us to hand out the appropriate urine collection bottle.

3) If you would like the bottle to be sent to the patient's GP surgery:
    a. For ICE requests, call Pathology Enquiries (642870) or email dbth.pathology.tests@nhs.net with the patient details so we can retrieve the request from ICE.
    b. For handwritten requests, email a copy of the request form to dbth.pathology.tests@nhs.net.

    Please state the name of the GP surgery that the bottle needs to be sent to.

Following this process helps to minimise errors and prevent the need for repeat collections.

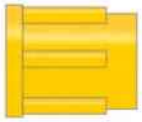


Test Panel	**Acanthamoeba**		
Synonyms			
Abbreviation		*Lab Test Code*	V454
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	For detection of Acanthamoeba eye infection.		
Availability	Routine hours only		
Specimen	Contact Lens or Contact Lens Solution, Dry swab or Corneal Scrape.	*Volume Required*	
Requirements			
Containers	 Universal  Swab		
	Contact Lens or Contact Lens Solution, Dry swab or Corneal Scrape.		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Acanthamoeba DNA		V4256	ACANTHAMOEBA DNA	
Acanthamoeba Culture:		V4274	ACANTHAMOEBA CULTURE	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Acetylcholine Receptor Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W425
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Myasthenia (80%) Gravis and Thymic Tumours		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

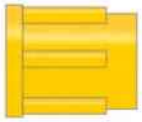
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Acetylchol. Receptor Ab:	nmol/L	W6205	NEWACRAB1	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Acetylcholine Receptor Antibodies
ISS Code	W425
ISS Test Name	Acetylcholine Receptor Antibody Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Acetylchol. Receptor Ab:	Female	0 Years	100 Years	0	0.2	nmol/L	18/03/1996
Acetylchol. Receptor Ab:	Female (Pregnant)	0 Years	100 Years	0	0.2	nmol/L	18/03/1996
Acetylchol. Receptor Ab:	Male	0 Years	100 Years	0	0.2	nmol/L	18/03/1996

Test Panel	**Acid Glycoprotein**		
Synonyms	Orosomucoid		
Abbreviation		*Lab Test Code*	W570
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

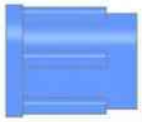
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Acid Glycoprot	g/L	W3025	ACID GLYC :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Acid Glycoprotein / Orosomucoid
ISS Code	W570
ISS Test Name	Acid Glycoprotein Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Acid Glycoprot	Female	0 Years	50 Years	0.4	1	g/L	03/03/2011
Acid Glycoprot	Female	50 Years	115 Years	0.8	2	g/L	03/03/2011
Acid Glycoprot	Male	1 Years	50 Years	0.6	1.2	g/L	03/03/2011
Acid Glycoprot	Male	50 Years	115 Years	0.8	2	g/L	03/03/2011

Test Panel	**Activated Partial Thromboplastin Time**		
Synonyms			
Abbreviation		*Lab Test Code*	X005
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

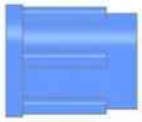
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Ratio		X0025	RATIO	
APTT	secs	X0061	PTT	
Mean Age APTT		X0700	APTT Age Mean	
Ratio - Age Weighted		X0705	Ratio Age Weighted	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Activated Partial Thromboplastin Time
ISS Code	X005
ISS Test Name	ACTIVATED P.T.T.
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
APTT	Female	0 Days	30 Days	27.6	45.6	secs	24/09/2019
APTT	Female	31 Days	150 Days	24.8	40.7	secs	24/09/2019
APTT	Female	151 Days	365 Days	25.1	40.7	secs	24/09/2019
APTT	Female	1 Years	6 Years	24	39.2	secs	24/09/2019
APTT	Female	6 Years	11 Years	26.9	38.7	secs	24/09/2019
APTT	Female	11 Years	17 Years	24.6	38.4	secs	24/09/2019
APTT	Female	17 Years	110 Years	25	36.5	secs	24/09/2019
APTT	Male	0 Days	30 Days	27.6	45.6	secs	24/09/2019
APTT	Male	31 Days	150 Days	24.8	40.7	secs	24/09/2019
APTT	Male	151 Days	365 Days	25.1	40.7	secs	24/09/2019
APTT	Male	1 Years	6 Years	24	39.2	secs	24/09/2019
APTT	Male	6 Years	11 Years	26.9	38.7	secs	24/09/2019
APTT	Male	11 Years	17 Years	24.6	38.4	secs	24/09/2019
APTT	Male	17 Years	110 Years	25	36.5	secs	24/09/2019

Test Panel	**Activated Protein C Resistance**		
Synonyms	Factor V Leiden Screen		
Abbreviation	APC-R	*Lab Test Code*	W550
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Factor V Leiden Screen (APC-R)		W0545	FV LEID	
Referred Test :		W4321	Referred Test	
Factor V Leiden defect		X0545	FACTOR V LEIDEN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	APC-R
ISS Code	W550
ISS Test Name	APC-R Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor V Leiden Screen (APC-R)	Female	0 Years	110 Years	2.32	5.07		01/11/2018
Factor V Leiden Screen (APC-R)	Male	0 Years	110 Years	2.32	5.07		01/11/2018

Test Panel	**Acyl Carnitine**		
Synonyms			
Abbreviation		*Lab Test Code*	W865
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2 spots on Guthrie Card
Requirements	2 spots on Guthrie Card		
Containers	No container required		Choose an item.
	Requires Dried Blood Spots on Guthrie Card		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
TMS Analysis of Acylcarnitine:		W6064	Acylcarnitine Analysis :	

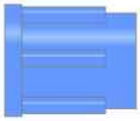
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Acyl Carnitine
ISS Code	W865
ISS Test Name	ACYLCARNITINE RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
C10	Female	0 Years	100 Years		<0.30	umol/L	01/06/2021
C10	Male	0 Years	100 Years		<0.30	umol/L	01/06/2021
C10:1	Female	0 Years	100 Years		<0.22	umol/L	01/06/2021
C10:1	Male	0 Years	100 Years		<0.22	umol/L	01/06/2021
C12	Female	0 Years	100 Years		<0.10	umol/L	01/06/2021
C12	Male	0 Years	100 Years		<0.10	umol/L	01/06/2021
C12:1	Female	0 Years	100 Years		<0.10	umol/L	01/06/2021
C12:1	Male	0 Years	100 Years		<0.10	umol/L	01/06/2021
C14	Female	0 Years	110 Years		<0.20	umol/L	01/03/2022
C14	Male	0 Years	110 Years		<0.20	umol/L	01/03/2022
C14:1	Female	0 Years	100 Years		<0.18	umol/L	01/06/2021
C14:1	Male	0 Years	100 Years		<0.18	umol/L	01/06/2021
C16	Female	0 Years	110 Years		<0.24	umol/L	01/03/2022
C16	Male	0 Years	110 Years		<0.24	umol/L	01/03/2022
C16:1	Female	0 Years	100 Years		<0.08	umol/L	01/12/2021
C16:1	Male	0 Years	100 Years		<0.08	umol/L	01/12/2021
C16:1-OH	Female	0 Years	110 Years		<0.02	umol/L	01/03/2022
C16:1-OH	Male	0 Years	110 Years		<0.02	umol/L	01/03/2022
C16-OH	Female	0 Years	110 Years		<0.02	umol/L	01/03/2022
C16-OH	Male	0 Years	110 Years		<0.02	umol/L	01/03/2022
C18	Female	0 Years	100 Years		<0.10	umol/L	01/03/2022
C18	Male	0 Years	100 Years		<0.10	umol/L	01/03/2022
C18:1	Female	0 Years	100 Years		<0.28	umol/L	01/06/2021
C18:1	Male	0 Years	100 Years		<0.28	umol/L	01/06/2021
C18:1-OH	Female	0 Years	110 Years		<0.01	umol/L	01/03/2022
C18:1-OH	Male	0 Years	110 Years		<0.01	umol/L	01/03/2022
C2	Female	0 Years	110 Years	5.5	27	umol/L	01/06/2021
C2	Male	0 Years	110 Years	5.5	27	umol/L	01/06/2021
C3-DC	Female	0 Years	110 Years		<0.10	umol/L	01/04/2022
C3-DC	Male	0 Years	110 Years		<0.10	umol/L	01/04/2022
C4-OH	Female	0 Years	110 Years		<0.07	umol/L	01/06/2021
C4-OH	Male	0 Years	110 Years		<0.07	umol/L	01/06/2021
C5-OH	Female	0 Years	100 Years		<0.06	umol/L	01/06/2021
C5-OH	Male	0 Years	100 Years		<0.06	umol/L	01/06/2021
C5:1	Female	0 Years	110 Years		<0.04	umol/L	01/06/2021
C5:1	Male	0 Years	110 Years		<0.04	umol/L	01/06/2021
C5-DC	Female	0 Years	110 Years		<0.10	umol/L	01/03/2022
C5-DC	Male	0 Years	110 Years		<0.10	umol/L	01/03/2022
C6	Female	0 Years	100 Years		<0.12	umol/L	01/06/2021
C6	Male	0 Years	100 Years		<0.12	umol/L	01/06/2021
C6-DC	Female	0 Years	100 Years		<0.02	umol/L	01/12/2021
C6-DC	Male	0 Years	100 Years		<0.02	umol/L	01/12/2021

C8	Female	0 Years	110 Years		<0.22	umol/L	01/06/2021
C8	Male	0 Years	110 Years		<0.22	umol/L	01/06/2021
Free Carnitine	Female	0 Years	110 Years	15	53	umol/L	28/03/2011
Free Carnitine	Male	0 Years	110 Years	15	53	umol/L	28/03/2011

Test Panel	Adamts-13 Activity		
Synonyms			
Abbreviation		*Lab Test Code*	W022
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements	Must have approval from Consultant Haematologist		
Containers	 Citrate		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

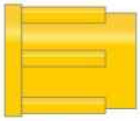
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Referred Test : ADAMTS-13 Activity	IU/dL	W4321 X0022	Referred Test ADAMTS	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Adamts-13 Activity
ISS Code	W022
ISS Test Name	ADAMTS-13 ACTIVITY Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
ADAMTS-13 Activity	Female	0 Years	110 Years	52	149	IU/dL	01/09/2018
ADAMTS-13 Activity	Male	0 Years	110 Years	52	149	IU/dL	01/09/2018

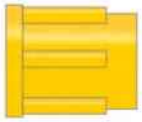
Test Panel	Adalimumab Drug & Antibody Level		
Synonyms			
Abbreviation		*Lab Test Code*	W482
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Adenovirus PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V464
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	A molecular assay for diagnosis of Adenovirus infection. Please state date of onset and nature of symptoms.		
Availability	Routine hours only		
Specimen	EDTA, Viral swab, CSF or Stool	*Volume Required*	1ml
Requirements			
Containers	 EDTA  Swab		
	EDTA, Viral swab, CSF or Stool		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date result received		V2725	DATR	
Reference Lab No		V2730	REFNO	
Adenovirus PCR		V2755	ADEN PCR.	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

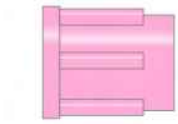
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Adrenal/Ovarian/Testes Antibody**		
Synonyms			
Abbreviation		*Lab Test Code*	W951
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Autoimmune Addisons (60%) & polyglandular autoimmunity		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
ADRENAL GLAND ABS		W0600	ADRGLAB	
OVARIAN AB		W0605	OVAB	
TESTES AB		W0610	TESTESAB	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Adrenocorticotrophin		
Synonyms	ACTH		
Abbreviation	ACTH	*Lab Test Code*	C225
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Test useful in determining the aetiology of proven Cushings syndrome or Addison's disease.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.1ml
Requirements	Send samples to the laboratory immediately following collection. Samples need to be frozen within 2 hours of collection. ACTH sample only available to be taken at DRI by phlebotomy		
Containers	 Preferred Pink EDTA  EDTA		
	ACTH sample only available to be taken at DRI by phlebotomy		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to laboratory immediately following collection.		
Stability	Only stable at room temperature for 2 hours.		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

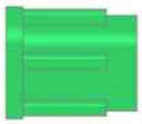
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Adreno Corticotrophin	ng/L	C1295	ACTH (Immulite)	
ACTH	ng/L	C1297	ACTH	

Site	

Reference Ranges

Test	Adrenocorticotrophin
ISS Code	C225
ISS Test Name	ACTH
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
ACTH	Female	0 Years	115 Years	4.7	48.8	ng/L	13/06/2018
ACTH	Male	0 Years	115 Years	4.7	48.8	ng/L	13/06/2018
Adreno Corticotrophin	Female	0 Years	100 Years		<47	ng/L	05/02/1996
Adreno Corticotrophin	Male	0 Years	100 Years		<47	ng/L	05/02/1996

Test Panel	**Aldosterone and Renin**		
Synonyms			
Abbreviation		*Lab Test Code*	W875
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	6 Weeks
Investigation Comments	Normally requested as Renin + Aldosterone to investigate secondary causes of hypertension. Initial sample may be taken when in-patient is still recumbent following sleep. Second sample taken after 30 minutes standing.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements	Test requires a sample transported to the lab at room temperature within 3 hours of sample collection. Sample must be separated and plasma frozen within 30 minutes of sample receipt. Failure to follow this process will give inappropriate results.		
Containers	 Heparin		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

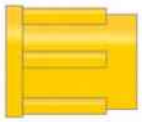
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Aldosterone / PRA Ratio (ARR) :		W6075	ARR	
Aldosterone	pmol/L	W6076	ALDOST	
Plasma Renin Activity (PRA) :	nmol/L/Hr.	W6080	P.R.A.	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Aldosterone and Renin
ISS Code	W875
ISS Test Name	Aldosterone and Renin Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Aldosterone	Female	6 Years	110 Years	90	700	pmol/L	18/03/2019
Aldosterone	Male	6 Years	110 Years	90	700	pmol/L	18/03/2019
Aldosterone / PRA Ratio (ARR) :	Female	6 Years	110 Years	0	680		18/03/2019
Aldosterone / PRA Ratio (ARR) :	Male	6 Years	110 Years	0	680		18/03/2019
Plasma Renin Activity (PRA) :	Female	0 Years	110 Years	0.5	3.5	nmol/L/Hr.	18/03/2019
Plasma Renin Activity (PRA) :	Male	0 Years	110 Years	0.5	3.5	nmol/L/Hr.	18/03/2019

Test Panel	**Alkaline Phosphatase Isoenzymes**		
Synonyms			
Abbreviation		*Lab Test Code*	C998A
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Used to establish the likely source of isolated elevations in alkaline phosphatase results. Test can identify liver, bone, intestinal and placental isoenzymes. Total ALP should be significantly raised for this test.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to laboratory on day of collection.		
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Sebia Hydrasis		

Tests in Panel

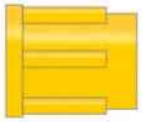
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Alk.Phos :	IU/L	C1067	ABBOTT ALP	
ALP Isoenzymes Ratio		C9997	ALPISOR	
ALP Isoenzymes		C9998	ALP ISO	

Site	

Reference Ranges

Test	Alkaline Phosphatase Isoenzymes
ISS Code	C998A
ISS Test Name	Alkaline Phosphatase Isoenzymes
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Alk.Phos :	Female	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Female	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Female	16 Years	110 Years	30	130	IU/L	01/11/2011
Alk.Phos :	Male	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Male	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Male	16 Years	110 Years	30	130	IU/L	01/11/2011

Test Panel	**Allergy Testing (referred)**		
Synonyms			
Abbreviation	RAST	*Lab Test Code*	W385
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

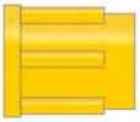
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Serum IgE:	kU/L	W6352	RAST2	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Allergy Testing (referred)
ISS Code	W385
ISS Test Name	Referred Allergy Testing (RAST) Result
Ref Range Comments	

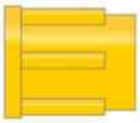
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Serum IgE:	Female	0 Days	1 Days	0	5	kU/L	14/10/1996
Serum IgE:	Female	1 Days	93 Days	0	11	kU/L	14/10/1996
Serum IgE:	Female	3 Months	12 Months	0	29	kU/L	14/10/1996
Serum IgE:	Female	1 Years	5 Years	0	52	kU/L	14/10/1996
Serum IgE:	Female	5 Years	10 Years	0	63	kU/L	14/10/1996
Serum IgE:	Female	10 Years	15 Years	0	75	kU/L	14/10/1996
Serum IgE:	Female	15 Years	100 Years	0	81	kU/L	14/10/1996
Serum IgE:	Female (Pregnant)	0 Days	1 Days	0	5	kU/L	14/10/1996
Serum IgE:	Female (Pregnant)	1 Days	93 Days	0	11	kU/L	14/10/1996
Serum IgE:	Female (Pregnant)	3 Months	12 Months	0	29	kU/L	14/10/1996
Serum IgE:	Female (Pregnant)	1 Years	5 Years	0	52	kU/L	14/10/1996
Serum IgE:	Female (Pregnant)	5 Years	10 Years	0	63	kU/L	14/10/1996
Serum IgE:	Female (Pregnant)	10 Years	15 Years	0	75	kU/L	14/10/1996
Serum IgE:	Female (Pregnant)	15 Years	100 Years	0	81	kU/L	14/10/1996
Serum IgE:	Male	0 Days	1 Days	0	5	kU/L	14/10/1996
Serum IgE:	Male	1 Days	93 Days	0	11	kU/L	14/10/1996
Serum IgE:	Male	3 Months	12 Months	0	29	kU/L	14/10/1996
Serum IgE:	Male	1 Years	5 Years	0	52	kU/L	14/10/1996
Serum IgE:	Male	5 Years	10 Years	0	63	kU/L	14/10/1996
Serum IgE:	Male	10 Years	15 Years	0	75	kU/L	14/10/1996
Serum IgE:	Male	15 Years	100 Years	0	81	kU/L	14/10/1996

Test Panel	**Allergy Testing**		
Synonyms			
Abbreviation	RAST	*Lab Test Code*	C973
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Serum IgE:		kU/L	W6352	

This assay can be performed for the following allergens
Aspergillus Fumigatus (C383)
Cat Epithelium and Dander (C373)
Common Food Mix (C387)
Dog Dander (C375)
Egg (C379)
Fish Mix (C389)
Grass (C381)
Horse Dander (C374)
Inhalant screen (C979)
Latex (C382)
Milk (C376)
Mould Mix (C390)
Nut Mix 1 (C384)
Nut Mix 2 (C388)
Peanut (C378)
Seafood Mix (C385)
Silver Birch (C391)
Timothy Grass (C380)
Tree Mix (C392)
Weed Mix (C393)
Wheat (C377)

Site	Choose an item.

Test Panel	**Alpha Feto Protein (Tumour Marker)**		
Synonyms	AFP		
Abbreviation		*Lab Test Code*	C266A
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	For use as a marker in monitoring clinically proven cases of liver, ovarian or testicular tumours. Tumour markers are not sufficiently sensitive or specific to use for screening.		
Availability	Routine hours only (assayed twice a week)		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	AFP (Abbott Tumour Marker)	KIU/L	C1348	AFP(ABBOTT)	
Site					

Reference Ranges

Test	Alpha Feto Protein (Tumour Marker)
ISS Code	C266A
ISS Test Name	TAFP (Abbott)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
AFP (Abbott Tumour Marker)	Female	0 Years	120 Years	0	7.3	KIU/L	07/09/2022
AFP (Abbott Tumour Marker)	Male	0 Years	120 Years	0	7.3	KIU/L	07/09/2022

Test Panel	**Alpha Galactosidase**		
Synonyms			
Abbreviation		*Lab Test Code*	W362R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:			W0125	RESULTRETURNED
Plasma A-Galactosidase:		(a) nmol/ml/hr	W0251	Plasma A-galactosidase
B-Hexosaminidase A & B		(b) nmol/ml/hr	W0256	B-Hexosaminidase A & B
Blood Spot A-Galactosidase		(c)pmol/punch/hr	W0261	BS A-Galactosidase
Blood Spot A-Glucosidase		(d)pmol/punch/hr	W0262	Blood spot A-Glucosidase
Referred Test :			W4321	Referred Test

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Alpha galactosidase
ISS Code	W362R
ISS Test Name	Alpha-galactosidase Result
Ref Range Comments	

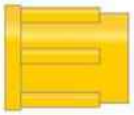
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
B-Hexosaminidase A & B	Female	0 Years	115 Years	600	3500	(b) nmol/ml/hr	01/06/2019
B-Hexosaminidase A & B	Male	0 Years	115 Years	600	3500	(b) nmol/ml/hr	01/06/2019
Blood Spot A-Glucosidase	Female	0 Years	110 Years	7.3	39	(d)pmol/punch/hr	01/09/2017
Blood Spot A-Glucosidase	Male	0 Years	110 Years	7.3	39	(d)pmol/punch/hr	01/09/2017
Blood Spot A-Galactosidase	Female	0 Years	110 Years	6.3	47	(c)pmol/punch/hr	01/09/2017
Blood Spot A-Galactosidase	Male	0 Years	110 Years	6.3	47	(c)pmol/punch/hr	01/09/2017
Plasma A-Galactosidase:	Female	0 Years	110 Years	3	20	(a) nmol/ml/hr	01/10/2014
Plasma A-Galactosidase:	Male	0 Years	110 Years	3	20	(a) nmol/ml/hr	01/10/2014

Test Panel	**Alpha-1-Antitrypsin Genotype**		
Synonyms			
Abbreviation		*Lab Test Code*	W839R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Full clinical details and history required to investigate Alpha-1-Antotrypsin deficiency		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Not to be used as first line screen for alpha1-AT deficiency - for this send serum for quantitation and phenotyping. Genotyping is used for confirmation of phenotype identification, admission to the national AAT deficiency register, and family studies.		
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
AAT Genotype		W0839	AAT Genotype	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Alpha-1-Antitrypsin Phenotype**		
Synonyms			
Abbreviation		*Lab Test Code*	W580
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Samples will be automatically referred for phenotyping if the A1AT activity is <1.2 g/L (and in all patients less than 1 year of age).		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		

Tests in Panel

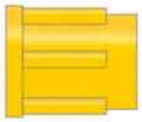
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
A1AT phenotype		W3024	A1AT PHENOTYPE :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Alpha-1-Antitrypsin Phenotype
ISS Code	W580
ISS Test Name	Alpha-1-Antitrypsin Phenotype Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
A1-Antitrypsin	Female	0 Months	6 Months	0.9	2.2	g/L	01/01/2021
A1-Antitrypsin	Female	6 Months	12 Months	0.8	1.8	g/L	01/01/2021
A1-Antitrypsin	Female	1 Years	5 Years	1.1	2	g/L	01/01/2021
A1-Antitrypsin	Female	5 Years	10 Years	1.1	2.2	g/L	01/01/2021
A1-Antitrypsin	Female	10 Years	15 Years	1.4	2.3	g/L	01/01/2021
A1-Antitrypsin	Female	15 Years	16 Years	1.2	2	g/L	01/01/2021
A1-Antitrypsin	Female	16 Years	110 Years	1.1	2.1	g/L	01/01/2021
A1-Antitrypsin	Male	0 Months	6 Months	0.9	2.2	g/L	01/01/2021
A1-Antitrypsin	Male	6 Months	12 Months	0.8	1.8	g/L	01/01/2021
A1-Antitrypsin	Male	1 Years	5 Years	1.1	2	g/L	01/01/2021
A1-Antitrypsin	Male	5 Years	10 Years	1.1	2.2	g/L	01/01/2021
A1-Antitrypsin	Male	10 Years	15 Years	1.4	2.3	g/L	01/01/2021
A1-Antitrypsin	Male	15 Years	16 Years	1.2	2	g/L	01/01/2021
A1-Antitrypsin	Male	16 Years	110 Years	1.1	2.1	g/L	01/01/2021

Test Panel	**Alpha-1-Antitrypsin**		
Synonyms			
Abbreviation		*Lab Test Code*	C613
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Results lower than 1.2 g/L are sent away for Phenotyping. CRP also measured to assess possible acute phase response. CRP also measured to assess possible acute phase response.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

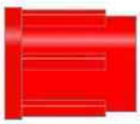
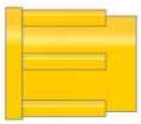
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
C Reactive Protein	mg/L	C3001	CRP	
Alpha-1-Antitrypsin	g/L	C4027	A1T	

Site	

Reference Ranges

Test	Alpha-1-Antitrypsin
ISS Code	C613
ISS Test Name	Alpha-1 - Antitrypsin
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Alpha-1-Antitrypsin	Female	0 Months	6 Months	0.9	2.2	g/L	12/12/2011
Alpha-1-Antitrypsin	Female	6 Months	12 Months	0.8	1.8	g/L	12/12/2011
Alpha-1-Antitrypsin	Female	1 Years	5 Years	1.1	2	g/L	12/12/2011
Alpha-1-Antitrypsin	Female	5 Years	10 Years	1.1	2.2	g/L	12/12/2011
Alpha-1-Antitrypsin	Female	10 Years	15 Years	1.4	2.3	g/L	12/12/2011
Alpha-1-Antitrypsin	Female	15 Years	16 Years	1.2	2	g/L	12/12/2011
Alpha-1-Antitrypsin	Female	16 Years	115 Years	1.1	2.1	g/L	12/12/2011
Alpha-1-Antitrypsin	Male	0 Months	6 Months	0.9	2.2	g/L	12/12/2011
Alpha-1-Antitrypsin	Male	6 Months	12 Months	0.8	1.8	g/L	12/12/2011
Alpha-1-Antitrypsin	Male	1 Years	5 Years	1.1	2	g/L	12/12/2011
Alpha-1-Antitrypsin	Male	5 Years	10 Years	1.1	2.2	g/L	12/12/2011
Alpha-1-Antitrypsin	Male	10 Years	15 Years	1.4	2.3	g/L	12/12/2011
Alpha-1-Antitrypsin	Male	15 Years	16 Years	1.2	2	g/L	12/12/2011
Alpha-1-Antitrypsin	Male	16 Years	115 Years	1.1	2.1	g/L	12/12/2011
C Reactive Protein	Female	0 Years	16 Years	0	5	mg/L	12/12/2011
C Reactive Protein	Female	16 Years	115 Years	0	5	mg/L	12/12/2011
C Reactive Protein	Male	0 Years	16 Years	0	5	mg/L	12/12/2011
C Reactive Protein	Male	16 Years	115 Years	0	5	mg/L	12/12/2011

Test Panel	Alternative Pathway Haem Complement		
Synonyms	AP50		
Abbreviation		*Lab Test Code*	W280R
Department	Immunology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Preferred Plain  SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

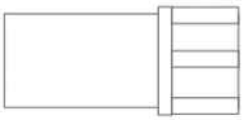
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Alt.Pathway.Haem.Complement	%	W0615	Alt.Pathway .Haem.Comp	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Alternative Pathway Haem Complement
ISS Code	W280R
ISS Test Name	Alt.Pathway.Haem Complement Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Alt.Pathway.Haem.Complement	Female	0 Years	115 Years	66	129	%	01/06/2014
Alt.Pathway.Haem.Complement	Male	0 Years	115 Years	66	129	%	01/06/2014

Test Panel	**Aluminium**		
Synonyms			
Abbreviation		*Lab Test Code*	W678
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Z10		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	Aluminium :	ug/L	W5235	Aluminium :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Aluminium
ISS Code	W678
ISS Test Name	ALUMINIUM RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Aluminium :	Female	0 Years	115 Years			ug/L	02/11/2017
Aluminium :	Male	0 Years	115 Years			ug/L	02/11/2017

Test Panel	**Amino Acids (CSF)**		
Synonyms			
Abbreviation		*Lab Test Code*	W852
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Sample contamination a severe problem. Handle with care. No gel separator or clotting aids. Send empty tubes from same batches to check for contamination.		
Availability	Routine hours only		
Specimen	Cerebro-Spinal Fluid	*Volume Required*	1ml
Requirements			
Containers	 Plain		Choose an item.
	A paired plasma sample must also be sent. Usually require CSF: Plasma Glycine ratio.		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

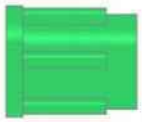
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
CSF Glycine	umol/L	W0190	CSFGLY	
Plasma Glycine	umol/L	W0191	PLGLY	
CSF/Plasma Glycine		W0192	CSFPGLY	
CSF Alanine	umol/L	W0193	CSFALA	
CSF Threonine	umolL	W0194	CSFTHR	
CSF Serine	umol/L	W0195	CSFSER	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Amino Acids (CSF)
ISS Code	W852
ISS Test Name	CSF Amino Acids Result
Ref Range Comments	

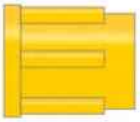
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CSF Alanine	Female	0 Days	180 Days	15	60	umol/L	01/06/2011
CSF Alanine	Male	0 Days	180 Days	15	60	umol/L	01/06/2011
CSF Glycine	Female	0 Days	180 Days	0	10	umol/L	01/06/2011
CSF Glycine	Male	0 Days	180 Days	0	10	umol/L	01/06/2011
CSF Serine	Female	0 Days	180 Days	35	80	umol/L	01/06/2011
CSF Serine	Male	0 Days	180 Days	35	80	umol/L	01/06/2011
CSF Threonine	Female	0 Days	180 Days	12	178	umolL	01/06/2011
CSF Threonine	Male	0 Days	180 Days	12	178	umolL	01/06/2011
Plasma Glycine	Female	0 Days	7 Days	200	600	umol/L	01/06/2011
Plasma Glycine	Female	8 Days	180 Days	140	420	umol/L	01/06/2011
Plasma Glycine	Female	6 Months	24 Months	100	425	umol/L	01/06/2011
Plasma Glycine	Female	2 Years	10 Years	120	480	umol/L	01/06/2011
Plasma Glycine	Female	10 Years	17 Years	110	465	umol/L	01/06/2011
Plasma Glycine	Female	17 Years	110 Years	100	450	umol/L	01/06/2011
Plasma Glycine	Male	0 Days	7 Days	200	600	umol/L	01/06/2011
Plasma Glycine	Male	8 Days	180 Days	140	420	umol/L	01/06/2011
Plasma Glycine	Male	6 Months	24 Months	100	425	umol/L	01/06/2011
Plasma Glycine	Male	2 Years	10 Years	120	480	umol/L	01/06/2011
Plasma Glycine	Male	10 Years	17 Years	110	465	umol/L	01/06/2011
Plasma Glycine	Male	17 Years	110 Years	100	450	umol/L	01/06/2011

Test Panel	**Amino Acids (Plasma, Qualitative)**		
Synonyms			
Abbreviation		*Lab Test Code*	C714
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Screening test for the investigation of disorders of amino acid metabolism. Abnormal results are sent to referral lab for quantitative analysis.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	For investigation of hypoglycaemia or seizures, take sample during acute episode. Patient should be fasting, if possible.		
Containers	 Heparin		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection.		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel

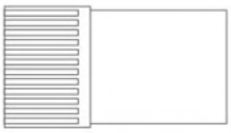
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
AATLC Interpretation		C2362	AATLC Interpretation	
TLC Plasma AA Screen		C8000	PAA	

Site	

Test Panel	**Amino Acids (Plasma Quantitative)**		
Synonyms			
Abbreviation		*Lab Test Code*	W849
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Quantitative amino acids, assayed at Sheffield Children's Hospital.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	Amino Acids		W5531	AAQ1	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Amino Acids (Urine Quantitative)**		
Synonyms			
Abbreviation		*Lab Test Code*	W852C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Quantitative amino acids, assayed at Sheffield Children's Hospital.		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	1ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Amino Acids		W4516	UAA 1	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Amiodarone**		
Synonyms			
Abbreviation		*Lab Test Code*	W317R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 Plain		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

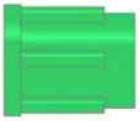
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Amiodarone	mg/L	W0281	Amiodarone	
Desethyl Amiodarone	mg/L	W0282	Desethyl Amiodarone	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Amiodarone
ISS Code	W317R
ISS Test Name	Amiodarone Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Amiodarone	Female	0 Years	115 Years	0.5	2	mg/L	01/06/2012
Amiodarone	Male	0 Years	115 Years	0.5	2	mg/L	01/06/2012
Desethyl Amiodarone	Female	0 Years	110 Years			mg/L	21/06/2022
Desethyl Amiodarone	Male	0 Years	110 Years			mg/L	21/06/2022

Test Panel	**Ammonia**		
Synonyms			
Abbreviation		*Lab Test Code*	C505
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the investigation of inherited metabolic disease and hepatic encephalopathy.		
Availability	Routine hours & On Call		
Specimen	Plasma	*Volume Required*	0.6ml
Requirements	Ideally ammonia should be measured on a free flowing venous sample or arterial stab. Capillary samples should be avoided. Samples should be sent to the laboratory as soon as possible (ideally within 15 minutes and on ice).		
Containers	 Heparin		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	Send to laboratory immediately		
Long Term	Not Possible		
Comments			
Platform	Abbott Architect		

Tests in Panel

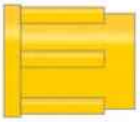
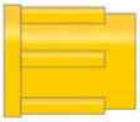
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index		C1026	HI	
Blood Ammonia	umol/L	C1700	AMMONIA	

Site	

Reference Ranges

Test	Ammonia
ISS Code	C505
ISS Test Name	AMMONIA..
Ref Range Comments	

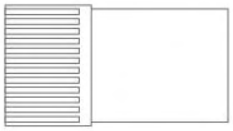
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Blood Ammonia	Female	0 Days	28 Days	0	100	umol/L	02/05/2020
Blood Ammonia	Female	29 Days	365 Days	0	40	umol/L	02/05/2020
Blood Ammonia	Female	1 Years	115 Years	0	40	umol/L	02/05/2020
Blood Ammonia	Male	0 Days	28 Days	0	100	umol/L	02/05/2020
Blood Ammonia	Male	29 Days	365 Days	0	40	umol/L	02/05/2020
Blood Ammonia	Male	1 Years	115 Years	0	40	umol/L	02/05/2020
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000

Test Panel	**Amoebic Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V429
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Include relevant clinical details including reason for investigation and travel history.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST 		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Amoebic IFAT(Serum)		V4181	Amoebic IFAT (Serum)	
Amoebic CAP (Serum)		V4183	Amoebic CAP (serum)	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

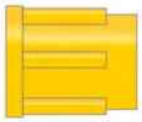
Site	

Test Panel	Amylase (urine)		
Synonyms			
Abbreviation		*Lab Test Code*	C512
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Typically used to investigate a mildly elevated amylase result in the absence of clinical signs of pancreatitis or salivary gland pathology. Normal urinary amylase confirms the serum level is due to 'macro-amylase', a non-biologically active protein bound		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport	Do not use air transport tube		
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		
Tests in Panel	Urine Amylase Timed Amylase Excretion		
Site			

Reference Ranges

Test	Amylase (urine)
ISS Code	C512
ISS Test Name	Amylase (urine)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Urine Amylase	Male	0 Years	115 Years	16	491	U/L	21/12/2022
Urine Amylase	Female	0 Years	115 Years	21	447	U/L	21/12/2022
Timed Amylase Excretion	Male	0 Years	115 Years	1	17	U/hour	21/12/2022
Timed Amylase Excretion	Female	0 Years	115 Years	1	17	U/hour	21/12/2022

Test Panel	**Amylase**		
Synonyms			
Abbreviation		*Lab Test Code*	C119
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	This method is sensitive to Salivary amylase as well as Pancreatic. Elevated results can also occur due to the presence of Macro Amylase (See urinary Amylase).		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Haemolysed and Icteric samples should be avoided		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

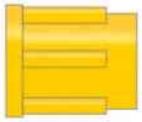
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Amylase	U/L	C1106	AMYLASE	

Site	

Reference Ranges

Test	Amylase
ISS Code	C119
ISS Test Name	AMYLASE
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Amylase	Female	0 Years	115 Years	25	125	U/L	12/12/2011
Amylase	Male	0 Years	115 Years	25	125	U/L	12/12/2011
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000

Test Panel	**Amyloid Proteins**		
Synonyms			
Abbreviation		*Lab Test Code*	W144C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

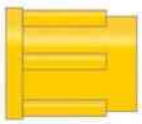
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Amyloid Ab:	mg/L	W4646	Amyloid Ab:	
Serum Amyloid A	mg/L	W4647	Serum Amyloid A	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Amyloid A Protein Result
ISS Code	W148B
ISS Test Name	Amyloid A Protein Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Amyloid A protein	Female	0 Years	115 Years	0	10	mg/L	01/01/2012
Amyloid A protein	Male	0 Years	115 Years	0	10	mg/L	01/01/2012

Test Panel	**Androstenedione**		
Synonyms			
Abbreviation		*Lab Test Code*	W325
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used in the investigation of precocious or delayed puberty in children/teenagers, and hirsutism or virilisation in adult females.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Lipaemic samples are unsuitable		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes	Sample transported at -20°C		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

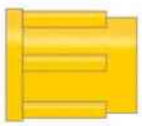
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Androstenedione(Old)	nmol/L	W6005	Androstenedione(Old)	
Androstenedione	nmol/L	W6006	Androstenedione (LCMS)	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Androstenedione
ISS Code	W325
ISS Test Name	Androstenedione Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Androstenedione	Female	1 Days	7 Days	0	10.1	nmol/L	01/03/2016
Androstenedione	Female	8 Days	28 Days	0	9.6	nmol/L	01/03/2016
Androstenedione	Female	1 Months	12 Months	0	3.1	nmol/L	01/03/2016
Androstenedione	Female	1 Years	10 Years	0	2.3	nmol/L	01/03/2016
Androstenedione	Female	10 Years	17 Years	0	6.9	nmol/L	01/03/2016
Androstenedione	Male	1 Days	7 Days	0	10.1	nmol/L	01/03/2016
Androstenedione	Male	8 Days	28 Days	0	9.6	nmol/L	01/03/2016
Androstenedione	Male	1 Months	12 Months	0	3.1	nmol/L	01/03/2016
Androstenedione	Male	1 Years	10 Years	0	2.3	nmol/L	01/03/2016
Androstenedione	Male	10 Years	17 Years	0	6.9	nmol/L	01/03/2016
Androstenedione	Male	17 Years	110 Years	0	7.8	nmol/L	01/03/2016

Test Panel	**Angiotensin Converting Enzyme**		
Synonyms			
Abbreviation	ACE	*Lab Test Code*	C882
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	Measurement of serum activity is a useful confirmatory test of sarcoid granulomas if values are elevated, and can be used to monitor the effectiveness of corticosteroid treatments. ACE activity can also be raised in some patients with TB, Gaucher's disease		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Angiotensin Conv. Enz.	IU/L	C6066	ACE	

Site	

Reference Ranges

Test	Angiotensin Converting Enzyme
ISS Code	C882
ISS Test Name	ACE..
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Angiotensin Conv. Enz.	Female	0 Years	115 Years	0	52	IU/L	12/12/2011
Angiotensin Conv. Enz.	Male	0 Years	115 Years	0	52	IU/L	12/12/2011

Test Panel	**Antenatal Antibody Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	J238
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 EDTA X-Match	 EDTA X-Match	
	2x 2ml required		
Request Forms	 Antenatal		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
SCREENING CELL 1		J2000	SCREEN CELL 1	
SCREENING CELL 2		J2001	SCREENING CELL 2	
SCREENING CELL 3		J2002	SCREENING CELL 3	
ANTIBODY SCREEN		J2003	ANTIBODY SCREEN	
ANTIBODY SCREEN		J2003	ANTIBODY SCREEN	

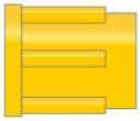
Site	

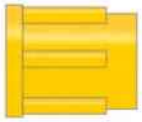
Test Panel	**Antenatal Group**		
Synonyms			
Abbreviation		*Lab Test Code*	J355
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 EDTA X-Match	 EDTA X-Match	
	2 x 2ml required		
Request Forms	 Antenatal		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
ANTI-A		J1000	ANTI-A	
ANTI-B		J1001	ANTI-B	
A1 CELLS		J1003	A1 CELLS	
B CELLS		J1004	B CELLS	
ABO + RH(D) GROUP		J1007	BLOOD GROUP	
ANTI-D		J6008	ANTI-D	
CTL-NEG		J9991	CTL-NEG	

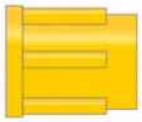
Site	

Test Panel	Anti-Basal Ganglia Antibodies		
Synonyms			
Abbreviation	ABGA	*Lab Test Code*	W445
Department	Immunology		
Clinical Contact	Choose an item.		
Contact	Choose an item.	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*ABGA Western Immunoblot* *ABGA NSE* *ABGA NPK* *ABGA Neuronal Aldolase C*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Anti Cardiac Muscle Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	C952
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Dressler's syndrome, post-MI		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements	Limited clinical significance		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Cardiac Muscle Ab:		C6211	CMA	
	Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Anti Cardiolipin Antibodies (ACA)**		
Synonyms			
Abbreviation	ACA	*Lab Test Code*	C471
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Can be transiently elevated so repeat after 3 months with concurrent lupus anticoagulant. Not diagnostic in themselves and can be found without clinical anti-phospholipid syndrome.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Note ACA IgG and IgM will be analysed.		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

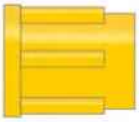
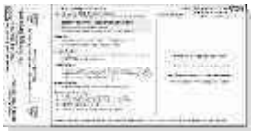
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
IgG-AntiCardiolipin	GPL-U/ml	C3151	IgG ACA	
IgM-AntiCardiolipin	MPL-U/ml	C3161	IgM ACA	

Site	Choose an item.

Reference Ranges

Test	Anti Cardiolipin Antibodies
ISS Code	C471
ISS Test Name	ACA
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
IgG-AntiCardiolipin	Female	0 Years	110 Years	0	10	GPL-U/ml	16/06/2015
IgG-AntiCardiolipin	Male	0 Years	110 Years	0	10	GPL-U/ml	16/06/2015
IgM-AntiCardiolipin	Female	0 Years	110 Years	0	10	MPL-U/ml	16/06/2015
IgM-AntiCardiolipin	Male	0 Years	110 Years	0	10	MPL-U/ml	16/06/2015

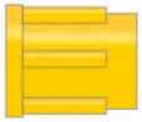
Test Panel	**Anti Cyclic Citrulated Peptide Antibodies**			
Synonyms	Anti-CCP Antibodies			
Abbreviation	CCP	*Lab Test Code*	C425	
Department	Immunology			
Clinical Contact	Clinical Biochemist			
Contact	01302 642870	*Turnaround Time*	2 Weeks	
Investigation Comments	Rheumatoid Antibodies			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*		
Requirements	Initial investigation should be rheumatoid factor (RF). If RF is negative and RA is still suspected a referral to a specialist should be made who may utilise CCP as part of the clinical assessment			
Containers	 SST			
Request Forms	 Pathology Combined			
Transport				
Storage notes	Send to the laboratory on day of collection.			
Stability	4 - 10°C			
Long Term	Minus 20°C			
Comments				
Platform	Abbott Architect			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Anti-CCP Antibodies:	U/mL	C3335	CCP	
Site					

Reference Ranges

Test	Anti CCP Antibodies
ISS Code	C425
ISS Test Name	CCP
Ref Range Comments	

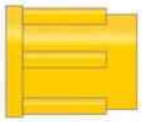
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Anti-CCP Antibodies:	Female	0 Years	110 Years	0	10	U/mL	09/05/2006
Anti-CCP Antibodies:	Female (Pregnant)	0 Years	110 Years	0	10	U/mL	09/05/2006
Anti-CCP Antibodies:	Male	0 Years	110 Years	0	10	U/mL	09/05/2006

Test Panel	**Anti Epidermal Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W295R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

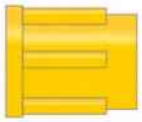
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Immunofluorescence:		W1190	Immunofluorescence Report	
Split Skin: BP180 Ab		W1191	Anti BP180 Ab	
Split Skin; BP230 Ab		W1192	Anti-BP230 Ab	
Anti-collagen VII Ab		W1193	Anti-collagen VII Ab	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Anti Ganglioside Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W576
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Master Neuropathies Normal Result= Negative		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	GM-1 Ganglioside Ab IgG :		W8522	GM-1 IgG :	
	GM-1 Ganglioside Ab IgM :		W8523	GM-1 IgM :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Anti Gliadin Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W427
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Found in Coeliac disease, other bowels disorders and children without Coeliac disease. Anti gliadin antibodies also present in dermatitis herpetiformis. IgG antigliadin antibodies also found in many 'leaky' bowel disorders.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform	Choose an item.		

Tests in Panel

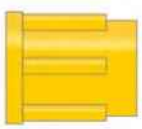
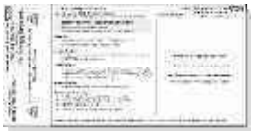
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
IgA-Gliadin Ab	U/mL	W0180	IGAGLAB	
IgG Gliadin Ab	U/mL	W0182	IGGGLAB	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Anti Gliadin Antibodies
ISS Code	W427
ISS Test Name	Anti Gliadin Antibodies Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
IgA-Gliadin Ab	Female	0 Years	115 Years	0	7	U/mL	14/09/2015
IgA-Gliadin Ab	Male	0 Years	115 Years	0	7	U/mL	14/09/2015
IgG Gliadin Ab	Female	0 Years	115 Years	0	7	U/mL	14/09/2015
IgG Gliadin Ab	Male	0 Years	115 Years	0	7	U/mL	14/09/2015

Test Panel	**Anti Histone Antibodies**		
Synonyms	Histone Ab		
Abbreviation		*Lab Test Code*	W712R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Systemic lupus erythematosus (SLE), drug induced SLE (DIL)		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Assay does not mean antibody concentration but antibody activity. This can be affected by a number of parameters such as antibody avidity		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Assay does not mean antibody concentration but antibody activity. This can be affected by a number of parameters such as antibody avidity		
Platform	Choose an item.		

Tests in Panel

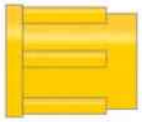
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Histone Antibodies :	U/mL	W7122	Histone Ab :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Anti Histone Antibodies
ISS Code	W712R
ISS Test Name	HISTONE ANTIBODIES RESULT
Ref Range Comments	

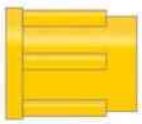
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Histone Antibodies :	Female	0 Years	110 Years	0	40	U/mL	01/12/2010
Histone Antibodies :	Male	0 Years	110 Years	0	40	U/mL	01/12/2010

Test Panel	**Anti Insulin Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W535
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

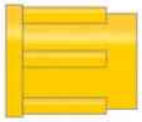
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
INSUL AUTOAB :	mg/L	W3110	IgG Insulin Autoantibodies :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Anti MUSK Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W328R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Myasthenia gravis in ACR negative patients Normal Result= Negative		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

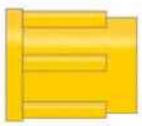
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Anti-Musk Ab		W1221	Anti-Musk antibody	
	Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Anti Myelin Sheath Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W971
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Neuropathy with macroglobulinemia (IgM monoclonal gammopathy)		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	Myelin antibody:		W6348	Myelin Ab :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Anti Neutrophil Cytoplasmic Antibodies (ANCA)**		
Synonyms			
Abbreviation	ANCA	*Lab Test Code*	C482
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Useful in the investigation of Wegeners, microscopic polyangitis, crescentic glomerulonephritis.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	This test should only be requested if there is a high suspicion of Vasculitis due to the poor predictive value and the potential for false positives. If ANA present it may prevent the identification of P-ANCA. Includes MPO and PR3 antibodies		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection.		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal result = negative		
Platform	Abbott Architect		

Tests in Panel

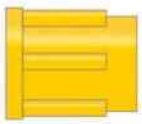
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Ant--Neutrophil Cytoplasmic Ab		C3169	ANCAI	
C-Anti Neut.Cytoplasmic A		C3170	C-ANCA	
Anti-Proteinase 3:	AU/ml	C3171	ANTI-PR3 Elisa	
Anti-Proteinase 3:	IU/ml	C3172	ANTI-PR3	
P-Anti Neut.Cytoplasmic A		C3180	P-ANCA	
Anti-Myeloperoxidase:	AU/ml	C3181	ANTI-MPO Elisa	
Anti-Myeloperoxidase:	IU/ml	C3182	ANTI-MPO	

Site	

Reference Ranges

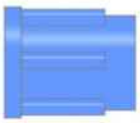
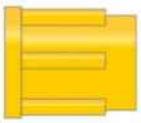
Test	Anti Neutrophil Cytoplasmic Antibodies (MPO and PR3)
ISS Code	C482
ISS Test Name	ANCAE
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Anti-Myeloperoxidase:	Female	0 Years	110 Years	0	5	IU/ml	01/05/2014
Anti-Myeloperoxidase:	Male	0 Years	110 Years	0	5	IU/ml	01/05/2014
Anti-Proteinase 3:	Female	0 Years	110 Years	0	3	IU/ml	01/05/2014
Anti-Proteinase 3:	Male	0 Years	110 Years	0	3	IU/ml	01/05/2014

Test Panel	**Anti Nuclear Antibodies (ANA)**		
Synonyms			
Abbreviation	ANA	*Lab Test Code*	C431
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	SLE, Sjogrens syndrome, Raynauds,PBC, Scleroderma, Polymyositis, CREST, Dermamyositis, insensitive for Jo-1 myositis		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection.		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Anti-Nuclear Factor		C3030	ANF	
	Staining pattern:		C3031	ANFP	
	Anti-dsDNA		C3080	DNA.	

Site	

Test Panel	**Anti Phospholipid Antibodies**		
Synonyms			
Abbreviation	APA	*Lab Test Code*	X108
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements	Samples need to be processed by the lab within 2 hours of phlebotomy		
Containers	 Citrate  SST		
	Citrate x 3, SST – Citrate must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Minus 40°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Lupus Screen		X0201	LUPUS SCREEN	
Lupus Screen(50/50 NP)		X0206	LUPUS SCREEN(50/50NP)	
Lupus Screen/Confirm Ratio		X0251	SCREEN/CONFIRM RATIO	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Anti Phospholipid Antibodies
ISS Code	X108
ISS Test Name	ANTI PHOSPHOLIPID Ab
Ref Range Comments	

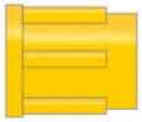
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Lupus Screen	Female	1 Years	115 Years	0	1.2		21/05/1996
Lupus Screen	Male	1 Years	115 Years	0	1.2		21/05/1996
Lupus Screen(50/50 NP)	Female	1 Years	115 Years	0	1.1		29/05/1996
Lupus Screen(50/50 NP)	Male	1 Years	115 Years	0	1.1		29/05/1996
Lupus Screen/Confirm Ratio	Female	0 Years	110 Years	0	1.2		18/05/1999
Lupus Screen/Confirm Ratio	Male	0 Years	110 Years	0	1.2		18/05/1999

Test Panel	**Anti-D Issue (Sensitising Event)**		
Synonyms			
Abbreviation		*Lab Test Code*	J903
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	
Requirements	Minimum volume 1 x 2ml pink plus 1 x 2ml lavender if greater than 20 weeks gestation		
Containers	 EDTA X-Match  EDTA		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Is the baby Rh+?		J0203	Baby Rh	
DOSE:		J9091	ANTI D	
Patient Group		J9093	New Anti-D Issue Group	

Site	Choose an item.

Test Panel	**Anti-Glutamic Acid Decarboxylase**		
Synonyms			
Abbreviation		*Lab Test Code*	W406
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

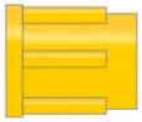
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
GAD Ab :	U/ml	W6294	GAD Ab :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Anti Glutamic Acid Decarboxylase Antibodies
ISS Code	W406
ISS Test Name	Glutamic Acid Decarboxylase Antibody Result
Ref Range Comments	

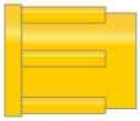
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
GAD Ab :	Female	0 Years	110 Years	0	5	U/ml	03/03/2011
GAD Ab :	Female (Pregnant)	0 Years	110 Years	0	5	U/ml	03/03/2011
GAD Ab :	Male	0 Years	110 Years	0	5	U/ml	03/03/2011

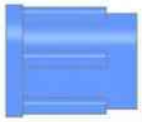
Test Panel	**Anti-Mullerian Hormone**		
Synonyms			
Abbreviation	AMH	*Lab Test Code*	W327R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Anti-Mullerian Hormone :	pmol/L	W3245	Anti-Mullerian Hormone :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Anti-Retinal Antibodies		
Synonyms			
Abbreviation		*Lab Test Code*	W591
Department	Immunology		
Clinical Contact	Choose an item.		
Contact	Choose an item.	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*Recoverin Ab* *Alpha Enolase Ab* *Carbonic Anthydrase II Ab*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Anti-thrombin**		
Synonyms			
Abbreviation		*Lab Test Code*	W170
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Citrate		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

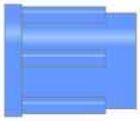
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Referred Test : Antithrombin III			W4321	Referred Test
Chromogenic	IU/ML		X0500	ATIII CHROMO
Antithrombin III Antigen	IU/ML		X0505	ATIII AG

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

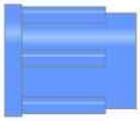
Reference Ranges

Test	Anti-thrombin
ISS Code	W170
ISS Test Name	ANTITHROMBIN
Ref Range Comments	

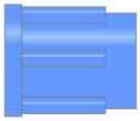
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Antithrombin III Antigen	Female	16 Years	115 Years	0.83	1.24	IU/ML	04/04/2014
Antithrombin III Antigen	Male	16 Years	115 Years	0.83	1.24	IU/ML	04/04/2014
Antithrombin III Chromogenic	Female	0 Years	110 Years	0.85	1.31	IU/ML	01/04/2009
Antithrombin III Chromogenic	Male	0 Years	110 Years	0.85	1.31	IU/ML	01/04/2009

Test Panel	Anti-Xa - Apixaban		
Synonyms			
Abbreviation	Apix	*Lab Test Code*	X751
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2.7ml
Requirements			
Containers	 Citrate		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments	For peak activity take sample 3 hour post-dose.		
Platform	Werfen TOP		

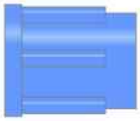
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	In-House Test (DRI)				

Test Panel	Anti-Xa (LMWH)		
Synonyms			
Abbreviation	Anti-Xa	*Lab Test Code*	X750
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2.7ml
Requirements			
Containers	 Citrate		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments	For peak activity take sample 4 hour post-dose.		
Platform	Werfen TOP		

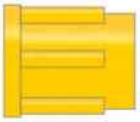
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	In-House Test (DRI)				

Test Panel	Anti-Xa - Edoxaban			
Synonyms				
Abbreviation	Edoxaban	*Lab Test Code*	X753	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	24 hours	
Investigation Comments				
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	2.7ml	
Requirements				
Containers	 Citrate		Choose an item.	
Request Forms	 Pathology Combined			
Transport	Refer to Short Term Stability			
Storage notes	Send to laboratory on day of collection			
Stability	12 - 28°C (Ambient Temperature)			
Long Term	Not Possible			
Comments	For peak activity take sample 3 hour post-dose.			
Platform	Werfen TOP			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	In-House Test (DRI)				

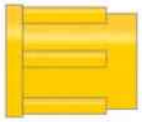
Test Panel	Anti-Xa - Rivaroxaban		
Synonyms			
Abbreviation	Riv	*Lab Test Code*	X752
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2.7ml
Requirements			
Containers	 Citrate		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments	For peak activity take sample 3 hour post-dose.		
Platform	Werfen TOP		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	In-House Test (DRI)				

Test Panel	**Aquaporin 4 Antibodies**		
Synonyms	AQP4		
Abbreviation	AQP4	*Lab Test Code*	W785
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Neuromyelitis optica (NMO) or Devic's syndrome		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal Result = Negative		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Aquaporin 4 Abs		W2000	AQP4	
	Referred Test :		W4321	Referred Test	

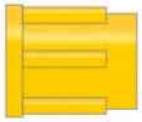
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**ASO (Anti-streptolysin O) titre**		
Synonyms	ASOT		
Abbreviation		*Lab Test Code*	V330A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Significant titres: adult >=400 IU/ml child >=200 IU/ml		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Kit Lot No. :			V0032	MYCO BATCH
QC passed?			V0063	QC PASSED
Anti-Streptolysin O Antibody :	iu/mL		V0080	Anti-Streptolysin O
BATCH LOT NO:			V0081	ASO BATCH
Test performed by:			V0262	TEST PERFORMED BY

Site	

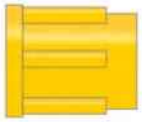
Test Panel	**Aspartate aminotransferase**		
Synonyms			
Abbreviation	AST	*Lab Test Code*	C131
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	ALT is the more liver specific transaminase and is part of the LFT test set.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	AST	U/L	C1070	AST	
Site					

Reference Ranges

Test	Aspartate aminotransferase
ISS Code	C131
ISS Test Name	AST
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
AST	Female	0 Years	16 Years	5	34	U/L	13/04/2022
AST	Female	16 Years	115 Years	5	34	U/L	13/04/2022
AST	Male	0 Years	16 Years	5	34	U/L	13/04/2022
AST	Male	16 Years	115 Years	5	34	U/L	13/04/2022
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000

Test Panel	**Aspergillus Precipitins**		
Synonyms			
Abbreviation		*Lab Test Code*	C495
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of colle		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

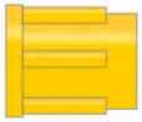
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
A.Fumigatus pptns		C3190	A.FUM.PPTS	
A.Fumigatus pptns	mg/L	C3191	A.FUM.PPTS (Phadia)	

Site	

Reference Ranges

Test	Aspergillus Precipitins
ISS Code	C495
ISS Test Name	Aspergillus Precipitins
Ref Range Comments	

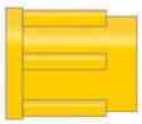
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
A.Fumigatus pptns	Female	0 Years	110 Years	0	40	mg/L	11/03/2015
A.Fumigatus pptns	Male	0 Years	110 Years	0	40	mg/L	11/03/2015

Test Panel	**Aspergillus Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V424
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Histoplasma (immunodiffusion) antibodies:		V1045	HISTOPLASMA (IMMUNO)	
Histoplasma yeast (CFT) antibodies:		V1046	HISTOPLASMA YEAST	
Histoplasma mycelium (CFT) antibodies:		V1047	HISTOPLASMA MYCELIUM	
Aspergillus antigen ELISA:		V1080	Aspergillus Antigen	
Aspergillus Index Value:		V1081	Aspergillus index value	
Aspergillus IgG (ImmunoCAP)	mg/L	V1082	Aspergillus IgG IC	
Aspergillus genus DNA		V1083	ASP DNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Please note that this test was referred to an external laboratory for analysis.		W4321	Referred Test	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Avian Precipitins**		
Synonyms			
Abbreviation		*Lab Test Code*	W332R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Useful in the investigation of Bird / Pigeon Fanciers Lung, Extrinsic Allergic Alveolitis Normal Result= Negative		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

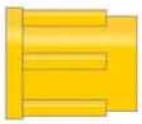
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Budgerigar Feather (IgG)	mg/L	W0240	Budgerigar Feathers (IgG)	
Budgerigar Dropping (IgG)	mg/L	W0241	Budgerigar Dropping (IgG)	
Pigeon Serum (IgG)	mg/L	W0242	Pigeon Serum (IgG)	
Pigeon Feathers (IgG)	mg/L	W0423	Pigeon Feathers (IgG)	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Avian Precipitins
ISS Code	W332R
ISS Test Name	Avian Precipitins (Referred) Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Budgerigar Dropping (IgG)	Female	0 Years	110 Years	0	40	mg/L	01/11/2014
Budgerigar Dropping (IgG)	Male	0 Years	110 Years	0	40	mg/L	01/11/2014
Budgerigar Feather (IgG)	Female	0 Years	110 Years	0	40	mg/L	01/11/2014
Budgerigar Feather (IgG)	Male	0 Years	110 Years	0	40	mg/L	01/11/2014
Pigeon Feathers (IgG)	Female	0 Years	110 Years	0	40	mg/L	01/11/2014
Pigeon Feathers (IgG)	Male	0 Years	110 Years	0	40	mg/L	01/11/2014
Pigeon Serum (IgG)	Female	0 Years	110 Years	0	40	mg/L	01/11/2014
Pigeon Serum (IgG)	Male	0 Years	110 Years	0	40	mg/L	01/11/2014

Test Panel	**B2 Glycoprotein Antibody**		
Synonyms	Anti Beta-2-Glycoprotein		
Abbreviation		*Lab Test Code*	W562
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Antiphospholipid syndrome		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements	Should be used in conjunction with clinical symptoms evaluation. Can be found without clinical APS, check lupus anticoagulant also. Positive lupus should be checked after 6 weeks to confirm persistent autoantibody present. No Haemolysed or Lipaemic samples		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	IgG B2GP1 0-10ml = Negative, IgG B2GP1 >10ml = positive		
Platform	Choose an item.		

Tests in Panel

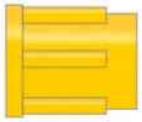
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Beta 2 Glycoprotein IgG Ab :	u/mL	W1932	B2 IgG :	
Beta 2 Glycoprotein IgM Ab :	u/mL	W1933	B2 IgM :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	B2 Glycoprotein Antibody
ISS Code	W562
ISS Test Name	B2 GLYCOPRO AB RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Beta 2 Glycoprotein IgG Ab :	Female	0 Years	110 Years	0	10	u/mL	03/03/2011
Beta 2 Glycoprotein IgG Ab :	Male	0 Years	110 Years	0	10	u/mL	03/03/2011
Beta 2 Glycoprotein IgM Ab :	Female	0 Years	110 Years	0	10	u/mL	03/03/2011
Beta 2 Glycoprotein IgM Ab :	Male	0 Years	110 Years	0	10	u/mL	03/03/2011

Test Panel	**B-2-Microglobulin**		
Synonyms	Beta-2-Microglobulin		
Abbreviation	B2M	*Lab Test Code*	C603
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Prognostic indicator in multiple myeloma at time of diagnosis.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

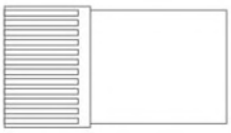
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Albumin	g/L	C1055	ALBUMIN	
B2 Microglobulin	mg/L	C3550	B2 MICROGLOB	

Site	

Reference Ranges

Test	B-2-Microglobulin
ISS Code	C603
ISS Test Name	B2M.
Ref Range Comments	

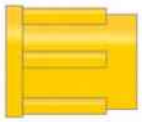
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Albumin	Female	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Female	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Female	16 Years	115 Years	35	50	g/L	12/12/2011
Albumin	Male	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Male	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Male	16 Years	115 Years	35	50	g/L	12/12/2011
B2 Microglobulin	Female	0 Years	115 Years	1.2	2.4	mg/L	12/12/2011
B2 Microglobulin	Male	0 Years	115 Years	1.2	2.4	mg/L	12/12/2011

Test Panel	**Bacterial/Fungal Molecular Identification**		
Synonyms			
Abbreviation		*Lab Test Code*	V426
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Discuss with Microbiologist.		
Availability	Routine hours only		
Specimen	CSF / Urine / Tissue	*Volume Required*	1ml
Requirements	Must be approved by Consultant Microbiologist		
Containers	 Universal		
	CSF, Fluid or Tissue		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
WHO SENT?		V2586	WHO SENT?	
Bacterial 16S rRNA gene		V4270	16S	
Group A/B Streptococus DNA		V4275	GRP A/B Strept DNA	
Staphylococcal DNA		V4276	Staphylococcal DNA	
Streptococcus pneumoniae DNA		V4277	STREP PNEUMO DNA	
Escherichia coli DNA		V4279	ECOLI DNA	
Bacterial 16S rRNA Gene Sequencing		V4280	16S rRNA Gene sequencing	
Date sent		V6810	DS	
Reference lab:		V6812	RL	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Bartonella (Cat scratch fever)**		
Synonyms			
Abbreviation		*Lab Test Code*	V447
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	We require clinical details (cat scratch / bite history) and dates of onset. Please note that this test can only be carried out in specialist circumstances and must be discussed with consultant Microbiologist.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Bartonella henselae IgM		V4135	BARHM	
Bartonella henselae IgG		V4136	BARHG	
Bartonella quintana IgM		V4137	BARQM	
Bartonella quintana IgG		V4138	BARQG	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

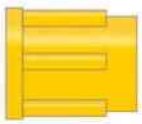
Test Panel	Batten Disease Screen		
Synonyms			
Abbreviation		*Lab Test Code*	W418
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements	Needs to reach laboratory within 72hrs of venepuncture.		
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*PalmitoylPro Thioester* *Tripeptidyl Peptidase 1* *B-Galactosidase (L)*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**BCR-ABL**		
Synonyms			
Abbreviation		*Lab Test Code*	W487A
Department	Haematology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	9ml
Requirements			
Containers	 EDTA  EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Ratio BCR-ABL/ABL %		W4877	BCR-ABL	

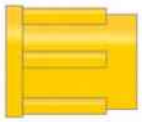
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Beta Glucan**		
Synonyms			
Abbreviation		*Lab Test Code*	V490
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Serological method for diagnosis of fungal infection. Please discuss with Consultant Microbiologists before requesting.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Beta Glucan concentration:	pg/ml	V0066	BETA GLUCAN CONCENTRATION	
Beta Glucan test:		V0079	BETA GLUCAN TEST	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

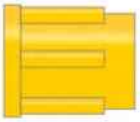
Test Panel	**Bicarbonate**		
Synonyms			
Abbreviation		*Lab Test Code*	C103
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Bicarbonate is not stable once the sample tube is opened. This test cannot be added to a sample which has already been analysed. Specific request only as part of U&E profile		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Bicarbonate	mmol/L	C1035	BICARBONATE	
	Ions Difference	mmol/L	C1040	IONS DIFF	
			C9090	C	
Site					

Reference Ranges

Test	Bicarbonate
ISS Code	C103
ISS Test Name	Bicarbonate
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Bicarbonate	Female	0 Years	115 Years	22	29	mmol/L	12/12/2011
Bicarbonate	Male	0 Years	115 Years	22	29	mmol/L	12/12/2011
Ions Difference	Female	0 Years	115 Years	12	20	mmol/L	10/01/1996
Ions Difference	Male	0 Years	115 Years	12	20	mmol/L	10/01/1996

Test Panel	**Bile Acids**		
Synonyms			
Abbreviation		*Lab Test Code*	C707
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Only useful for investigation of icterus and itching in pregnancy		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements			
Containers	 SST		
	Fasting sample preferred		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

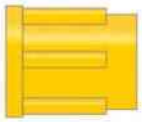
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Bile Acids :	umol/L	C7071	ABBOTT Bile acids	

Site	

Reference Ranges

Test	Bile Acids
ISS Code	C707
ISS Test Name	Bile Acids
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Bile Acids :	Female	0 Years	115 Years	0	6	umol/L	11/10/2018
Bile Acids :	Male	0 Years	115 Years	0	6	umol/L	11/10/2018
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000

Test Panel	**Bilirubin, conjugated**		
Synonyms			
Abbreviation		*Lab Test Code*	C223
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Conjugated bilirubin performed on all total bilirubin results greater than 50µmol/L. Not available to request separately from total bilirubin.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.15ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

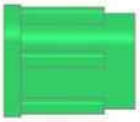
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	C.Bilirubin	umol/L	C1086	DBIL	

Site	

Reference Ranges

Test	Bilirubin, conjugated
ISS Code	C223
ISS Test Name	Bilirubin conjugated
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
C.Bilirubin	Female	0 Days	28 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Female	29 Days	365 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Female	1 Years	115 Years	0	9	umol/L	12/11/2012
C.Bilirubin	Male	0 Days	28 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Male	29 Days	365 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Male	1 Years	115 Years	0	9	umol/L	12/11/2012

Test Panel	**Biotinidase**		
Synonyms			
Abbreviation		*Lab Test Code*	W245R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Plasma	*Volume Required*	1ml
Requirements			
Containers	 Heparin		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel

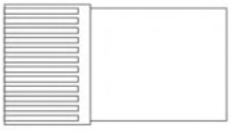
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Biotinidase :	U/L	W3563	Biotinidase	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Biotinidase
ISS Code	W245R
ISS Test Name	BIOTINIDASE RESULT
Ref Range Comments	

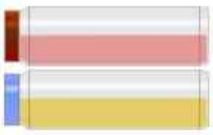
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Biotinidase :	Female	0 Years	110 Years	2.5	10.5	U/L	01/11/2011
Biotinidase :	Male	0 Years	110 Years	2.5	10.5	U/L	01/11/2011

Test Panel	**BK Virus PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V457
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	A molecular assay for diagnosis of BK Virus infection. Please state date of onset and nature of symptoms.		
Availability	Routine hours only		
Specimen	Urine, CSF or EDTA	*Volume Required*	1ml
Requirements			
Containers	 Sterile Universal  EDTA		
	Urine, CSF or EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
BKV Quantification Number	copies/ml	V0251	BKV QUANT NUM	
BKV Quantification Log		V0252	BKV QUANT LOG	
BK virus		V4203	BK virus	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Blood Culture		
Synonyms			
Abbreviation		*Lab Test Code*	M530
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Incubate for 5 days. All significant positive results phoned. There may be certain situations where a longer culture time is necessary.		
Availability	Routine hours & On Call		
Specimen	Venous Blood, Arterial Blood or Blood via IV line	*Volume Required*	5 - 10ml
Requirements	Wash hands and thoroughly disinfect skin at site of venepuncture before collection. Add up to 10mls to each bottle (5ml to single paediatric bottle). For patients with suspected endocarditis collect 3 sets from separate venepunctures at different times.		
Containers	 Blood Culture Bottles		
	Blood culture bottles (Adult or Paediatric)		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Do not use air transport tube		
Storage notes	Transport to laboratory without delay. DO NOT refrigerate Blood cultures.		
Stability	37°C As soon as possible		
Long Term	37°C		
Comments			
Platform			

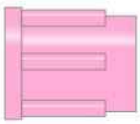
Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Isolate 1		M8100	MISOLATE1	
Isolate 2		M8120	ISOLATE2	
Isolate 3		M8140	MISOLATE3	
Isolate 4		M8144	ISOLATE4	

Site	

Test Panel	**Blood Film**		
Synonyms			
Abbreviation		*Lab Test Code*	H500
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Can be performed Out of Hours depending on urgency at discretion of Haematology Staff		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
	Can only be performed in conjunction with FBC		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

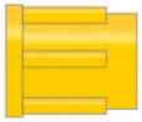
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	'Blood film seen and commented by ....,		H1000	FILM Report by	
Site					

Test Panel	Blood Group		
Synonyms			
Abbreviation		*Lab Test Code*	J307
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 EDTA X-Match		
	Minimum volume 2ml		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
ANTI-A		J1000	ANTI-A	
ANTI-B		J1001	ANTI-B	
A1 CELLS		J1003	A1 CELLS	
B CELLS		J1004	B CELLS	
ABO + RH(D) GROUP		J1007	BLOOD GROUP	
ANTI-D		J6008	ANTI-D	
CTL-NEG		J9991	CTL-NEG	

Site	

Test Panel	**Bone Alkaline Phosphatase**		
Synonyms			
Abbreviation		*Lab Test Code*	W290R
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

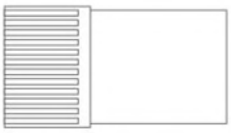
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Bone ALP (ACT)	U/L	W0290	Bone ALP (ACT)	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

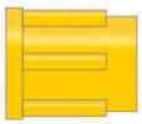
Reference Ranges

Test	Bone Alkaline Phosphatase
ISS Code	W290R
ISS Test Name	Bone ALP (ACT) Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Bone ALP (ACT)	Female	5 Years	6 Years	34	88	U/L	01/09/2017
Bone ALP (ACT)	Female	6 Years	7 Years	31	76	U/L	01/09/2017
Bone ALP (ACT)	Female	7 Years	8 Years	29	78	U/L	01/09/2017
Bone ALP (ACT)	Female	8 Years	9 Years	26	76	U/L	01/09/2017
Bone ALP (ACT)	Female	9 Years	10 Years	30	79	U/L	01/09/2017
Bone ALP (ACT)	Female	10 Years	11 Years	28	83	U/L	01/09/2017
Bone ALP (ACT)	Female	11 Years	12 Years	26	77	U/L	01/09/2017
Bone ALP (ACT)	Female	12 Years	13 Years	24	71	U/L	01/09/2017
Bone ALP (ACT)	Female	13 Years	14 Years	22	69	U/L	01/09/2017
Bone ALP (ACT)	Female	14 Years	15 Years	20	66	U/L	01/09/2017
Bone ALP (ACT)	Female	15 Years	16 Years	16	62	U/L	01/09/2017
Bone ALP (ACT)	Female	16 Years	17 Years	14	56	U/L	01/09/2017
Bone ALP (ACT)	Female	17 Years	115 Years	10	26	U/L	01/09/2017
Bone ALP (ACT)	Male	5 Years	6 Years	36	86	U/L	01/09/2017
Bone ALP (ACT)	Male	6 Years	7 Years	32	78	U/L	01/09/2017
Bone ALP (ACT)	Male	7 Years	8 Years	31	80	U/L	01/09/2017
Bone ALP (ACT)	Male	8 Years	9 Years	30	75	U/L	01/09/2017
Bone ALP (ACT)	Male	9 Years	10 Years	28	74	U/L	01/09/2017
Bone ALP (ACT)	Male	10 Years	11 Years	35	82	U/L	01/09/2017
Bone ALP (ACT)	Male	11 Years	12 Years	36	84	U/L	01/09/2017
Bone ALP (ACT)	Male	12 Years	13 Years	34	86	U/L	01/09/2017
Bone ALP (ACT)	Male	13 Years	14 Years	28	77	U/L	01/09/2017
Bone ALP (ACT)	Male	14 Years	15 Years	27	73	U/L	01/09/2017
Bone ALP (ACT)	Male	15 Years	16 Years	24	72	U/L	01/09/2017
Bone ALP (ACT)	Male	16 Years	17 Years	20	65	U/L	01/09/2017
Bone ALP (ACT)	Male	17 Years	115 Years	10	40	U/L	01/09/2017

Test Panel	**Bone Marrow Aspirate**			
Synonyms				
Abbreviation		*Lab Test Code*	W002	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	4 Weeks	
Investigation Comments	By arrangement with Consultant Haematologist			
Availability	Routine hours only - Must pre-arrange with the laboratory			
Specimen	Bone Marrow Aspirate	*Volume Required*	1ml	
Requirements				
Containers	 Universal		Choose an item.	
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours			
Long Term	Not Possible			
Comments	By arrangement with Haematology			
Platform	Choose an item.			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Bone Profile**		
Synonyms			
Abbreviation		*Lab Test Code*	C124
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Includes calcium, phosphate, ALP, total protein and albumin. A fasting sample is preferable when investigating disorders of calcium metabolism		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.3ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index		C1026	HI	
Total Protein	g/L	C1050	T.PROTEIN	
Lipaemia Index		C1051	LINDEX	
Albumin	g/L	C1055	ALBUMIN	
Globulin	g/L	C1060	GLOBULIN	
Alb/Glob Ratio	g/L	C1061	ALB/GLOB RATIO	
Alk.Phos :	IU/L	C1067	ABBOTT ALP	
Calcium	mmol/L	C1090	CALCIUM	
Adjusted Ca	mmol/L	C1095	ADJ CA	
Phosphate	mmol/L	C1100	PHOSPHATE	

Site	

Reference Ranges

Test	Bone Profile
ISS Code	C124
ISS Test Name	BONE PROFILE
Ref Range Comments	

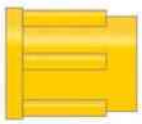
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Alk.Phos :	Female	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Female	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Female	16 Years	110 Years	30	130	IU/L	01/11/2011
Alk.Phos :	Male	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Male	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Male	16 Years	110 Years	30	130	IU/L	01/11/2011
Adjusted Ca	Female	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Adjusted Ca	Female	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019
Adjusted Ca	Female	6209 Days	6574 Days	2.2	2.6	mmol/L	01/11/2019
Adjusted Ca	Female	18 Years	115 Years	2.2	2.6	mmol/L	01/11/2019
Adjusted Ca	Male	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Adjusted Ca	Male	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019
Adjusted Ca	Male	6209 Days	6574 Days	2.2	2.6	mmol/L	01/11/2019
Adjusted Ca	Male	18 Years	115 Years	2.2	2.6	mmol/L	01/11/2019
Albumin	Female	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Female	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Female	16 Years	115 Years	35	50	g/L	12/12/2011
Albumin	Male	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Male	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Male	16 Years	115 Years	35	50	g/L	12/12/2011
Calcium	Female	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Calcium	Female	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019
Calcium	Male	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Calcium	Male	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019
Globulin	Female	0 Years	115 Years	23	40	g/L	21/06/2012
Globulin	Male	0 Years	115 Years	23	40	g/L	21/06/2012
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Lipaemia Index	Female	0 Years	100 Years	0	3		28/09/2000
Lipaemia Index	Male	0 Years	100 Years	0	3		28/09/2000
Phosphate	Female	0 Days	28 Days	1.3	2.6	mmol/L	12/12/2011
Phosphate	Female	29 Days	365 Days	1.3	2.4	mmol/L	12/12/2011
Phosphate	Female	1 Years	16 Years	0.9	1.8	mmol/L	12/12/2011
Phosphate	Female	16 Years	115 Years	0.8	1.5	mmol/L	12/12/2011
Phosphate	Male	0 Days	28 Days	1.3	2.6	mmol/L	12/12/2011
Phosphate	Male	29 Days	365 Days	1.3	2.4	mmol/L	12/12/2011
Phosphate	Male	1 Years	16 Years	0.9	1.8	mmol/L	12/12/2011
Phosphate	Male	16 Years	115 Years	0.8	1.5	mmol/L	12/12/2011
Total Protein	Female	0 Years	115 Years	60	80	g/L	12/12/2011
Total Protein	Male	0 Years	115 Years	60	80	g/L	12/12/2011

Test Panel	**Bordetella pertussis (Whooping cough)**		
Synonyms	Whooping cough		
Abbreviation		*Lab Test Code*	V412
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	We require a GOLD blood sample for B.pertussis serology and a dry per nasal swab (or NPA) for B.pertussis PCR. Please provide clinical details and dates of onset.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Please provide clinical details and dates of onset.		
Containers	 SST  Swab		
	Swab must be dry per-nasal swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Bordetella pertussis anti-PT IgG	IU/mL	V4160	Bordetella pertussis IgG	
Bordetella pertussis PCR		V4166	Bordetella pertussis PCR	
Bordetella pertussis IgG antibody		V4282	BORDETELLA IgG AB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

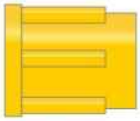
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

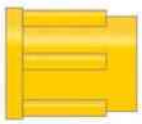
Test Panel	**Borrelia burgdorferi (Lyme disease)**		
Synonyms	Borrelia burgdorferi (Lyme disease) serology		
Abbreviation		*Lab Test Code*	V446
Department	Virology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	It is essential to provide tick bite/travel history and clinical history including dates of onset.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be refrigerated.		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Borrelia C6 (Peptide) EIA		V4131	BORC6EIA	
B. burgdorferi IgG + IgM ELFA		V4132	BORGMELFA	
B. burgdorferi IgG Immunoblot		V4133	BORGIMM	
B. burgdorferi IgM Immunoblot		V4134	BORMIMM	
B.burghdorferi IgG EIA		V4167	BOREIA	
B.burgdorferi IgG/IgM (C6 EIA)		V4168	BB C6 EIA G/M	
Borrelia IgG		V4225	Borrelia IgG	
Borrelia IgM		V4226	Borrelia IgM	
IgG to Borrelia P83 antigen		V4239	Borrelia P83	
IgG to Borrelia P58 antigen		V4240	Borrelia P58	
IgG to Borrelia P43 antigen		V4241	Borrelia P43	
IgG to Borrelia P39 antigen		V4242	Borrelia P39G	
IgG to Borrelia P30 antigen		V4243	Borrelia P30	
IgG to Borrelia OspC antigen		V4244	BORRELIA OSPC G	
IgG to Borrelia P21 antigen		V4245	Borrelia P21	
IgG to Borrelia Osp17 antigen		V4246	Borrelia Osp17	
IgG to Borrelia DBPA antigen		V4247	Borrelia DBPA	
IgG to Borrelia P14 antigen		V4248	Borrelia P14	
IgG to Borrelia V1sE antigen		V4249	Borrelia V1sE	
Borrelia IgG Lineblot interpretation		V4266	Borrelia IgG LB INT	

	IgM to Borrelia P41 antigen	V4267	Borrelia P41M
	IgM to Borrelia P39 antigen	V4268	Borrelia P39 IgM
	IgM to Borrelia OspC antigen	V4269	Borrelia OspC M
	IgM to Borrelia Osp17antigen	V4271	Borrelia Osp17M
	IgM to Borrelia V1sE antigen	V4272	Borrelia V1sEM
	Borrelia IgM Lineblot interpretation	V4273	Borrelia IgM LB Int
	Date result received	V6814	DRR
	Reference Lab No	V6816	RLN
	REF LAB DATE REC	V6825	REF LAB DATE RECEIVED
	REF LAB DATE REPORTED	V6835	REF LAB DATE REPORTED
	Referred Test :	W4321	Referred Test
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

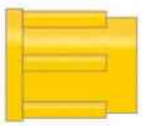
Test Panel	Brivaracetam		
Synonyms			
Abbreviation		*Lab Test Code*	W289
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Brucella**		
Synonyms			
Abbreviation		*Lab Test Code*	V448
Department	Virology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	Include clinical symptoms and any history of travel or occupational exposure. Please discuss with Microbiologist before requesting.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Brucellacapt (Total IgG/ IgM)		V4139	BRUTOT	
Brucella ELISA IgG		V4140	BRUELG	
Brucella ELISA IgM		V4141	BRUELM	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**C1 Esterase Inhibitor (functional)**		
Synonyms			
Abbreviation		*Lab Test Code*	W450R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Useful in the investigation of Type II HAE & acquired angioedema. Complement C3 & C4 also requested. Functional levels measured also. Complement C3 & C4 also requested. Functional levels measured on patients with low C1 and C4		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Icteric, Lipaemic or Haemolysed samples are unsuitable. Separate on arrival and send to reference lab frozen.		
Containers	 SST  EDTA		
	2ml serum or 2ml plasma		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

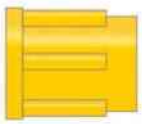
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Complement C3	g/L	W3090	COMP C3	
Complement C4	g/L	W3091	COMP C4	
Functional C1INH Activity	%	W3092	FUNCT C1INH	
C1 Esterase Inhibitor	g/L	W3093	C1ESTINH	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	C1 Esterase Inhibitor (functional)
ISS Code	W450R
ISS Test Name	Functional C1INH Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
C1 Esterase Inhibitor	Female	0 Years	120 Years	0.15	0.43	g/L	19/10/2017
C1 Esterase Inhibitor	Male	0 Years	120 Years	0.15	0.43	g/L	19/10/2017
Complement C3	Female	0 Years	120 Years	0.75	1.65	g/L	01/01/2012
Complement C3	Male	0 Years	120 Years	0.75	1.65	g/L	01/01/2012
Complement C4	Female	0 Years	120 Years	0.14	0.54	g/L	01/01/2012
Complement C4	Male	0 Years	120 Years	0.14	0.54	g/L	01/01/2012
Functional C1INH Activity	Female	0 Years	115 Years	70	150	%	18/09/2015
Functional C1INH Activity	Male	0 Years	115 Years	70	150	%	18/09/2015

Test Panel	**CA 15-3**		
Synonyms			
Abbreviation		*Lab Test Code*	W351
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	For use as a marker in monitoring clinically proven cases of established breast cancer. Tumour markers are not sufficiently sensitive or specific to use for screening.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

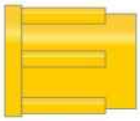
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	CA15-3 :	kU/L	W6105	CA 15-3 (STH) :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	CA 15-3
ISS Code	C351
ISS Test Name	CA 15-3 (Abbott - New Assay)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CA 15-3 (Abbott) :	Female	0 Years	116 Years	0	31.3	U/mL	20/12/2018
CA 15-3 (Abbott) :	Male	0 Years	116 Years	0	31.3	U/mL	20/12/2018

Test Panel	CA 19-9		
Synonyms			
Abbreviation		*Lab Test Code*	C262A
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	For use as a marker in monitoring clinically proven cases of established pancreatic cancer. Tumour markers are not sufficiently sensitive or specific to use for screening.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	2 - 8°C		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

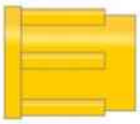
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	CA 19-9 (Abbott)	kU/L	C6110	CA19-9(Abbott)	

Site	

Reference Ranges

Test	CA 19-9
ISS Code	C262A
ISS Test Name	CA199(ABBOTT)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CA 19-9 (Abbott)	Female	0 Years	120 Years	0	37	kU/L	31/01/2012
CA 19-9 (Abbott)	Male	0 Years	120 Years	0	37	kU/L	31/01/2012

Test Panel	**CA 125**		
Synonyms			
Abbreviation		*Lab Test Code*	C255A
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	For use as a marker in monitoring clinically proven cases of ovarian tumours. Tumour markers are not sufficiently sensitive or specific to use for screening.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	2 - 8°C		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	CA-125 (Abbott)	KU/L	C1338	CA125 (Abbott)	

Site	

Reference Ranges

Test	CA 125
ISS Code	C255A
ISS Test Name	CA125(Abbott)
Ref Range Comments	

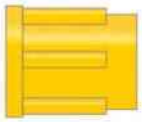
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CA-125 (Abbott)	Female	0 Years	120 Years	0	35	KU/L	31/01/2012
CA-125 (Abbott)	Male	0 Years	120 Years			KU/L	31/01/2012

Test Panel	**Cadmium (blood)**		
Synonyms			
Abbreviation		*Lab Test Code*	W348R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Send unused tubes from same batches to check for contamination		
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Blood Cadmium	nmol/L	W1405	Blood Cadmium	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Caeruloplasmin**		
Synonyms			
Abbreviation		*Lab Test Code*	W350
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Copper binding serum protein. Used in conjunction with serum copper levels, to diagnose Wilson's disease.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Caeruloplasmin	g/L	W4030	CAERULOPLASMIN :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Caeruloplasmin
ISS Code	W350
ISS Test Name	Caeruloplasmin Result
Ref Range Comments	

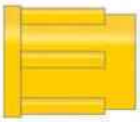
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Caeruloplasmin	Female	0 Months	4 Months	0.09	0.27	g/L	01/04/2014
Caeruloplasmin	Female	4 Months	12 Months	0.14	0.41	g/L	01/04/2014
Caeruloplasmin	Female	1 Years	10 Years	0.24	0.47	g/L	01/04/2014
Caeruloplasmin	Female	10 Years	13 Years	0.18	0.27	g/L	01/04/2014
Caeruloplasmin	Female	14 Years	115 Years	0.2	0.6	g/L	01/04/2014
Caeruloplasmin	Male	0 Months	4 Months	0.09	0.27	g/L	01/04/2014
Caeruloplasmin	Male	4 Months	12 Months	0.14	0.41	g/L	01/04/2014
Caeruloplasmin	Male	1 Years	10 Years	0.24	0.47	g/L	01/04/2014
Caeruloplasmin	Male	10 Years	13 Years	0.18	0.27	g/L	01/04/2014
Caeruloplasmin	Male	14 Years	115 Years	0.2	0.6	g/L	01/04/2014

Test Panel	**CAL R Gene Exon 9 Analysis**		
Synonyms			
Abbreviation	CALR	*Lab Test Code*	W497
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	2 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
RESULT		W0505	Result.	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Calcitonin**		
Synonyms			
Abbreviation		*Lab Test Code*	W366C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Calcitonin is useful for monitoring medullary thyroid carcinoma, not for screening or diagnosis.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements	Patient must be fasted. Take on ice, transport immediately to laboratory		
Containers	 Plain  SST		
	Either Plain or Gold SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Transport on Ice - Up to 10 minutes		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

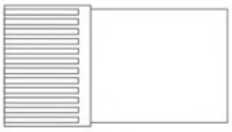
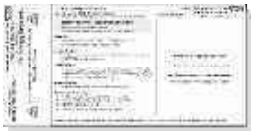
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	Calcitonin:	ng/L	W5536	Calcitonin:	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Calcitonin
ISS Code	W366C
ISS Test Name	Calcitonin Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Calcitonin:	Female	0 Years	115 Years	0	4.8	ng/L	02/08/2012
Calcitonin:	Male	0 Years	115 Years	0	11.8	ng/L	02/08/2012

Test Panel	**Calcium (random urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C522
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Useful for investigating hypercalcaemia and recurrent stone formation.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements	A 24h collection, or fasting early morning urine is most helpful. Collect 24h sample in acid preservative (red top bottle)		
Containers	 24hr Urine with Acid Preservative  Universal or Z30		
	24hr Urine container with Acid Preservative		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Specimens over 12 hours may be rejected		
Comments			
Platform	Abbott Architect		

Tests in Panel

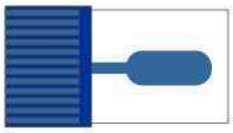
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
U.Creat.Conc.	mmol/L	C5030		URINE CREATININE
U.Calcium Conc.	mmol/L	C5130		UCA
U.Calcium/Creat ratio	mmol/mmol Cr	C5133		U.CALCIUM/CREAT RATIO
U.Phosphate Conc.	mmol/L	C5150		UPHOS
U.Phosphate/Creat ratio	mmol/mmol Cr	C5153		U.PHOSPH/CREAT RATIO

Site	

Reference Ranges

Test	Calcium (random urine)
ISS Code	C522
ISS Test Name	RANDOM UCA
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Calcium/Creat ratio	Female	0 Months	7 Months	0	2.4	mmol/mmol Cr	01/06/2005
U.Calcium/Creat ratio	Female	7 Months	18 Months	0	1.7	mmol/mmol Cr	01/06/2005
U.Calcium/Creat ratio	Female	19 Months	72 Months	0	1.2	mmol/mmol Cr	01/06/2005
U.Calcium/Creat ratio	Female	6 Years	15 Years	0	0.7	mmol/mmol Cr	01/06/2005
U.Calcium/Creat ratio	Male	0 Months	7 Months	0	2.4	mmol/mmol Cr	01/06/2005
U.Calcium/Creat ratio	Male	7 Months	18 Months	0	1.7	mmol/mmol Cr	01/06/2005
U.Calcium/Creat ratio	Male	19 Months	72 Months	0	1.2	mmol/mmol Cr	01/06/2005
U.Calcium/Creat ratio	Male	6 Years	15 Years	0	0.7	mmol/mmol Cr	01/06/2005
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011

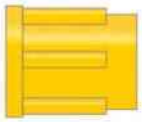
Test Panel	Calprotectin		
Synonyms			
Abbreviation		*Lab Test Code*	V190
Department	Microbiology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	1ml
Requirements			
Containers	 Faeces		Choose an item.
Request Forms	 Pathology Combined		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Diasorin Liason XL		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	DRI				

Reference Ranges

Test	Calprotectin
ISS Code	V190
ISS Test Name	Faecal Calprotectin Result
Ref Range Comments	

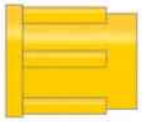
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Faecal Calprotectin :	Female	0 Years	110 Years	0	50	ug/g faeces	03/03/2011
Faecal Calprotectin :	Male	0 Years	110 Years	0	50	ug/g faeces	03/03/2011

Test Panel	**Campylobacter Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V487
Department	Virology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Must have clinical details to support testing. Please discuss with consultant microbiologists for advice.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Sample referred to external source		
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be refrigerated.		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Campylobacter jejuni IgM		V4214	Campylobacter jejuni IgM	
Campylobacter jejuni IgG		V4216	Campylobacter jejuni IgG	
Campylobacter jejuni IgA		V4217	CAMPYLOBACTER JEJUNI IgA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Carbamazepine**		
Synonyms	10 Hydroxy Carbamazepine		
Abbreviation		*Lab Test Code*	
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
10 Hydroxy Carbamazepine	mg/L	W0208	10 HYDROXY CARB	
Testing Laboratory:		W0260	TESTINGLAB	
Enquiry Line:		W0265	ENQUIRIES	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	10 Hydroxy Carbamazepine
ISS Code	W318R
ISS Test Name	10 Hydroxy Carbamazepine Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
10 Hydroxy Carbamazepine	Female	0 Years	115 Years	3	35	mg/L	01/05/2013
10 Hydroxy Carbamazepine	Male	0 Years	115 Years	3	35	mg/L	01/05/2013

Test Panel	**Carbapenamase Molecular Test**		
Synonyms			
Abbreviation		*Lab Test Code*	M965
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642843	*Turnaround Time*	2 Weeks
Investigation Comments	Referred test for confirming Carbapenamase production following a positive in-house screen.		
Availability	Routine hours only		
Specimen	Cultured Organism	*Volume Required*	
Requirements			
Containers	 Cultured Organism		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Sample referred to external source		
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
bla KPC like non-metallo-carbapenemase gene:		M1200	KPC GENE	
bla OXA-48 like non-metallo-carbapenemase gene:		M1201	OXA gene	
bla NDM -metallo-carbapenemase gene:		M1202	NDM GENE	
blaVIM metallo-carbapenemase gene:		M1203	VIM GENE	
blaSIM metallo-carbapenemase gene:		M1204	SIM GENE	
blaGIM metallo-carbapenemase gene:		M1205	GIM GENE	
blaSPM metallo-carbapenemase gene:		M1206	SPM GENE	
blaIMP metallo-carbapenemase gene:		M1207	IMP GENE	
Date sent:		M3678	DATER	
Date result received:		M3679	DATERET	
Reference lab:		M3681	RLAB	
Reference lab no:		M3682	RL NO	
REF LAB DATE REC		M3686	MIC REFLAB DR	
REF LAB DATE REPORTED		M3687	MIC REF LAB DREP	
Identified as:		M7501	ORGID	

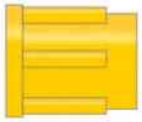
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Carbapenemase Screen**		
Synonyms	Carbapenemase (CPE) Screen		
Abbreviation		*Lab Test Code*	M728
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	This test is a screening method for Carbapenamase producing organisms (CPE).		
Availability	Routine hours only		
Specimen	Charcoal Transport Swab	*Volume Required*	
Requirements			
Containers	 Swab		Choose an item.
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Refer to Short Term Stability		
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
CRE Screening test		M7825	CRE Screen	
VRE Screening test		M7826	VRE SCREEN	
Candida auris Screening test		M7827	CANDIDA AURIS SCREEN	
Isolate 1		M8100	MISOLATE1	
Isolate 2		M8120	ISOLATE2	
Isolate 3		M8140	MISOLATE3	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Carbohydrate Deficient Transferrin Alcohol**		
Synonyms			
Abbreviation		*Lab Test Code*	W409R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

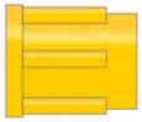
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Serum CDT :	%	W9529	Serum CDT :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Carbohydrate Deficient Transferrin Alcohol
ISS Code	W409R
ISS Test Name	SERUM CDT RESULT
Ref Range Comments	

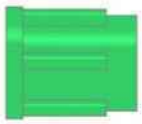
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Serum CDT :	Female	0 Years	115 Years	0	2.6	%	01/11/2011
Serum CDT :	Male	0 Years	115 Years	0	2.6	%	01/11/2011

Test Panel	**Carbohydrate Deficient Transferrin Neurology**		
Synonyms			
Abbreviation		*Lab Test Code*	W179B
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Transferrin Glycoforms		W0095	TRFGLY	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Carboxyhaemoglobin**		
Synonyms			
Abbreviation		*Lab Test Code*	C660
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Measures % of carbon monoxide bound to haemoglobin. Unlikely to be significantly increased if oxygen saturation >85% Unlikely to be significantly increased if oxygen saturation >85%		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements	Do not leave air space in bottle.		
Containers	 Heparin		
	Full EDTA - Heparin or Blood gas sample		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	Transport on Ice - Up to 10 minutes for blood gas		
Long Term	Not Possible		
Comments			
Platform	IL GEM OPL		

Tests in Panel

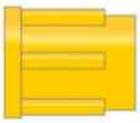
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Func.O2 Saturation	%	C1560	FOSAT	
Carboxy Hb.	%	C1565	CARBOXY.HB	
Met. Hb.	%	C1570	METHB	

Site	

Reference Ranges

Test	Carboxyhaemoglobin
ISS Code	C660
ISS Test Name	Carboxyhaemoglobin
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Carboxy Hb.	Female	0 Years	100 Years		<5	%	19/03/1996
Carboxy Hb.	Male	0 Years	100 Years		<5	%	19/03/1996
Func.O2 Saturation	Female	0 Years	100 Years			%	19/03/1996
Met. Hb.	Female	0 Years	100 Years			%	19/03/1996

Test Panel	**Carcinoembryonic Antigen**		
Synonyms	CEA		
Abbreviation	CEA	*Lab Test Code*	C260A
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	2 - 8°C		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	CEA (Abbott)	ng/mL	C1342	CEA (Abbott)	
Site					

Reference Ranges

Test	Carcinoembryonic Antigen
ISS Code	C260A
ISS Test Name	CEA(Abbott)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CEA (Abbott)	Female	0 Years	120 Years	0	5	ng/mL	31/01/2012
CEA (Abbott)	Male	0 Years	120 Years	0	5	ng/mL	31/01/2012

Test Panel	**Carotene**		
Synonyms			
Abbreviation		*Lab Test Code*	W728R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	A precursor of vitamin A but levels do not always reflect vitamin A status. High values can be used to rule out steatorrhoea but low-normal levels lack specificity.		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Protect from light and send to laboratory within one hour.		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
beta Carotene	umol/L	W1730	Beta Carotene	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Carotene
ISS Code	W728R
ISS Test Name	Carotene Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
beta Carotene	Female	0 Years	115 Years	0.19	0.9	umol/L	01/01/2015
beta Carotene	Male	0 Years	115 Years	0.19	0.9	umol/L	01/01/2015

Test Panel	**Catecholamines - Adrenaline, Noradrenaline, Dopamine (24hr urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C600
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Test used in the diagnosis of phaeochromocytoma Sample will be rejected if pH of 24hr urine >3.5		
Availability	Routine hours only		
Specimen	24 Hour Urine with Acid Preservative	*Volume Required*	
Requirements			
Containers	 24hr Urine with Acid Preservative		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
24 hr Urine				
Volume	Litres	C5225	CATVOL	
U.Creat.Exc.	mmol/24hr	C5226	CREX	
HMMA	umol/24hr	C5230	HMMA	
HVA	umol/24hr	C5250	HVA	
Noradrenaline	umol/24hr	C5260	NORAD	
Adrenaline	umol/24hr	C5270	ADR	
Dopamine	umol/24hr	C5280	DOP	

Site	This test is processed at an external reference centre. The parameters analysed in this test and any reference ranges for these parameters will be displayed on the report when it is returned to the requestor.

Reference Ranges

Test	Catecholamines - Adrenaline, Noradrenaline, Dopamine (24hr urine)
ISS Code	C600
ISS Test Name	Catecholamines
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Adrenaline	Female	0 Years	100 Years		<0.11	umol/24hr	04/03/1996
Adrenaline	Male	0 Years	100 Years		<0.11	umol/24hr	04/03/1996
Dopamine	Female	0 Years	100 Years	0.42	3	umol/24hr	04/03/1996
Dopamine	Male	0 Years	100 Years	0.42	3	umol/24hr	04/03/1996
HMMA	Female	0 Years	100 Years	6	55	umol/24hr	04/03/1996
HMMA	Male	0 Years	100 Years	6	55	umol/24hr	04/03/1996
HVA	Female	0 Years	100 Years	0.5	55	umol/24hr	04/03/1996
HVA	Male	0 Years	100 Years	0.5	55	umol/24hr	04/03/1996
Noradrenaline	Female	0 Years	100 Years	0.08	0.45	umol/24hr	04/03/1996
Noradrenaline	Male	0 Years	100 Years	0.08	0.45	umol/24hr	04/03/1996

Test Panel	**Catecholamines (paediatric random urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C745
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Test used in the diagnosis of phaeochromocytoma and neuroblastoma Sample will be rejected if pH of urine >3.5		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	1ml
Requirements	Random collection required in children. Sample must be collated into acid preservative. Containers available from laboratory.		
Containers	 Universal		
	Random collection required in children. Sample must be collated into acid preservative. Containers available from laboratory.		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Perkin Elmer HPLC		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
			URINE	
U.Creat.Conc.	mmol/L	C5030	CREATININE	
HMMA	umol/mmol creatinine	C5232	PHMMA	
HVA	umol/mmol creatinine	C5252	PHVA	
Noradren	umol/mmol creatinine	C5262	PNORAD	
Adren	umol/mmol creatinine	C5272	PADR	
Dopam	umol/mmol creatinine	C5282	PDOPA	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**CD 34**		
Synonyms			
Abbreviation		*Lab Test Code*	W097
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	9ml
Requirements			
Containers	 EDTA  EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
CD34 Result:		W0098	CD34 Result	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**CD4/8**		
Synonyms			
Abbreviation		*Lab Test Code*	W098
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	9ml
Requirements			
Containers	 EDTA  EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
CD4/8 RESULTS		W0099	CD4/8 RESULTS	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	

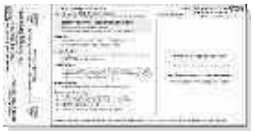
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Cell Markers (Blood)**			
Synonyms				
Abbreviation		*Lab Test Code*	W059	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	4 Weeks	
Investigation Comments	Consultant referral required for all bone marrow investigations			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	1ml	
Requirements				
Containers	 EDTA			
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Cell Markers (Marrow)**			
Synonyms				
Abbreviation		*Lab Test Code*	W058	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	4 Weeks	
Investigation Comments	Consultant referral required for all bone marrow investigations			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	1ml	
Requirements				
Containers	 EDTA			
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform				

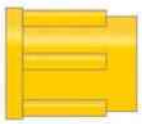
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Chlamydia/GC SDA (Dual Test)**		
Synonyms			
Abbreviation		*Lab Test Code*	M306
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Unique BD swabs (of various sites) or Urine	*Volume Required*	0.5ml (Urine)
Requirements	Please refer to Special Instructions sheet on following page for this test.		
Containers	 Swab  Sterile Universal		
	Unique BD swabs (of various sites) or Urine		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Lot No.		M2973	SDA LOT	
NEISSERIA GONORRHOEAE		M2976	GC SDA	
GC MOTA		M2977	GC MOTA	
GC Lot No.		M2978	GC LOT	
CHLAMYDIA TRACHOMATIS		M4570	BCHL	
TEL NO		M6104	TEL NO FOR CASH	

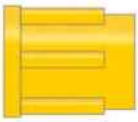
Site	Choose an item.

Test Panel	**Chlamydia Reference Laboratory**		
Synonyms			
Abbreviation		*Lab Test Code*	V409
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Include clinical details or the test may not be processed. It is important to state whether request is for respiratory of fertility investigations.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
C. trachomatis (L2 Strain) Titre:		V4145	CHLAMTL2	
C. psittaci (EAE Strain) Titre:		V4146	CHLAMPSIEAE	
C. pneumoniae (TW183 Strain) Titre:		V4147	CPNEUTW183	
Chlamydia Group/ LGV CFT Titre:		V4148	CHLAMGTIT	
Chlamydia psittaci DNA		V4149	CPSIDNA	
Chlamydia trachomatis DNA		V4150	CTDNA	
Psittacosis/ LGV group CFT Titre:		V4151	PSITIT	
Result comment:		V4218	Result comment:	
Chlamydia trachomatis IgG immunoassay		V4293	CTRACHGIA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

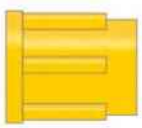
Test Panel	**Chloride**			
Synonyms				
Abbreviation		*Lab Test Code*	C096	
Department	Clinical Biochemistry			
Clinical Contact	Clinical Biochemist			
Contact	01302 642870	*Turnaround Time*	24 hours	
Investigation Comments	Used in the investigation of pyloric stenosis.			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	0.5ml	
Requirements				
Containers	 SST			
Request Forms	 Pathology Combined			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform	Abbott Architect			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Chloride	mmol/L	C1031	CHLORIDE.	
Site					

Reference Ranges

Test	Chloride
ISS Code	C096
ISS Test Name	Chloride
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Chloride	Female	0 Years	115 Years	95	108	mmol/L	12/12/2011
Chloride	Male	0 Years	115 Years	95	108	mmol/L	12/12/2011

Test Panel	**Cholesterol**		
Synonyms	Lipid Profile		
Abbreviation		*Lab Test Code*	C145
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Lipid profile includes triglyceride, total cholesterol, LDL cholesterol. HDL cholesterol and a total cholesterol / HDL cholesterol ratio. LDL cholesterol is a calculated parameter. Calculation invalid if Triglyceride > 4.6 mmol/L or non-fasting blood sample sent		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements	Patient should be fasting if LDL cholesterol required.		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Triglyceride	mmol/L	C1125	TRIG	
Cholesterol	mmol/L	C1130	CHOLESTEROL	
HDL-Cholesterol	mmol/L	C1135	HDL-C	
Non-HDL C	mmol/L	C1138	Non-HDL C	
LDL	mmolL	C1140	LDL	
HDL-Ratio		C1145	HDLRAT	

Site	

Test Panel	**Cholinesterase enzyme activity**		
Synonyms			
Abbreviation		*Lab Test Code*	W891
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used to assess scoline apnoea following anaesthesia or exposure to organophosphates.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

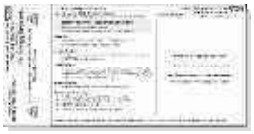
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Cholinesterase :	IU/l	W6090	Cholinesterase :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Cholinesterase (activity and phenotype)
ISS Code	W891
ISS Test Name	Cholinesterase Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Cholinesterase :	Female	0 Years	110 Years	>5300		IU/l	28/03/2011
Cholinesterase :	Male	0 Years	110 Years	>5300		IU/l	28/03/2011

Test Panel	**Chromium and Cobalt (Blood)**		
Synonyms			
Abbreviation		*Lab Test Code*	W567C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 Sodium Heparin		Choose an item.
	Contact lab before sending for detailed sample collection instructions. Method cannot detect deficiency. Send unused tube from same batch to check for contamination		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Chromium -Whole Blood:	nmol/L	W4567	Chromium :	
Cobalt -Whole Blood:	nmol/L	W4568	Cobalt :	
Chromium-Whole Blood (ppb)	ppb	W4569	Chromium (ppb)	
Cobalt- Whole Blood(ppb)	ppb	W4570	Cobalt (ppb)	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Chromium and Cobalt (Blood)
ISS Code	W567C
ISS Test Name	Chromium and Cobalt Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Chromium-Whole Blood (ppb)	Female	0 Years	115 Years	0	7	ppb	29/07/2014
Chromium-Whole Blood (ppb)	Male	0 Years	115 Years	0	7	ppb	29/07/2014
Chromium -Whole Blood:	Female	0 Years	115 Years	0	135	nmol/L	29/07/2014
Chromium -Whole Blood:	Male	0 Years	115 Years	0	135	nmol/L	29/07/2014
Cobalt- Whole Blood(ppb)	Female	0 Years	115 Years	0	7	ppb	29/07/2014
Cobalt- Whole Blood(ppb)	Male	0 Years	115 Years	0	7	ppb	29/07/2014
Cobalt -Whole Blood:	Female	0 Years	115 Years	0	120	nmol/L	29/07/2014
Cobalt -Whole Blood:	Male	0 Years	115 Years	0	120	nmol/L	29/07/2014

Test Panel	Chromogranin A and B		
Synonyms			
Abbreviation		*Lab Test Code*	W649C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used in the investigation of gastrointestinal endocrine neoplasia.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 Preferred Pink EDTA  EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

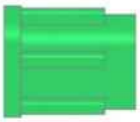
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Chromogranin A :	pmol/L	W1548	Chrom. A :	
Chromogranin B :	pmol/L	W1549	Chrom. B :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Chromogranin A
ISS Code	W649C
ISS Test Name	Chromogranin A&B Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Chromogranin A :	Female	0 Years	110 Years	0	60	pmol/L	03/03/2011
Chromogranin A :	Male	0 Years	110 Years	0	60	pmol/L	03/03/2011
Chromogranin B :	Female	0 Years	110 Years	0	150	pmol/L	03/03/2011
Chromogranin B :	Male	0 Years	110 Years	0	150	pmol/L	03/03/2011

Test Panel	**Clobazam**		
Synonyms			
Abbreviation		*Lab Test Code*	W636C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	An anti-convulsant drug. Sample taken immediately before a dose, at least 5 days after initiation of treatment.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Tubes with gel separators are NOT acceptable.		
Containers	 Plain  Heparin		
	Red, Plain or Green, Li Hep		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Clobazam	umol/L	W2051	Clobazam :	
Desmethyl clobazam :	umol/L	W2054	Desmethyl clobazam :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Clobazam
ISS Code	W636C
ISS Test Name	Clobazam Result
Ref Range Comments	

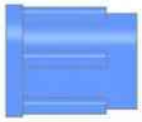
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Clobazam level	Female	0 Years	115 Years	30	300	ug/L	01/06/2021
Clobazam level	Male	0 Years	115 Years	30	300	ug/L	01/06/2021
Desmethylclobazam level	Female	0 Years	115 Years	300	3000	ug/L	01/06/2021
Desmethylclobazam level	Male	0 Years	115 Years	300	3000	ug/L	01/06/2021

Test Panel	**Clonazepam**		
Synonyms			
Abbreviation		*Lab Test Code*	C356
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	An anti-convulsant drug. Sample taken immediately before a dose, at least 5 days after initiation of treatment.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Tubes with gel separators are NOT acceptable. Protect samples from light.		
Containers	 Plain		Choose an item.
	Tubes with gel separators are NOT acceptable. Protect samples from light.		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Ask: Time and date of last dose; Dose; Frequency of dosing; List all other medications. Link to lab handbook: PD-UserHbk-015 & PD-UserHbk-022		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Clonazepam	ug/L	C2043	CLONAZEPAM VALUE	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Clostridium Difficile Screen		
Synonyms	C. Diff		
Abbreviation		*Lab Test Code*	M704
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642831	*Turnaround Time*	24 hours
Investigation Comments	Investigation for Clostridium difficile is carried out on samples from the following patients: • Unformed stool samples from all In-patients >2 years of age. • Unformed stool samples from Outpatients > 65 years of age. • All patients from nursing / care homes • There is a specific request for C. difficile on the request form accompanying the sample		
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	5ml
Requirements			
Containers	 Faeces		Choose an item.
Request Forms	 Pathology Combined		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Diasorin Liason XL		
Tests in Panel	*Literal* *Unit* *Lab Code* *Lab Name* *Lab Comment*		
Site	In-House Test (DRI)		

Test Panel	**Clotting Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	X011
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments	Includes PT APTT and Fibrinogen tests		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

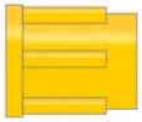
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Ratio		X0025	RATIO	
Fibrinogen	g/L	X0030	FIBRINOGEN LEVEL	
APTT	secs	X0061	PTT	
Mean Age APTT		X0700	APTT Age Mean	
Ratio - Age Weighted		X0705	Ratio Age Weighted	
Prothrombin Time	secs	X1000	Prothrombin Time	
INR		X5020	INR	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Clotting Screen
ISS Code	X011
ISS Test Name	CLOTTING TESTS
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Fibrinogen	Female	0 Days	30 Days	1.36	3	g/L	01/06/2019
Fibrinogen	Female	30 Days	150 Days	1.41	4.37	g/L	01/06/2019
Fibrinogen	Female	150 Days	365 Days	1.48	3.67	g/L	01/06/2019
Fibrinogen	Female	1 Years	5 Years	1.64	4.97	g/L	01/06/2019
Fibrinogen	Female	6 Years	10 Years	1.71	5.37	g/L	01/06/2019
Fibrinogen	Female	11 Years	17 Years	1.68	5.29	g/L	01/06/2019
Fibrinogen	Female	17 Years	110 Years	1.5	4.5	g/L	01/06/2019
Fibrinogen	Male	0 Days	30 Days	1.36	3	g/L	01/06/2019
Fibrinogen	Male	30 Days	150 Days	1.41	4.37	g/L	01/06/2019
Fibrinogen	Male	150 Days	365 Days	1.48	3.67	g/L	01/06/2019
Fibrinogen	Male	1 Years	5 Years	1.64	4.97	g/L	01/06/2019
Fibrinogen	Male	6 Years	10 Years	1.71	5.37	g/L	01/06/2019
Fibrinogen	Male	11 Years	17 Years	1.68	5.29	g/L	01/06/2019
Fibrinogen	Male	17 Years	110 Years	1.5	4.5	g/L	01/06/2019
Prothrombin Time	Female	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Female	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Female	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Female	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Female	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Female	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Female	17 Years	120 Years	9.4	12.5	secs	18/11/2019
Prothrombin Time	Male	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Male	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Male	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Male	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Male	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Male	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Male	17 Years	120 Years	9.4	12.5	secs	18/11/2019
APTT	Female	0 Days	30 Days	27.6	45.6	secs	24/09/2019
APTT	Female	31 Days	150 Days	24.8	40.7	secs	24/09/2019
APTT	Female	151 Days	365 Days	25.1	40.7	secs	24/09/2019
APTT	Female	1 Years	6 Years	24	39.2	secs	24/09/2019
APTT	Female	6 Years	11 Years	26.9	38.7	secs	24/09/2019
APTT	Female	11 Years	17 Years	24.6	38.4	secs	24/09/2019
APTT	Female	17 Years	110 Years	25	36.5	secs	24/09/2019
APTT	Male	0 Days	30 Days	27.6	45.6	secs	24/09/2019
APTT	Male	31 Days	150 Days	24.8	40.7	secs	24/09/2019
APTT	Male	151 Days	365 Days	25.1	40.7	secs	24/09/2019
APTT	Male	1 Years	6 Years	24	39.2	secs	24/09/2019
APTT	Male	6 Years	11 Years	26.9	38.7	secs	24/09/2019
APTT	Male	11 Years	17 Years	24.6	38.4	secs	24/09/2019
APTT	Male	17 Years	110 Years	25	36.5	secs	24/09/2019

Test Panel	**Combined Pituitary Function Test**		
Synonyms			
Abbreviation		*Lab Test Code*	E123
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

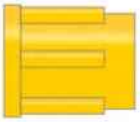
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Thyroid Stimulating Hormone	mU/L	C1242		ABBOTT TSH
Lutrophin	IU/L	C1268		ABBOTT LH
Follicle-stimulating hormone	IU/L	C1272		ABBOTT FSH
Time		C1301		SPEC TIMING
Cortisol	nmol/L	C1304		ABBOTT Cortisol

Site	

Reference Ranges

Test	Combined Pituitary Function Test
ISS Code	E123
ISS Test Name	Combined Pituitary Function Test
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Cortisol	Female	0 Years	110 Years			nmol/L	01/10/2011
Cortisol	Male	0 Years	110 Years			nmol/L	01/10/2011
Follicle-stimulating hormone	Female	0 Years	110 Years			IU/L	01/10/2011
Follicle-stimulating hormone	Male	0 Years	110 Years	0.95	11.95	IU/L	01/10/2011
Lutrophin	Female	0 Years	110 Years			IU/L	01/10/2011
Lutrophin	Male	0 Years	110 Years	0.57	12.07	IU/L	01/10/2011
Thyroid Stimulating Hormone	Female	0 Days	4 Days			mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	4 Days	182 Days	0.73	4.77	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	183 Days	5113 Days	0.7	4.17	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	5114 Days	6939 Days	0.47	3.41	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	19 Years	110 Years	0.35	4.94	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	0 Days	4 Days			mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	4 Days	182 Days	0.73	4.77	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	183 Days	5113 Days	0.7	4.17	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	5114 Days	6939 Days	0.47	3.41	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	19 Years	110 Years	0.35	4.94	mU/L	07/10/2021

Test Panel	**Complement C1Q**		
Synonyms			
Abbreviation		*Lab Test Code*	W793R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Must be frozen within 2 hours and transported on ice to reference laboratory		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	50-250mg/L		
Platform	Choose an item.		

Tests in Panel

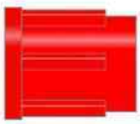
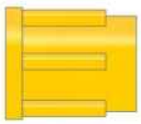
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Complement C1q	mg/L	W1260	CC1Q	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Complement C1Q
ISS Code	W793R
ISS Test Name	COMPLEMENT C1Q RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Complement C1q	Female	0 Years	110 Years	50	250	mg/L	01/06/2011
Complement C1q	Male	0 Years	110 Years	50	250	mg/L	01/06/2011

Test Panel	Complement C5-C9 Levels		
Synonyms			
Abbreviation		*Lab Test Code*	W968R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Deficiency - discuss with consultant immunologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Separate and freeze with 1-2 hours of taking blood		
Containers	 Preferred Plain  SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	C5 - 80-150mg/L, C6 - 40-80mg/L, C7 - 50-80mg/L, C8 - 40-80mg/L, C9 - 50-250mg/L		
Platform	Choose an item.		

Tests in Panel

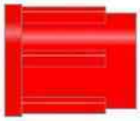
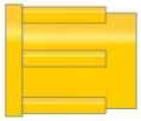
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Complement C5:	mg/L	C6306	C5	
Complement C6:	mg/L	C6307	C6	
Complement C7	mg/L	C6308	C7	
Complement C8:	mg/L	C6309	C8	
Complement C9:	mg/L	C6310	C9	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Complement C5-C9 Levels
ISS Code	W968R
ISS Test Name	Complement C5-9 results
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Complement C5:	Female	0 Years	115 Years	80	150	mg/L	20/09/2018
Complement C5:	Male	0 Years	115 Years	80	150	mg/L	20/09/2018
Complement C7	Female	0 Years	115 Years	50	80	mg/L	20/09/2018
Complement C7	Male	0 Years	115 Years	50	80	mg/L	20/09/2018
Complement C9:	Female	0 Years	115 Years	50	250	mg/L	20/09/2018
Complement C9:	Male	0 Years	115 Years	50	250	mg/L	20/09/2018
Complement C6:	Female	0 Years	115 Years	40	80	mg/L	20/09/2018
Complement C6:	Male	0 Years	115 Years	40	80	mg/L	20/09/2018
Complement C8:	Female	0 Years	115 Years	40	280	mg/L	20/09/2018
Complement C8:	Male	0 Years	115 Years	40	280	mg/L	20/09/2018

Test Panel	Complement Haemolysis 50		
Synonyms			
Abbreviation		*Lab Test Code*	W721C
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Complement deficiency, recurrent Neisserial infections		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Separate and freeze with 1-2 hours of taking blood		
Containers	 Preferred Plain  SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

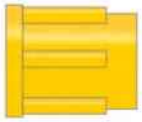
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
CH50 Complement Function Test :	U/mL	W2558	CH50 :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Complement Haemolysis 50
ISS Code	W721C
ISS Test Name	CH50 Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CH50 Complement Function Test :	Female	0 Years	110 Years	23	46	U/mL	03/03/2011
CH50 Complement Function Test :	Male	0 Years	110 Years	23	46	U/mL	03/03/2011

Test Panel	**Complement Levels (C3 and C4)**		
Synonyms			
Abbreviation		*Lab Test Code*	C440
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

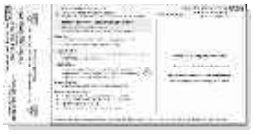
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Complement C3c	g/L	C3090	C3c	
	Complement C4	g/L	C3100	C4	

Site	

Reference Ranges

Test	Complement Levels (C3 and C4)
ISS Code	C440
ISS Test Name	Complement Levels (C3 and C4)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Complement C3c	Female	0 Years	115 Years	0.75	1.65	g/L	12/12/2011
Complement C3c	Male	0 Years	115 Years	0.75	1.65	g/L	12/12/2011
Complement C4	Female	0 Years	115 Years	0.14	0.54	g/L	12/12/2011
Complement C4	Male	0 Years	115 Years	0.14	0.54	g/L	12/12/2011

Test Panel	**Copper (urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	W833
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Useful only in diagnosing or assessing treatment for Wilson's disease		
Availability	Routine hours only		
Specimen	24hour Urine	*Volume Required*	1ml
Requirements			
Containers	 24hr Urine		Choose an item.
Request Forms	 Pathology Combined		
	Must be collected into plastic container		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Urine Volume :	ml	W2380	URINEVOL@1	
24hr Urine Copper :	umol/24h	W2385	24HRUCOPPER@1	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Copper (urine)
ISS Code	W833
ISS Test Name	URINE COPPER RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
24hr Urine Copper :	Female	16 Years	110 Years	0.047	0.55	umol/24h	01/04/2019
24hr Urine Copper :	Male	16 Years	110 Years	0.047	0.55	umol/24h	01/04/2019

Test Panel	**Copper**		
Synonyms			
Abbreviation		*Lab Test Code*	W310
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used as a screening test for Wilson's or Menke's diseases		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Also request Caeruloplasmin		
Containers	 Trace Element		
	Trace Element – Dark Blue with RED stripe		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W2327	Copper Returned :	
Copper	umol/L	W5666	Copper :	
Copper (by ICP)	umol/L	W5667	Copper (By ICP)	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Copper
ISS Code	W310
ISS Test Name	Copper Result
Ref Range Comments	

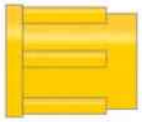
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Copper (by ICP)	Female	0 Months	6 Months	5.9	16.3	umol/L	01/01/2015
Copper (by ICP)	Female	6 Months	12 Months	3.8	23.8	umol/L	01/01/2015
Copper (by ICP)	Female	1 Years	12 Years	11	27.2	umol/L	01/01/2015
Copper (by ICP)	Female	13 Years	49 Years	11	38.9	umol/L	01/01/2015
Copper (by ICP)	Female	49 Years	115 Years	11	27.2	umol/L	01/01/2015
Copper (by ICP)	Male	0 Months	6 Months	5.9	16.3	umol/L	01/01/2015
Copper (by ICP)	Male	6 Months	12 Months	3.8	23.8	umol/L	01/01/2015
Copper (by ICP)	Male	1 Years	115 Years	11	27.2	umol/L	01/01/2015
Copper	Female	0 Months	6 Months	5.9	16.3	umol/L	09/01/2015
Copper	Female	6 Months	12 Months	3.8	23.8	umol/L	09/01/2015
Copper	Female	1 Years	13 Years	11	27.2	umol/L	09/01/2015
Copper	Female	13 Years	49 Years	11	38.9	umol/L	09/01/2015
Copper	Female	49 Years	115 Years	11	27.2	umol/L	09/01/2015
Copper	Male	0 Months	6 Months	5.9	16.3	umol/L	09/01/2015
Copper	Male	6 Months	12 Months	3.8	23.8	umol/L	09/01/2015
Copper	Male	1 Years	115 Years	11	27.2	umol/L	09/01/2015

Test Panel	**Cortisol**		
Synonyms			
Abbreviation		*Lab Test Code*	C230
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	A random cortisol measurement is of limited use in diagnosing pituitary or adrenal disease. Please contact the laboratory if protocol is required.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.1ml
Requirements	Blood sample should be collected before 10.00am		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Cortisol	nmol/L	C1304	ABBOTT Cortisol	
Interpretation :		C1314	Cortsiol Interpretation	

Site	

Test Panel	**COVID Antibody**		
Synonyms			
Abbreviation		*Lab Test Code*	V496
Department	Clinical Biochemistry		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Coronavirus (COVID-19) IgG Antibody :		V2793	COVID AB	
Coronavirus (COVID-19) IgG Value:	BAU/ml	V2794	COVID AB NUM	

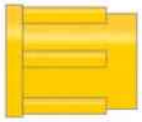
Site	Choose an item.

Test Panel	**COVID PCR**		
Synonyms	COVID 2019		
Abbreviation		*Lab Test Code*	V495
Department	Virology		
Clinical Contact	Consultant Microbiologist or Infection Control		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Viral Swab	*Volume Required*	NA
Requirements			
Containers	 Viral Swab		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Influenza A PCR		V2735	INFA	
Influenza B PCR		V2745	INFB	
RSV PCR		V2750	RSVP	
FLU A HR		V2781	FLU A HR	
FLU B HR		V2782	FLU B HR	
RSV HR		V2783	RSV HR	
COVID HR		V2784	COVID HR	
2019 Novel Coronavirus		V2786	NOV CORONA	
Coronavirus (COVID-19) RNA		V2788	COVID 19 IN HOUSE	
CP COVID-19		V2789	CP COVID-19	
CP IEC		V2791	CP IEC	
Location		V2792	STAFF	
2019 Novel Corona NPEx		V2795	NOV CORONA STH	
PRE OP		V2798	PRE OP	
BioFire FilmArray COVID-19		V2799	BIOFIRE FILMARRAY COVID	
Referred Test :		W4321	Referred Test	

Site	Choose an item.

Test Panel	**Cows Milk Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W375
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	For cows milk intolerance, IgG antibodies.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

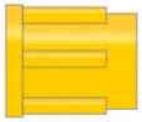
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Alpha-Lactalbumin:	mg/L	W6361	NEWCOWS1	
Beta-Lactoglobulin:	mg/L	W6362	NEWCOWS2	
Casein:	mg/L	W6363	NEWCOWS3	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Cows Milk Antibodies
ISS Code	W375
ISS Test Name	COWS MILK Ab RESULT
Ref Range Comments	

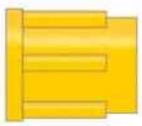
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Alpha-Lactalbumin:	Female	0 Years	100 Years	0	20	mg/L	22/07/2003
Alpha-Lactalbumin:	Female (Pregnant)	0 Years	100 Years	0	20	mg/L	22/07/2003
Alpha-Lactalbumin:	Male	0 Years	100 Years	0	20	mg/L	22/07/2003
Beta-Lactoglobulin:	Female	0 Years	100 Years	0	30	mg/L	22/07/2003
Beta-Lactoglobulin:	Female (Pregnant)	0 Years	100 Years	0	30	mg/L	22/07/2003
Beta-Lactoglobulin:	Male	0 Years	100 Years	0	30	mg/L	22/07/2003
Casein:	Female	0 Years	100 Years	0	50	mg/L	22/07/2003
Casein:	Female (Pregnant)	0 Years	100 Years	0	50	mg/L	22/07/2003
Casein:	Male	0 Years	100 Years	0	50	mg/L	22/07/2003

Test Panel	**Coxiella (Q-fever)**		
Synonyms			
Abbreviation		*Lab Test Code*	V450
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments	Please state date of onset and nature of symptoms.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Coxiella burnetii 1 C.F.T.:		V4007	COX1CFT	
Coxiella burnetii 2 C.F.T.:		V4008	COX2 CFT	
Coxiella burnetii (PH1)		V4143	COX1	
Coxiella burnetii (PH2)		V4144	COX2	
Coxiella phase 1 IgG Antibodies:		V4194	Coxiella phase 1 IgG Ab	
Coxiella phase 1 IgM Antibodies:		V4195	Coxiella phase 1 A	
Coxiella phase 2 IgG Antibodies:		V4196	Coxiella phase 2 IgG Ab	
Coxiella phase 2 IgM Antibodies:		V4197	Coxiella phase 2 IgM Ab	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

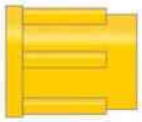
Test Panel	**C-Reactive Protein**		
Synonyms			
Abbreviation	CRP	*Lab Test Code*	C401
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	An acute phase protein synthesized by the liver. Increases in concentration follow acute or chronic inflammation, most commonly associated with bacterial infections, autoimmune disease, tissue necrosis and malignancy, myocardial infarction and trauma.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	C Reactive Protein	mg/L	C3001	CRP	
Site					

Reference Ranges

Test	C-Reactive Protein
ISS Code	C401
ISS Test Name	CRP
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
C Reactive Protein	Female	0 Years	16 Years	0	5	mg/L	12/12/2011
C Reactive Protein	Female	16 Years	115 Years	0	5	mg/L	12/12/2011
C Reactive Protein	Male	0 Years	16 Years	0	5	mg/L	12/12/2011
C Reactive Protein	Male	16 Years	115 Years	0	5	mg/L	12/12/2011

Test Panel	Creatine Kinase		
Synonyms			
Abbreviation	CK	*Lab Test Code*	C120
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Present in heart muscle, skeletal muscle and brain. Outdated as a marker of MI (Troponin should be measured). Useful as an indicator of muscle damage.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

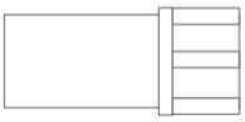
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Creatine Kinase :	IU/L	C1111	ABBOTT CK	

Site	

Reference Ranges

Test	Creatine Kinase
ISS Code	C120
ISS Test Name	CK
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Creatine Kinase :	Female	0 Years	115 Years	25	200	IU/L	01/11/2011
Creatine Kinase :	Male	0 Years	115 Years	40	320	IU/L	01/11/2011

Test Panel	**Creatinine (urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C297
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Part of urine U&E profile. Not a good indicator of early renal disease. In random urine samples, is useful for indicating how concentrated the specimen is when interpreting other urinary tests.		
Availability	Routine hours only		
Specimen	24hour Urine or Random Urine	*Volume Required*	3ml
Requirements			
Containers	 24hr Urine  Z10		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

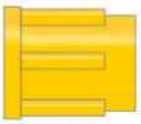
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	U.Creat.Conc.	mmol/L	C5030	URINE CREATININE	

Site	

Reference Ranges

Test	Creatinine (urine)
ISS Code	C297
ISS Test Name	Creatinine (urine)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011

Test Panel	**Creatinine Clearance**		
Synonyms			
Abbreviation		*Lab Test Code*	C298
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used to assess GFR. An estimated GFR (eGFR) can be calculated from a single blood sample in most adult patients with stable renal function. Creatinine clearance may be required to assess renal function prior to the administration of certain reno-toxic drugs		
Availability	Routine hours only		
Specimen	24hour Urine & Venous blood	*Volume Required*	3ml Urine and 2ml Blood
Requirements	Venous blood sample must be taken during the collection period for the 24 Hour urine. Avoid vigorous exercise during collection period.		
Containers	 24hr Urine  SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

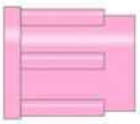
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Urine Volume	L/24 Hr	C5001	24HR URINE VOLUME	
U.Creat.Conc.	mmol/L	C5030	URINE CREATININE	
P.Creat	umol/L	C5035	Plasma Creatinine	
Cr.Clearance	ml/Min.	C5036	Creatinine Clearance	

Site	

Reference Ranges

Test	Creatinine Clearance
ISS Code	C298
ISS Test Name	Creatinine Clearance
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Cr.Clearance	Female	0 Years	100 Years	88	128	ml/Min.	22/03/1996
Cr.Clearance	Male	0 Years	100 Years	97	137	ml/Min.	22/03/1996
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011

Test Panel	**Crossmatch**		
Synonyms			
Abbreviation		*Lab Test Code*	J179
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Please be aware of the 2 sample rule for the routine provision of blood products; the patient must have been grouped on 2 separate occasions. A valid group & save sample must be available in Blood Bank.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Please ensure special requirements are clearly marked on the request form along with the reason.		
Containers	 EDTA X-Match		
	Minimum volume 2ml - unless a valid group & save sample already available in Blood Bank.		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
COMPATIBILITY TEST		J0005	COMPATIBILITY	
UNIT NUMBER		J5000	UNIT NUMBER	
PRODUCT		J5001	PRODUCT	
UNIT GROUP		J5002	UNIT GROUP	
CROSSMATCH RESULT		J5006	CROSSMATCH RESULT	
Fraction		J8080	FRACTION	

Site	

Test Panel	**Cryoglobulins**		
Synonyms			
Abbreviation		*Lab Test Code*	C901
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Cryoglobulins are immunoglobulins that exhibit the phenomenon of insolubility when cooled below 37°C. Common symptoms include purpura, arthralgia and Raynaud's phenomenon.		
Availability	Routine hours only (please note that this assay is not performed on a Friday or the day before a bank holiday)		
Specimen	Venous Blood	*Volume Required*	
Requirements	Samples must be collected at DRI phlebotomy clinic. For in-patients, please contact the duty Biochemist to discuss on 642870. Please inform the patient that samples must be collected at DRI phlebotomy MONDAY-THURSDAY only.		
Containers	 Plain  EDTA		
	3 Plain tubes required (either 4ml or 6ml) and 1 EDTA at 4ml		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Samples must be collected and transported to the laboratory at 37°C. This is only available at DRI phlebotomy		
Stability			
Long Term			
Comments	Normal Result= Not detected		
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Cryoglobulin:		C4050		Cryoglobulin Cryoprecipitate Tot
CryoTotal Protein	g/L	C4057		Prot
Cryo Electrophoresis		C4058		Cryo Precipitate EP
Cryo Monoclonal Type		C4059		Cryo Precipitate Isotype
Cryoglobulin estimation	g/L	C4060		Cryoglobulin Estimation
Cryo IgG	g/L	C4061		Cryo Precipitate IgG
Cryo IgA	g/L	C4062		Cryo Precipitate IgA
Cryo IgM	g/L	C4063		Cryo Precipitate IgM
Cryo RF	IU/ml	C4064		Cryo Precipitate RF
Cryo C4	g/L	C4065		Cryo Precipitate C4

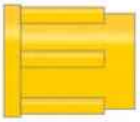
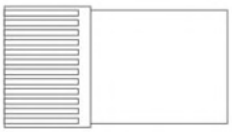
Site	

Test Panel	**Cryoprecipitate Issue**		
Synonyms			
Abbreviation		*Lab Test Code*	J888
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Blood group must have been established, if not Group & Save must be sent. Consultant Haematologist approval only, unless massive haemorrhage protocol activated.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	If no previous sample for Group
Requirements	If no previous sample for Group		
Containers	 EDTA X-Match  EDTA		
	Issued as Group Specific so Group and Save will need to be provided if not had one previously.		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
COMPATIBILITY TEST		J0005	COMPATIBILITY	
UNIT NUMBER - CRYO		J1400	UNIT NUMBER CRYO	
PRODUCT - CRYO		J1401	PRODUCT CRYO	
UNIT GROUP - CRYO		J1402	UNIT GROUP CRYO	
FRACTION NUMBER - CRYO		J1403	FRACTION NUMBER CRYO	
CRYO ISSUE		J1404	CRYO ISSUE	

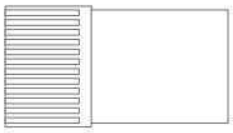
Site	

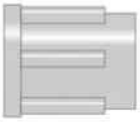
Test Panel	**Cryptococcal Investigations**		
Synonyms			
Abbreviation		*Lab Test Code*	V414
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Venous Blood or CSF		
Containers	 SST  Sterile Universal		
	GOLD topped blood sample, CSF in sterile Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Cryptococcal Antigen		V4189	Cryptococcal An	
Cryptococcal Neoformans DNA		V4190	Cryptococcal Neo DNA	
Cryptococcal PCR		V4191	Crypto PCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	CSF ACE		
Synonyms			
Abbreviation		*Lab Test Code*	
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Cerebro-Spinal Fluid	*Volume Required*	0.5ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**CSF Glucose and Protein**		
Synonyms			
Abbreviation		*Lab Test Code*	C165
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Blood sample should be collected at least 4 hours after a single overdose, or as soon as possible if more than one overdose has been taken within the last one or two days. See BNF for guidance on treatment limits. (addition 64 onwards)		
Availability	Routine hours & On Call		
Specimen	Cerebro-Spinal Fluid	*Volume Required*	0.2ml CSF in universal and 0.2ml CSF in Fluoride Oxalate
Requirements	Collect samples for glucose into fluoride oxalate tubes. If multiple samples are being collected, refer to QR-COM-004 (to be amended) for order of collection. Label samples with order of collection, and protect from light if investigating for xanthochromia		
Containers	 Universal  Fluoride Oxalate		
	Universal and Grey top		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

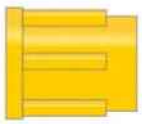
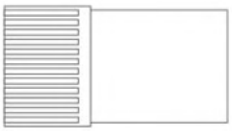
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Appearance		C1215	APPEARANCE	
CSF Protein	g/L	C1220	CSF PROTEIN	
CSF Glucose	mmol/L	C1225	CSF GLUCOSE	
Pandys Test		C1230	PANDYS	

Site	

Reference Ranges

Test	CSF Glucose and Protein
ISS Code	C165
ISS Test Name	CSF Glucose and Protein
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CSF Protein	Female	0 Years	115 Years	0.15	0.4	g/L	12/12/2011
CSF Protein	Male	0 Years	115 Years	0.15	0.4	g/L	12/12/2011

Test Panel	**CSF Immunoglobulins**		
Synonyms			
Abbreviation		*Lab Test Code*	W412
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Suspected dementia disease, CNS infections or multiple sclerosis		
Availability	Routine hours only		
Specimen	Cerebro-Spinal Fluid & Venous Blood	*Volume Required*	2ml
Requirements	CSF and Blood must be sent together. Contamination of CSF with blood during lumbar puncture renders last uninterpretable		
Containers	 SST  Universal		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal oligoclonal bands = pattern 1 (Negative)		
Platform	Choose an item.		

Tests in Panel

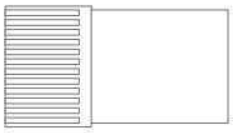
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
CSF IgG:	mg/L	W1620	CIG	
CSF Albumin:	mg/L	W1621	CALB	
Serum IgG:	g/L	W1622	SIGG	
Serum Albumin:	g/L	W1623	SALB	
CSF IgG/Alb Ratio:		W1624	GARAT	
CSF:Serum IgG/Alb Ratio:		W1625	MSRAT	
Oligoclonal Bands:		W1626	OLIG	
Referred Test :		W4321	Referred Test	

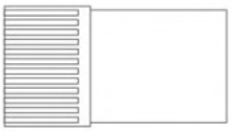
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Immunoglobulins (CSF)
ISS Code	W412
ISS Test Name	Immunoglobulins (CSF) Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CSF:Serum IgG/Alb Ratio:	Female	0 Years	110 Years	0.2	0.7		03/03/2011
CSF:Serum IgG/Alb Ratio:	Male	0 Years	110 Years	0.2	0.7		03/03/2011

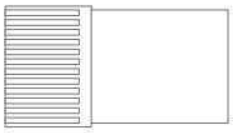
Test Panel	CSF LDH		
Synonyms			
Abbreviation		*Lab Test Code*	
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Cerebro-Spinal Fluid	*Volume Required*	0.5ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**CSF Microscopy & Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M150M
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	Include relevant clinical details		
Availability	Routine hours only		
Specimen	Cerebro-Spinal Fluid	*Volume Required*	
Requirements	Always contact the laboratory when sending specimens. Ideally collect the CSF sample in 3 consecutive universal containers. Labelled 1 to 3 accordingly. Ensure bottles 1 & 3 are sent to Microbiology		
Containers	 Sterile Universal		
	CSF		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Do not use air transport tube		
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Appearance		M1500	DESCRIPTION	
WBC		M1510	WCC	
WBC		M1511	WHITE CC	
RBC		M1512	RCC	
WBC Differential		M1513	WBC DIFF	
Gram		M1515	GRAMSTAIN	
Supernatant		M1530	SUPERNATANT	
Specimen number		M1535	SPECIMEN NUMBER (1)	
Specimen number		M1545	SPECIMEN NUMBER (2)	
RBC		M1550	RBC COUNT (2)	

Site	

Test Panel	CSF GABA & AMPA Receptor Antibodies		
Synonyms			
Abbreviation		*Lab Test Code*	W149C
Department	Immunology		
Clinical Contact	Choose an item.		
Contact	Choose an item.	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	CSF - PROTECT FROM LIGHT	*Volume Required*	0.5ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*Anti-AMPA1 Ab* *Anti-AMPA2 Ab* *Anti-GABA Ab*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Cyclosporin**		
Synonyms			
Abbreviation		*Lab Test Code*	W855
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	An immunosuppressant, frequently used in transplant medicine. Take sample immediately before dose, at least one week after initiation of therapy or dose change. Sample sent to patient's transplant hospital. Please state on request.		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements	Take blood sample just before dose (ie trough level)		
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Cyclosporin	ug/L	W6055	CYCLOSPOR	
Ref. Range given		W6057	Cys.Range.	
Cyclosporin (LCTMS)	ug/L	W6058	CYCLO(LCTMS)	

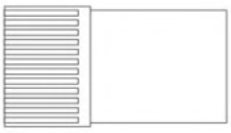
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Cystic Fibrosis Genotype**		
Synonyms			
Abbreviation		*Lab Test Code*	W566C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Test detects the commonest mutations in the european population. Negative result does not conclusively exclude the diagnosis.		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	9ml
Requirements			
Containers	 EDTA  EDTA		
Request Forms	 Pathology Combined		
	Pink Molecular Genetics form preferred		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

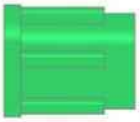
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Cystic Fibrosis - CFTR gene :		W5656	Cystic Fibrosis :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

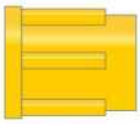
Test Panel	**Cystine/Homocystine Screen (urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C721
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 weeks
Investigation Comments	Spot test for presence of urine cystine/homocystine is performed as part of metabolic screen (urine).		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	1ml
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	U.Cys/Homocys		C1960	U.CYST/HCYST	
	DMB	mg/mmol Cr	C1965	U.DMB	

Site	

Test Panel	**Cytogenetics**			
Synonyms				
Abbreviation		*Lab Test Code*	W060	
Department	Clinical Biochemistry			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	4 Weeks	
Investigation Comments				
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	4.5ml	
Requirements				
Containers	 Heparin			
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	4 - 10°C			
Long Term	4 - 10°C			
Comments				
Platform				

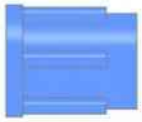
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	Cytomegalovirus Serology (IgG/IgM)		
Synonyms			
Abbreviation	CMV	*Lab Test Code*	V292A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Test for past exposure to (or immunity against) Cytomegalovirus or acute infection. If pregnant, test can be carried out on the booking sample if available. Please contact virology at DRI to discuss.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		V0250	VIR LAB NOTES	
CMV IgG antibody :		V6651	CMV IGG AB	
Vidas Test Value		V6652	CMV IGG RESULT	
Lot No.		V6653	CMV IGG LOT	
CMV IgM antibody :		V6654	CMV IGM AB	
Vidas Test Value		V6655	CMV IGM VALUE	
Lot No.		V6656	CMV IGM LOT	

Site	

Test Panel	**D-Dimer**		
Synonyms			
Abbreviation		*Lab Test Code*	X061
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments	For Deep Vein Thrombosis or Pulmonary Embolism investigation.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements	"Wells Score" or equivalent must be quoted on all requests		
Containers	 Citrate		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

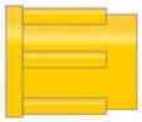
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Wells/BTS Score		X0014	WELLSBTS	
D-Dimer	ug/ml FEU	X0013	TOP DIMER	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	D-Dimer
ISS Code	X061
ISS Test Name	VTE-DIMER
Ref Range Comments	

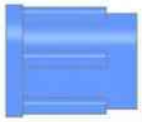
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
D-Dimer	Female	0 Years	130 Years	0	0.5	ug/ml FEU	07/09/2013
D-Dimer	Male	0 Years	130 Years	0	0.5	ug/ml FEU	07/09/2013

Test Panel	**Dehydroepiandrosterone Sulphate**		
Synonyms			
Abbreviation	DHEAS	*Lab Test Code*	C275
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Used in the investigation of precocious or delayed puberty in children/teenagers, and hirsuitism or virilisation in adult females.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
DHEA Sulphate	umol/L	C1355	DHEAS (IMM)	
DHEA-S	umol/L	C1356	DHEA-S (ABBOTT)	

Site	This test is processed at an external reference centre. The parameters analysed in this test and any reference ranges for these parameters will be displayed on the report when it is returned to the requestor.

Test Panel	**DIC Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	X056
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments	Includes PT, APTT, Fibrinogen and D-Dimer tests		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements	Must be requested with FBC or platelet count		
Containers	 Citrate		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Platelets	x 10*9/L	H0035	PLATELETS	
D-Dimer	ug/ml FEU	X0013	TOP DIMER	
Ratio		X0025	RATIO	
Fibrinogen	g/L	X0030	FIBRINOGEN LEVEL	
APTT	secs	X0061	PTT	
Prothrombin Time	secs	X1000	Prothrombin Time	
INR		X5020	INR	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	DIC Screen
ISS Code	X056
ISS Test Name	DIC
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Fibrinogen	Female	0 Days	30 Days	1.36	3	g/L	01/06/2019
Fibrinogen	Female	30 Days	150 Days	1.41	4.37	g/L	01/06/2019
Fibrinogen	Female	150 Days	365 Days	1.48	3.67	g/L	01/06/2019
Fibrinogen	Female	1 Years	5 Years	1.64	4.97	g/L	01/06/2019
Fibrinogen	Female	6 Years	10 Years	1.71	5.37	g/L	01/06/2019
Fibrinogen	Female	11 Years	17 Years	1.68	5.29	g/L	01/06/2019
Fibrinogen	Female	17 Years	110 Years	1.5	4.5	g/L	01/06/2019
Fibrinogen	Male	0 Days	30 Days	1.36	3	g/L	01/06/2019
Fibrinogen	Male	30 Days	150 Days	1.41	4.37	g/L	01/06/2019
Fibrinogen	Male	150 Days	365 Days	1.48	3.67	g/L	01/06/2019
Fibrinogen	Male	1 Years	5 Years	1.64	4.97	g/L	01/06/2019
Fibrinogen	Male	6 Years	10 Years	1.71	5.37	g/L	01/06/2019
Fibrinogen	Male	11 Years	17 Years	1.68	5.29	g/L	01/06/2019
Fibrinogen	Male	17 Years	110 Years	1.5	4.5	g/L	01/06/2019
Platelets	Female	0 Years	115 Years	140	450	x 10*9/L	04/04/2014
Platelets	Male	0 Years	115 Years	140	450	x 10*9/L	04/04/2014
Prothrombin Time	Female	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Female	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Female	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Female	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Female	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Female	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Female	17 Years	120 Years	9.4	12.5	secs	18/11/2019
Prothrombin Time	Male	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Male	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Male	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Male	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Male	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Male	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Male	17 Years	120 Years	9.4	12.5	secs	18/11/2019
APTT	Female	0 Days	30 Days	27.6	45.6	secs	24/09/2019
APTT	Female	31 Days	150 Days	24.8	40.7	secs	24/09/2019
APTT	Female	151 Days	365 Days	25.1	40.7	secs	24/09/2019
APTT	Female	1 Years	6 Years	24	39.2	secs	24/09/2019
APTT	Female	6 Years	11 Years	26.9	38.7	secs	24/09/2019
APTT	Female	11 Years	17 Years	24.6	38.4	secs	24/09/2019
APTT	Female	17 Years	110 Years	25	36.5	secs	24/09/2019
APTT	Male	0 Days	30 Days	27.6	45.6	secs	24/09/2019
APTT	Male	31 Days	150 Days	24.8	40.7	secs	24/09/2019
APTT	Male	151 Days	365 Days	25.1	40.7	secs	24/09/2019
APTT	Male	1 Years	6 Years	24	39.2	secs	24/09/2019
APTT	Male	6 Years	11 Years	26.9	38.7	secs	24/09/2019

APTT	Male	11 Years	17 Years	24.6	38.4	secs	24/09/2019
APTT	Male	17 Years	110 Years	25	36.5	secs	24/09/2019
D-Dimer	Female	0 Years	130 Years	0	0.5	ug/ml FEU	07/09/2013
D-Dimer	Male	0 Years	130 Years	0	0.5	ug/ml FEU	07/09/2013

Test Panel	**Differential WBC**		
Synonyms	Manual Differential		
Abbreviation		*Lab Test Code*	H100
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Lab may reflex a manual differential White cell count from a blood film if appropriate. An FBC must be performed.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Neut	x 10*9/L	H0100	NEUTROPHILS	
Lymph	x 10*9/L	H0105	LYMPHOCYTES	
Mono	x 10*9/L	H0110	MONOCYTES	
Eosin	x 10*9/L	H0115	EOSINOPHILS	
Baso	x 10*9/L	H0120	BASOPHILS	
Metamyelo	x 10*9/L	H0125	METAMYELOCYTES	
Myelocyte	x 10*9/L	H0130	MYELOCYTES	
Blast	x 10*9/L	H0135	BLAST CELLS	
N RBC	x 10*9/L	H0140	NUCLEATED RBC	
Promyelocytes	x 10*9/L	H0145	PROMYELOCYTES	

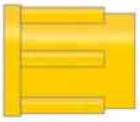
Site	

Reference Ranges

Test	Differential WBC
ISS Code	H100
ISS Test Name	MAN DIFF WBC
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Baso	Female	0 Days	7 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Female	7 Days	90 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Female	90 Days	366 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Female	1 Years	3 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	3 Years	6 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	6 Years	10 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	10 Years	12 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	12 Years	115 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	0 Days	7 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Male	7 Days	90 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Male	90 Days	366 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Male	1 Years	3 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	3 Years	6 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	6 Years	10 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	10 Years	12 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	12 Years	115 Years	0	0.1	x 10*9/L	10/01/1996
Blast	Female	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014
Blast	Male	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014
Eosin	Female	0 Days	7 Days	0.2	0.9	x 10*9/L	10/01/1996
Eosin	Female	7 Days	90 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	90 Days	366 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	1 Years	3 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	3 Years	6 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	6 Years	10 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	10 Years	12 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	12 Years	115 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	0 Days	7 Days	0.2	0.9	x 10*9/L	10/01/1996
Eosin	Male	7 Days	90 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	90 Days	366 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	1 Years	3 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	3 Years	6 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	6 Years	10 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	10 Years	12 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	12 Years	115 Years	0.01	0.7	x 10*9/L	10/01/1996
Lymph	Female	0 Days	7 Days	2.7	11	x 10*9/L	10/01/1996
Lymph	Female	7 Days	90 Days	2	17	x 10*9/L	10/01/1996
Lymph	Female	90 Days	366 Days	4	12	x 10*9/L	10/01/1996
Lymph	Female	1 Years	3 Years	5	10	x 10*9/L	10/01/1996
Lymph	Female	3 Years	6 Years	5.5	8	x 10*9/L	10/01/1996
Lymph	Female	6 Years	10 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Female	10 Years	12 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Female	12 Years	115 Years	1.5	4	x 10*9/L	10/01/1996

Lymph	Male	0 Days	7 Days	2.7	11	x 10*9/L	10/01/1996
Lymph	Male	7 Days	90 Days	2	17	x 10*9/L	10/01/1996
Lymph	Male	90 Days	366 Days	4	12	x 10*9/L	10/01/1996
Lymph	Male	1 Years	3 Years	5	10	x 10*9/L	10/01/1996
Lymph	Male	3 Years	6 Years	5.5	8	x 10*9/L	10/01/1996
Lymph	Male	6 Years	10 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Male	10 Years	12 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Male	12 Years	115 Years	1.5	4	x 10*9/L	10/01/1996
Metamyelo	Female	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014
Metamyelo	Male	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014
Mono	Female	0 Days	7 Days	0.4	3.1	x 10*9/L	10/01/1996
Mono	Female	7 Days	90 Days	0.3	2.7	x 10*9/L	10/01/1996
Mono	Female	90 Days	366 Days	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	1 Years	3 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	3 Years	6 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	6 Years	10 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	10 Years	12 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	12 Years	115 Years	0.2	0.95	x 10*9/L	10/01/1996
Mono	Male	0 Days	7 Days	0.4	3.1	x 10*9/L	10/01/1996
Mono	Male	7 Days	90 Days	0.3	2.7	x 10*9/L	10/01/1996
Mono	Male	90 Days	366 Days	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	1 Years	3 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	3 Years	6 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	6 Years	10 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	10 Years	12 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	12 Years	115 Years	0.2	0.95	x 10*9/L	10/01/1996
Myelocyte	Female	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014
Myelocyte	Male	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014
Neut	Female	0 Days	7 Days	4.5	13.2	x 10*9/L	10/01/1996
Neut	Female	7 Days	90 Days	1.5	10	x 10*9/L	10/01/1996
Neut	Female	90 Days	366 Days	1.5	7	x 10*9/L	10/01/1996
Neut	Female	1 Years	3 Years	1.5	7	x 10*9/L	10/01/1996
Neut	Female	3 Years	6 Years	2	6	x 10*9/L	10/01/1996
Neut	Female	6 Years	10 Years	2	6	x 10*9/L	10/01/1996
Neut	Female	10 Years	12 Years	2	6	x 10*9/L	10/01/1996
Neut	Female	12 Years	115 Years	2	7.5	x 10*9/L	10/01/1996
Neut	Male	0 Days	7 Days	4.5	13.2	x 10*9/L	10/01/1996
Neut	Male	7 Days	90 Days	1.5	10	x 10*9/L	10/01/1996
Neut	Male	90 Days	366 Days	1.5	7	x 10*9/L	10/01/1996
Neut	Male	1 Years	3 Years	1.5	7	x 10*9/L	10/01/1996
Neut	Male	3 Years	6 Years	2	6	x 10*9/L	10/01/1996
Neut	Male	6 Years	10 Years	2	6	x 10*9/L	10/01/1996
Neut	Male	10 Years	12 Years	2	6	x 10*9/L	10/01/1996
Neut	Male	12 Years	115 Years	2	7.5	x 10*9/L	10/01/1996
Promyelocytes	Female	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014
Promyelocytes	Male	0 Years	115 Years	<0.0		x 10*9/L	04/04/2014

Test Panel	**Digoxin**		
Synonyms			
Abbreviation		*Lab Test Code*	C052
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Drug used in the treatment of congestive heart failure. For monitoring response to the dose, the sample must be taken 6 to 8 hours post dose.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Take sample 6h post dose.		
Containers	 SST		
	Small paediatric sample / plasma samples are only reliable for 24hrs in fridge		
Request Forms	 Pathology Combined		
Transport			
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

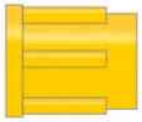
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Digoxin	nmol/L	C1255	DIGOXIN	
Digoxin	ug/L	C3255	DIGOXIN.	
Digoxin dose		C3256	Digoxin Dose	
Date and time of last dose		C3257	Digoxin time of last dose	
Potassium	mmol/L	C3258	Serum Potassium	

Site	

Reference Ranges

Test	Digoxin
ISS Code	C052
ISS Test Name	DIGOXIN.
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Digoxin	Female	0 Years	115 Years	0.5	2	ug/L	12/12/2011
Digoxin	Male	0 Years	115 Years	0.5	2	ug/L	12/12/2011
Potassium	Female	0 Years	115 Years	3.5	5.3	mmol/L	10/06/2019
Potassium	Male	0 Years	115 Years	3.5	5.3	mmol/L	10/06/2019

Test Panel	**Diptheria Vaccine Response**		
Synonyms			
Abbreviation		*Lab Test Code*	V445
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	This test is used for measuring immunity against Diptheria.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

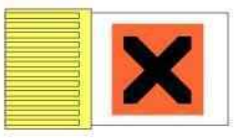
Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Diptheria antitoxin level assay:	IU/ml	V6773	DIPAB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

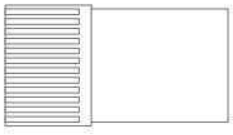
Test Panel	**Direct Antiglobulin Test (DAT)**		
Synonyms			
Abbreviation	DAT	*Lab Test Code*	J170
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 EDTA X-Match  EDTA		
	Minimum volume 2ml - Paediatric EDTA sample acceptable		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Direct Antiglobulin Test Result:		J1700	DCT	
Site					

Test Panel	Direct Immunofluorescence testing			
Synonyms	Histology			
Abbreviation		*Lab Test Code*	T030	
Department	Histology			
Clinical Contact	Consultant Histopathologist			
Contact	01302 642843	*Turnaround Time*	1 Week	
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.			
Availability	Monday – Friday (9am - 4pm), except bank holidays.			
Specimen	Fresh tissue biopsy	*Volume Required*		
Requirements	Sample(s) received in Michel's medium, labelled with patient identifiers.			
Containers	 Sterile Universal	Michel's medium	Choose an item.	
Request Forms	 Histology WPR2580	Viapath request form		
Transport	Transport in Michel's medium			
Storage notes	Refer to Short Term Stability			
Stability	12 - 28°C (Ambient Temperature)			
Long Term	12 - 28°C (Ambient Temperature)			
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on viapath request form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Sample(s) received in a Michel's medium, labelled with patient identifiers. • Viapath request form with corresponding patient identifiers, clinician, sample site and relevant clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. All high risk specimens should be clearly marked 'Danger of infection' on both form and pot.			
Platform	Choose an item.			
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	Choose an item.			

Test Panel	**Double Negative T-Cell test**			
Synonyms				
Abbreviation		*Lab Test Code*	W019	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	4 Weeks	
Investigation Comments	By arrangement with Consultant Haematologist			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	1ml	
Requirements				
Containers	 EDTA			
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	Drugs of Abuse Screen		
Synonyms	DOA		
Abbreviation		*Lab Test Code*	C652 or W045R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Clinically urgent sample undergo a basic drugs of abuse screen and results will be available within 24 hours. All samples are referred to a referral laboratory for full drugs of abuse panel. Diluted samples generating low creatinine results should be interpreted with caution.		
Availability	Routine hours & On Call		
Specimen	Urine	*Volume Required*	Minimum 1ml
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Amphetamines		C2100		
Benzodiazepines		C2110		
Cocaine		C2115		
Opiates		C2120		
Cannabinoids		C2130		

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

MOLECULAR TESTING FOR EGFR IN LUNG CANCER

Background Information

Testing for mutations in the EGFR gene in lung cancer is performed on the Biocartis Idylla System. The Biocartis Idylla™ System covers the entire process from sample to result with fully integrated sample preparation followed by PCR amplification and detection of the targeted sequences. The Idylla™ System consists of the Idylla™ Console connected to one or more Idylla™ Instruments. Idylla™ Cartridges, designed for specific applications, can be processed by the Idylla™ System using Assay specific software (Test Type Package, TTP). The Assay procedure and data analysis have been optimized for FFPE tissue sections.

Interpretation

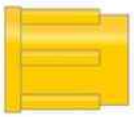
The Idylla™ EGFR Mutation Test detects exon 18 (G719A/C/S), exon 20 (T790M, S768I), exon 21 (L858R, L861Q) mutations, exon 19 deletions and exon 20 insertions of the *EGFR* gene.

GENE	EXON	MUTATION	PROTEIN CHANGE	NUCLEOTIDE CHANGE	GENOTYPE CALL
EGFR	18	G719A	p.Gly719Ala	c.2156G>C	G719A/C/S
		G719C	p.Gly719Cys	c.2155G>T	
		G719C2	p.Gly719Cys(2)	c.2154_2155delinsTT	
		G719S	p.Gly719Ser	c.2155G>A	
	19	Deletion 9	p.Leu747_Ala750delinsPro	c.2238_2248delinsGC	Exon 19 deletion
				c.2239_2248delinsC	
			p.Leu747_Ala750delinsSer	c.2240_2248del	
			p.Leu747_Glu749del	c.2239_2247del	
		Deletion 12	p.Leu747_Thr751delinsPro	c.2239_2251delinsC	
			p.Leu747_Thr751delinsSer	c.2240_2251del	
		Deletion 15	p.Glu746_Ala750del	c.2235_2249del	
				c.2236_2250del	
			p.Leu747_Thr751del	c.2239_2253del	
				c.2240_2254del	
				c.2238_2252del	
			p.Glu746_Thr751delinsAla	c.2237_2251del	
			p.Glu746_Thr751delinsIle	c.2235_2252delinsAAT	
			p.Glu746_Thr751delinsVal	c.2237_2252delinsT	
			p.Lys745_Ala750delinsThr	c.2234_2248del	
			p.Glu746_Thr751delinsLeu	c.2236_2253delinsCTA	
			p.Glu746_Thr751delinsVal	c.2237_2253delinsTA	
			p.Glu746_Thr751delinsAla	c.2235_2251delinsAG	
			p.Glu746_Thr751delinsGln	c.2236_2253delinsCAA	
			p.Ile744_Ala750delinsValLys	c.2230_2249delinsGTCAA	
		Deletion 18	p.Leu747_Pro753delinsSer	c.2240_2257del	
			p.Glu746_Ser752delinsVal	c.2237_2255delinsT	
			p.Leu747_Ser752del	c.2239_2256del	
			p.Glu746_Thr751del	c.2236_2253del	
			p.Leu747_Pro753delinsGln	c.2239_2258delinsCA	
			p.Glu746_Ser752delinsAla	c.2237_2254del	
			p.Glu746_Ser752delinsAsp	c.2238_2255del	
			p.Glu746_Pro753delinsValSer	c.2237_2257delinsTCT	
			p.Glu746_Ser752delinsIle	c.2236_2255delinsAT	
				c.2236_2256delinsATC	
			p.Glu746_Ser752delinsVal	c.2237_2256delinsTT	
				c.2237_2256delinsTC	
				c.2235_2255delinsGGT	
		Deletion 21	p.Leu747_Pro753del	c.2238_2258del	
			p.Glu746_Ser752del	c.2236_2256del	
		Deletion 24	p.Ser752_Ile759del	c.2253_2276del	
	20	T790M	p.Thr790Met	c.2369C>T	T790M
		S768I	p.Ser768Ile	c.2303G>T	S768I
		InsG	p.Asp770_Asn771insGly	c.2310_2311insGGT	Exon 20 Insertion
		InsASV(9)	p.Val769_Asp770insAlaSerVal	c.2307_2308insGCCAGCGTG	
		InsASV(11)	p.Val769_Asp770insAlaSerVal	c.2309_2310delinsCCAGCGTGGAT	
		InsSVD	p.Asp770_Asn771insSerValAsp	c.2311_2312insGCGTGGACA	
		InsH	p.His773_Val774insHis	c.2319_2320insCAC	
	21	L858R	p.Leu858Arg	c.2573T>G	L858R
				c.2573_2574delinsGT	
				c.2573_2574delinsGA	
		L861Q	p.Leu861Gln	c.2582T>A	L861Q

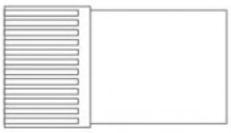
Limits of Detection

The Idylla™ EGFR Mutation Test is able to detect allelic frequencies at:

≤ 5% for mutations in exons 19, 20 and 21 of the *EGFR* oncogene
≤ 10% for mutations in exon 18 of the *EGFR* oncogene

Test Panel	**Endomysial Antibodies (IgA)**		
Synonyms	Endomysial Antibodies		
Abbreviation		*Lab Test Code*	C986
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Test for screening for coeliac disease. Results reported as Strongly Positive / Positive / Weakly Positive / Negative.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	If patients are IgA deficient, an IgG endomysical antibody screen may be performed, however this is less specific and sensitive.		
Containers	 SST		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal Result= Negative		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	IgA Endomysial Ab		C6226	ENDO	
Site	Choose an item.				

Test Panel	**Endoscopy Water**		
Synonyms			
Abbreviation		*Lab Test Code*	M280A
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours only		
Specimen		*Volume Required*	100ml
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

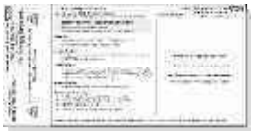
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		M0080	LAB COMMENTS	
Machine Identifier:		M1999	ENDO NO	
TVC Sample:		M2000	TVC1	
TVC Duplicate:		M2101	TVC2	
Control:		M2102	TVCC	
ACC/100ml		M2103	TVCM	

Site	

Test Panel	**Enterobius (Threadworm) Microscopy**			
Synonyms				
Abbreviation		*Lab Test Code*	M751	
Department	Microbiology			
Clinical Contact	Consultant Microbiologist			
Contact	01302 642870	*Turnaround Time*	24 hours	
Investigation Comments	This is a microscopical proceedure screening for Enterobious Ova.			
Availability	Routine hours only			
Specimen	Sellotape Slide	*Volume Required*		
Requirements	Please include clinical symptoms and any history of travel or exposure.			
Containers	 Sellotape Slide			
Request Forms	 Pathology Combined			
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.			
Transport				
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term				
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Microscopy:		M1212	ENTEROBIUS	
			M1213	ENT1	

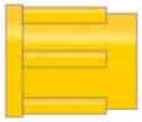
Site	

Test Panel	**Enterovirus PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V437
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Include date of onset and clinical details Includes Coxsackie A and B and Echovirus.		
Availability	Routine hours only		
Specimen	CSF, Fluid, Faeces or Viral Throat Swab	*Volume Required*	1ml
Requirements			
Containers	 Universal  Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Enterovirus PCR RNA		V4119	ENTPCR	
Parechovirus RNA		V4199	PARECHOVIRUS RNA	
Echovirus RNA		V4227	ECHO RNA	
Echo virus type		V4228	ECHOTYPE	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

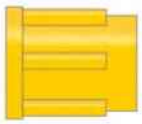
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Enterovirus Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V483
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	For Serological diagnosis of Enterovirus infection.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Enterovirus IgM Antibody		V4162	Enterovirus IgM Antibody	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Eosinophilic Cationic Protein**		
Synonyms			
Abbreviation		*Lab Test Code*	W949
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Eosinophilic inflammation (eg. Asthma). Plasma or Haemolysed samples should not be used. Allow to clot for 60 minutes before separating.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	If serial samples are taken If serial samples are taken they should be at the same ambient temperature to minimise viability due to the artifactual release of ECP by Eosinophil breakdown which is accelerated at higher temperatures.		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal range is 1.0 - 15.0mg/L		
Platform	Choose an item.		

Tests in Panel

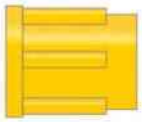
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Eosinophil Cationic Protein:	ug/L	W6290	ECP :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Eosinophilic Cationic Protein
ISS Code	W949
ISS Test Name	ECP RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Eosinophil Cationic Protein:	Female	0 Years	100 Years	0	15	ug/L	03/03/2011
Eosinophil Cationic Protein:	Male	0 Years	100 Years	0	15	ug/L	03/03/2011

Test Panel	**Epstein Barr (EBV) Confirmation**		
Synonyms			
Abbreviation		*Lab Test Code*	V440
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Only used for serological confirmation of EBV infection following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
EBV VCA IgG		V0302	EBV VCA IgG	
EBV VCA IgM		V0303	EBV VCA IgM	
EBV EBNA IgG		V0320	EBV EBNA IgG Antibody	
EBV IgM Antibody		V4123	EBVMAB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

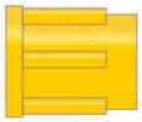
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Epstein Barr Virus PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V482
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Molecular detection and quantification of EBV (Epstein Barr Virus).		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
EBV DNA PCR		V4124	EBVPCR	
EBV PCR DNA		V4124	EBVPCR	
EBV Quantification No	copies/ml	V4125	EBVQUANTNO	
EBV Quantification Log	log copies/ml	V4126	EBVQLOG	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Epstein Barr Virus Serology**		
Synonyms			
Abbreviation	EBV	*Lab Test Code*	V300A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Test for past or current EBV infection and can be requested as part of the hepatitis screen.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
EBV EBNA IgG		V0300	EBV EBNA IgG	
EBV VCA IgG		V0302	EBV VCA IgG	
EBV VCA IgM		V0303	EBV VCA IgM	
VCA IgG OD		V0314	EBV VCA IGG OD	
VCA IgG Cut Off		V0315	EBV VCA IGG CO	
EBNA IgG OD		V0316	EBV EBNA IGG OD	
EBNA IgG Cut Off		V0317	EBV EBNA IGG CUT OFF	
VCA IgM OD		V0318	VCAOD	
VCA IgM Cut Off		V0319	VCACO	

Site	

Test Panel	Erythrocyte Sedimentation Rate		
Synonyms			
Abbreviation		*Lab Test Code*	H800
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Starssed		

Tests in Panel

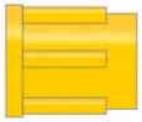
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
ESR	mm	H8000	ESR	
ESR West	mm	H8001	ESR,WEST	
Pipette No		H8002	PIPETTE	
Sed.Time	Mins	H8003	SED.TIME	
Temp	Deg C	H8004	TEMP	
Comment		H8005	ESR COMMENT	

Site	

Reference Ranges

Test	Erythrocyte Sedimentation Rate
ISS Code	H800
ISS Test Name	ESR
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
ESR	Female	0 Years	110 Years	1	15	mm	29/03/2000
ESR	Male	0 Years	110 Years	1	10	mm	29/03/2000

Test Panel	**Erythropoietin**		
Synonyms	Serum Erythropoietin		
Abbreviation	EPO	*Lab Test Code*	W136
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Sample requires freezing – Send to laboratory as soon as possible		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source – Sample needs to be frozen		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Serum Erythropoietin	mIU/ml	W1250	Serum Erythropoetin	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Erythropoietin
ISS Code	W136
ISS Test Name	SERUM ERYTHROPOIETIN. Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Serum Erythropoietin	Female	0 Years	110 Years	3	18	mIU/ml	01/01/2011
Serum Erythropoietin	Male	0 Years	110 Years	3	18	mIU/ml	01/01/2011

Reference Ranges

Test	Erythropoietin
ISS Code	W136
ISS Test Name	SERUM ERYTHROPOIETIN. Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Serum Erythropoietin	Female	0 Years	110 Years	3	18	mIU/ml	01/01/2011
Serum Erythropoietin	Male	0 Years	110 Years	3	18	mIU/ml	01/01/2011

Test Panel	**Ethanol**		
Synonyms			
Abbreviation		*Lab Test Code*	C671
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the differential diagnosis of an unconscious patient, to confirm ethanol intoxication and in the management of ethylene glycol or other alcohol poisoning. Only for the clinical management of intoxicated patients.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	3ml
Requirements	Always allow bottle to completely fill		
Containers	 Fluoride Oxalate		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform			

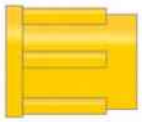
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Ethanol	mg/100ml	C1581	Alcohol	
Site					

Test Panel	**Ethylene Glycol**		
Synonyms			
Abbreviation		*Lab Test Code*	W560
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Please contact laboratory. Test not performed on site.		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	3ml
Requirements	Please contact laboratory. Test not performed on site. Random urine sample also required.		
Containers	 Fluoride Oxalate		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

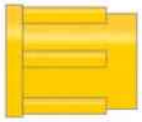
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Ethylene Glycol :	mg/L	W3555	Ethylene Glycol :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Extractable Nuclear Antibodies**		
Synonyms			
Abbreviation	ENA	*Lab Test Code*	C489
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Useful in the investigation of CTD,(SLE, Sjogrens, MCTD, overlap syndromes), polymyositis, scleroderma.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	3ml
Requirements	This is an ENA Screening test. Results are positive or negative. Positive results will be referred for ENA typing.		
Containers	 SST		
Request Forms	 Pathology Combined		
	Send to the laboratory on day of collection		
Transport	Refer to Short Term Stability		
Storage notes	Send to the laboratory on day of collection		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal Result = Negative		
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	ENA Screen:		C3265	ENAS	

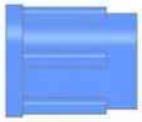
Site	

Test Panel	**Extractable Nuclear Antigens (ENA) Typing**		
Synonyms			
Abbreviation	ENA	*Lab Test Code*	W361
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Serum	*Volume Required*	5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
ENA-Anti Ro type (SS-A) :		W3321	Ro :	
ENA-Anti La type (SS-B) :		W3322	La :	
ENA-Anti Sm type :		W3323	Sm :	
ENA-Anti RNP type :		W3324	RNP :	
ENA-Anti Scl 70 type :		W3325	Scl :	
ENA-Anti Jol type :		W3326	Jol :	
Anti-Centromere A Ab :		W3327	Cent A :	
Anti-Centromere B Ab :		W3328	Cent B :	
Anti-Jo-1 Ab :		W3329	Jo-1 :	
Anti-Ku Ab :		W3332	Anti-Ku Ab :	
Anti-M2 Ab :		W3333	Anti-M2 Ab :	
Anti-PM-Scl Ab :		W3334	Anti-PM-Scl Ab :	
Anti-RNP Ab :		W3336	RNP Ab :	
Anti-Ro52 Ab :		W3337	Ro52 Ab :	
Anti-Ribosomal P Ab :		W3338	Ribo P :	
Anti-Scl-70 Ab :		W3339	Scl-70 :	
Anti-Sm Ab :		W3340	Sm Ab :	
Anti-SS-A Ab :		W3341	SS-A Ab :	
Anti-SS-B Ab :		W3342	SS-B Ab :	
Referred Test :		W4321	Referred Test	
Date Result Returned:		W5645	ENA Returned :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Factor Assays**		
Synonyms			
Abbreviation		*Lab Test Code*	W640
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Requested only in consultation with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements	Must clearly specify which factors are required.		
Containers	 Citrate		
	Citrate x 2 must be filled to the blue line on the side of the tube.		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Factor II	U/ml	W1001	FACTOR II	
Referred Test :		W4321	Referred Test	
Factor V Assay	U/ML	X8000	FACTOR V	
Factor VII Assay	U/ML	X8005	FACTOR V11	
Factor VIII (chromogenic)	IU/mL	X8010	FACTOR V111C	
Factor IX Assay	U/ML	X8025	FACTOR 1X	
Factor X Assay	U/ML	X8030	FACTOR X	
Factor XI Assay	U/ML	X8035	FACTOR X1	
Factor XII Assay	U/ML	X8040	FACTOR X11	
Factor XIII Activity:	IU/mL	X8045	FACTOR XIII	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Factor II
ISS Code	W150
ISS Test Name	FACTOR II Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor II	Female	181 Days	3800 Days	0.84	1.32	U/ml	15/07/2022
Factor II	Male	181 Days	3800 Days	0.84	1.32	U/ml	15/07/2022

Reference Ranges

Test	Factor IX
ISS Code	W157
ISS Test Name	FACTOR IX Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor IX Assay	Female	0 Days	1 Days	0.15	0.91	U/ML	23/02/2022
Factor IX Assay	Female	2 Days	5 Days	0.15	0.91	U/ML	23/02/2022
Factor IX Assay	Female	6 Days	30 Days	0.21	0.81	U/ML	23/02/2022
Factor IX Assay	Female	31 Days	90 Days	0.21	1.13	U/ML	23/02/2022
Factor IX Assay	Female	91 Days	180 Days	0.36	1.36	U/ML	23/02/2022
Factor IX Assay	Female	181 Days	150 Days	0.69	1.57	U/ML	23/02/2022
Factor IX Assay	Male	0 Days	1 Days	0.15	0.91	U/ML	23/02/2022
Factor IX Assay	Male	2 Days	5 Days	0.15	0.91	U/ML	23/02/2022
Factor IX Assay	Male	6 Days	30 Days	0.21	0.81	U/ML	23/02/2022
Factor IX Assay	Male	31 Days	90 Days	0.21	1.13	U/ML	23/02/2022
Factor IX Assay	Male	91 Days	180 Days	0.36	1.36	U/ML	23/02/2022
Factor IX Assay	Male	181 Days	150 Days	0.69	1.57	U/ML	23/02/2022

Reference Ranges

Test	Factor V
ISS Code	W155
ISS Test Name	FACTOR V Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor V Assay	Female	0 Years	120 Years	0.66	1.26	U/ML	15/07/2022
Factor V Assay	Male	0 Years	120 Years	0.66	1.26	U/ML	15/07/2022

Reference Ranges

Test	Factor VII
ISS Code	W156
ISS Test Name	FACTOR VII Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor VII Assay	Female	0 Days	1 Days	0.28	1.04	U/ML	23/02/2022
Factor VII Assay	Female	2 Days	5 Days	0.35	1.43	U/ML	23/02/2022
Factor VII Assay	Female	6 Days	30 Days	0.42	1.38	U/ML	23/02/2022
Factor VII Assay	Female	31 Days	90 Days	0.39	1.43	U/ML	23/02/2022
Factor VII Assay	Female	91 Days	180 Days	0.47	1.27	U/ML	23/02/2022
Factor VII Assay	Female	181 Days	150 Days	0.61	1.57	U/ML	23/02/2022
Factor VII Assay	Male	0 Days	1 Days	0.28	1.04	U/ML	23/02/2022
Factor VII Assay	Male	2 Days	5 Days	0.35	1.43	U/ML	23/02/2022
Factor VII Assay	Male	6 Days	30 Days	0.42	1.38	U/ML	23/02/2022
Factor VII Assay	Male	31 Days	90 Days	0.39	1.43	U/ML	23/02/2022
Factor VII Assay	Male	91 Days	180 Days	0.47	1.27	U/ML	23/02/2022
Factor VII Assay	Male	181 Days	150 Days	0.61	1.57	U/ML	23/02/2022

Reference Ranges

Test	Factor XI
ISS Code	W159
ISS Test Name	FACTOR XI Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor XI Assay	Female	0 Days	1 Days	0.1	0.66	U/ML	23/02/2022
Factor XI Assay	Female	2 Days	5 Days	0.23	0.87	U/ML	23/02/2022
Factor XI Assay	Female	6 Days	30 Days	0.27	0.79	U/ML	23/02/2022
Factor XI Assay	Female	31 Days	90 Days	0.41	0.97	U/ML	23/02/2022
Factor XI Assay	Female	91 Days	180 Days	0.49	1.34	U/ML	23/02/2022
Factor XI Assay	Female	181 Days	150 Days	0.67	1.69	U/ML	23/02/2022
Factor XI Assay	Male	0 Days	1 Days	0.1	0.66	U/ML	23/02/2022
Factor XI Assay	Male	2 Days	5 Days	0.23	0.87	U/ML	23/02/2022
Factor XI Assay	Male	6 Days	30 Days	0.27	0.79	U/ML	23/02/2022
Factor XI Assay	Male	31 Days	90 Days	0.41	0.97	U/ML	23/02/2022
Factor XI Assay	Male	91 Days	180 Days	0.49	1.34	U/ML	23/02/2022
Factor XI Assay	Male	181 Days	150 Days	0.67	1.69	U/ML	23/02/2022

Reference Ranges

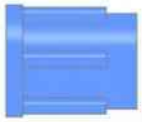
Test	Factor XII
ISS Code	W160
ISS Test Name	FACTOR XII Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor XII Assay	Female	0 Days	1 Days	0.13	0.93	U/ML	22/02/2022
Factor XII Assay	Female	2 Days	5 Days	0.11	0.83	U/ML	22/02/2022
Factor XII Assay	Female	6 Days	30 Days	0.17	0.81	U/ML	22/02/2022
Factor XII Assay	Female	31 Days	90 Days	0.25	1.09	U/ML	22/02/2022
Factor XII Assay	Female	91 Days	180 Days	0.39	1.15	U/ML	22/02/2022
Factor XII Assay	Female	181 Days	150 Days	0.5	1.61	U/ML	22/02/2022
Factor XII Assay	Male	0 Days	1 Days	0.13	0.93	U/ML	22/02/2022
Factor XII Assay	Male	2 Days	5 Days	0.11	0.83	U/ML	22/02/2022
Factor XII Assay	Male	6 Days	30 Days	0.17	0.81	U/ML	22/02/2022
Factor XII Assay	Male	31 Days	90 Days	0.25	1.09	U/ML	22/02/2022
Factor XII Assay	Male	91 Days	180 Days	0.39	1.15	U/ML	22/02/2022
Factor XII Assay	Male	181 Days	150 Days	0.5	1.61	U/ML	22/02/2022

Reference Ranges

Test	Factor XIII
ISS Code	W161
ISS Test Name	FACTOR XIII Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor XIII Activity:	Female	0 Years	110 Years	0.59	1.63	IU/mL	01/01/2019
Factor XIII Activity:	Male	0 Years	110 Years	0.59	1.63	IU/mL	01/01/2019

Test Panel	**Factor V Leiden**		
Synonyms			
Abbreviation		*Lab Test Code*	W510
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	2 Weeks
Investigation Comments	Only done via referral to Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

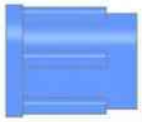
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Factor V Leiden Screen (APC-R)		W0545	FV LEID	
Referred Test :		W4321	Referred Test	
Factor V Leiden defect		X0545	FACTOR V LEIDEN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Factor V Leiden
ISS Code	W510
ISS Test Name	FV LEIDEN Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor V Leiden Screen (APC-R)	Female	0 Years	110 Years	2.32	5.07		01/11/2018
Factor V Leiden Screen (APC-R)	Male	0 Years	110 Years	2.32	5.07		01/11/2018

Test Panel	**Factor VIII Complex**		
Synonyms			
Abbreviation		*Lab Test Code*	W203
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	2 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Factor VIII (chromogenic)	IU/mL	X8010	FACTOR V111C	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Faecal Elastase**		
Synonyms			
Abbreviation		*Lab Test Code*	W530
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	For the investigation and monitoring of exocrine pancreatic insufficiency.		
Availability	Routine hours only (sent away)		
Specimen	Faeces	*Volume Required*	Minimum 10g
Requirements			
Containers	 Faeces		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

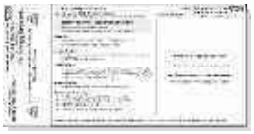
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Faecal Elastase :	ugEl/g stool	W3100	F. ELASTASE :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

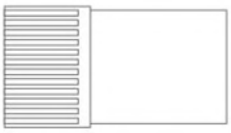
Reference Ranges

Test	Faecal Elastase
ISS Code	W530
ISS Test Name	F. ELASTASE RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Faecal Elastase :	Female	0 Years	110 Years	>200		ugEl/g stool	03/03/2011
Faecal Elastase :	Male	0 Years	110 Years	>200		ugEl/g stool	03/03/2011

Test Panel	**Faecal Occult Blood (FOB)**			
Synonyms				
Abbreviation	FOB	*Lab Test Code*	C999	
Department	Clinical Biochemistry			
Clinical Contact	Clinical Biochemist			
Contact	01302 642870	*Turnaround Time*	24 hours	
Investigation Comments	Test only available for paediatric cases			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	Walnut size piece, do not overfill container	
Requirements				
Containers	 SST			
	Walnut size piece, do not overfill container			
Request Forms	 Pathology Combined			
Transport				
Storage notes	Send to the laboratory on day of collection.			
Stability	12 - 28°C (Ambient Temperature)			
Long Term	Minus 20°C			
Comments				
Platform				

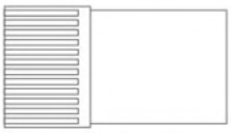
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site					

Test Panel	**Faecal Parasites**		
Synonyms			
Abbreviation		*Lab Test Code*	M820
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	A microscopical method for Ova, cysts and parasite identification.		
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	
Requirements	Please include clinical symptoms and any history of travel or exposure.		
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

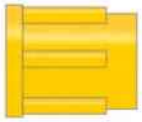
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		M7021	FAEC TH	
CONCENTRATED OCP		M7250	OCP	
CRYPTOSPORIDIUM CYSTS OCP MEASUREMENT	um	M7260 M7270	CRYPTOCON OCP MEASUREMENT	

Site	

Test Panel	**Faeces Microscopy & Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M721
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	
Requirements	Please include clinical symptoms and any history of travel or exposure.		
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	CRYPTO QC PASSED?		M0105	CRYPTO QC	
	ZN STAIN		M0560	ZN	
	WET FILM		M7000	WET	
	CRYPTOSPORIDIUM		M7005	CRYPTO	

Site	

Test Panel	**Farmers Lung Precipitins**		
Synonyms			
Abbreviation		*Lab Test Code*	W460
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

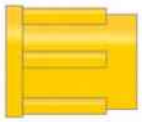
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
M.Faenii:	mg/L	W6216	M.Faeni :	
A.Fumigatus:		W6217	A.Fumigatus :	
T.Vulgaris:	mg/L	W6218	T.Vulgaris :	
Farmers Lung pptns:		W6219	FL pptns :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Farmers Lung Precipitins
ISS Code	W460
ISS Test Name	FARMERS LUNG P RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
M.Faenii:	Female	0 Years	115 Years	0	60	mg/L	09/11/2012
M.Faenii:	Male	0 Years	115 Years	0	60	mg/L	09/11/2012
T.Vulgaris:	Female	0 Years	60 Years	0	60	mg/L	09/11/2012
T.Vulgaris:	Male	0 Years	60 Years	0	60	mg/L	09/11/2012

Test Panel	**Ferritin**			
Synonyms				
Abbreviation		*Lab Test Code*	Y018	
Department	Clinical Biochemistry			
Clinical Contact	Consultant Haematologist			
Contact	01302 642843	*Turnaround Time*	24 hours	
Investigation Comments	Stored iron represents about 25% of total iron in the body and most of this is stored as ferritin. Ferritin plays a significant role in the absorption, storage and release of iron. Ferritin is found in serum in low concentrations and is directly proportional			
Availability	Routine hours & On Call			
Specimen	Venous Blood	*Volume Required*	1ml	
Requirements				
Containers	 SST			
	Must be filled to the blue line on the side of the tube			
Request Forms	 Pathology Combined			
Transport	Refer to Short Term Stability			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform	Abbott Architect			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Ferritin	ug/L	Y0021	ABBOTT Ferritin	
Site					

Reference Ranges

Test	Ferritin
ISS Code	Y018
ISS Test Name	SERUM FERRITIN
Ref Range Comments	

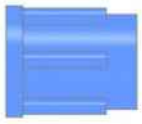
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Ferritin	Female	0 Years	110 Years	10	204	ug/L	01/10/2011
Ferritin	Male	0 Years	110 Years	22	275	ug/L	01/10/2011

Test Panel	**Feto-Maternal Haemorrhage Screen (Kleihauer)**		
Synonyms	Kleihauer		
Abbreviation		*Lab Test Code*	J700
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	See comments
Requirements			
Containers	 EDTA X-Match  EDTA		
	Minimum volume 1 x 2ml Pink and 1 x 2ml Lavender maternal in addition at delivery 1 x 2ml pink and 1 x 2ml lavender cord		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
KLEIHAUER		J7000	KLEIHAUER	
Kleihauer Positive Control		J7001	Kleihauer Pos Control	
Kleihauer Negative Control		J7002	Kleihauer Neg Control	

Site	

Test Panel	**Fibrinogen**		
Synonyms			
Abbreviation		*Lab Test Code*	X030
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments	Used to detect or assist in monitoring bleeding tendency. Will also be requested by lab staff as appropriate if abnormality suspected.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

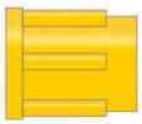
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Fibrinogen	g/L	X0030	FIBRINOGEN LEVEL	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Fibrinogen
ISS Code	X030
ISS Test Name	FIBRINOGEN LEVEL
Ref Range Comments	

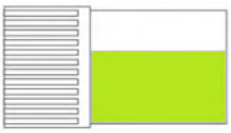
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Fibrinogen	Female	0 Days	30 Days	1.36	3	g/L	01/06/2019
Fibrinogen	Female	30 Days	150 Days	1.41	4.37	g/L	01/06/2019
Fibrinogen	Female	150 Days	365 Days	1.48	3.67	g/L	01/06/2019
Fibrinogen	Female	1 Years	5 Years	1.64	4.97	g/L	01/06/2019
Fibrinogen	Female	6 Years	10 Years	1.71	5.37	g/L	01/06/2019
Fibrinogen	Female	11 Years	17 Years	1.68	5.29	g/L	01/06/2019
Fibrinogen	Female	17 Years	110 Years	1.5	4.5	g/L	01/06/2019
Fibrinogen	Male	0 Days	30 Days	1.36	3	g/L	01/06/2019
Fibrinogen	Male	30 Days	150 Days	1.41	4.37	g/L	01/06/2019
Fibrinogen	Male	150 Days	365 Days	1.48	3.67	g/L	01/06/2019
Fibrinogen	Male	1 Years	5 Years	1.64	4.97	g/L	01/06/2019
Fibrinogen	Male	6 Years	10 Years	1.71	5.37	g/L	01/06/2019
Fibrinogen	Male	11 Years	17 Years	1.68	5.29	g/L	01/06/2019
Fibrinogen	Male	17 Years	110 Years	1.5	4.5	g/L	01/06/2019

Test Panel	**Filaria**		
Synonyms			
Abbreviation		*Lab Test Code*	V470
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Include clinical symptoms and any history of travel or occupational exposure. Discuss with Microbiologist.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Filaria Elisa		V4513	Filaria Elisa	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

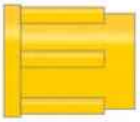
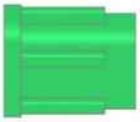
Test Panel	**Fine Needle Aspiration Cytology**		
Synonyms	Non Gynae Cytology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.		
Availability	Monday – Friday (9am - 5pm), except bank holidays. Specimen(s) should be received at DRI Histopathology before 3pm for same day processing.		
Specimen	Aspirated Tissue Sample	*Volume Required*	Less than 20ml
Requirements	• Sample(s) received in a universal containing cytospin collection fluid and labelled with patient identifiers. Clinic prepared slides to contain 3 patient identifiers and be placed in a slide mailer box.		
Containers	 Sterile Universal		
Request Forms	 Histology WPR2583		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A Non gynae cytology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Sample(s) received in a universal containing cytospin collection fluid, labelled with patient identifiers. • Request form with corresponding patient identifiers, named clinician, sample site and relevan clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. All high risk specimens should be clearly marked 'Danger of infection' on both form and pot. Unsuitable for frozen section or DIF		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	Choose an item.				

Test Panel	**FK506 Tacrolimus**		
Synonyms			
Abbreviation		*Lab Test Code*	W857
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	FK506 :	ug/L	W6060	FK506 Result :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Flecanide**		
Synonyms			
Abbreviation		*Lab Test Code*	W545C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 SST  Heparin		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Flecanide :	ug/L	W0031	Flecanide :	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Flecanide
ISS Code	W545C
ISS Test Name	Flecanide Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Flecanide :	Female	0 Years	115 Years	200	700	ug/L	20/05/1999
Flecanide :	Male	0 Years	115 Years	200	700	ug/L	20/05/1999

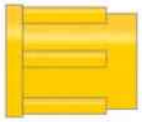
Test Panel	**Fluid - non gynae cytology: Ascites, pleural, peritoneal, pericardial, washings**		
Synonyms	Non Gynae Cytology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.		
Availability	Monday – Friday (9am - 5pm), except bank holidays. Specimen(s) should be received at DRI Histopathology before 3pm for same day processing.		
Specimen	Fluid	*Volume Required*	Less than 20ml
Requirements	Sample(s) received in a universal and labelled with patient identifiers.		
Containers	 Universal		
Request Forms	 Histology WPR2583		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A Non gynae cytology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Sample(s) received in a universal, labelled with patient identifiers. • Request form with corresponding patient identifiers, sample site, named clinician and relevant clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. Less than 20ml. If a larger volume has been collected, please decant a 20ml sample for cytology investigations. Unsuitable for frozen section or DIF		
Platform	Choose an item.		
Tests in Panel	*Literal* *Unit* *Lab Code* *Lab Name* *Lab Comment*		
Site	Choose an item.		

Test Panel	**Fluid Analysis**		
Synonyms			
Abbreviation		*Lab Test Code*	C725
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Includes – Creatinine, Urea, Sodium, Potassium, Chloride, Bicarbonate, Total Protein, Albumin, Globulin, Glucose, Amylase, Urate, pH		
Availability	Routine hours only		
Specimen	Fluid	*Volume Required*	2ml
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Spec. Name		C1980	SP.NAM	
F.Creatinine	umol/l	C1985	F.CR	
F.Urea	mmol/L	C1990	F.U	
F.Sodium	mmol/L	C1995	F.NA	
F.Potassium	mmol/L	C2300	F.K	
F. Cl	mmol/L	C2305	F.CL	
F. Bicarb	mmol/L	C2310	F.HCO3	
F.Tot. Prot	g/L	C2315	F.TPRO	
F. Albumin	g/L	C2320	F.ALB	
F. Globulin	g/L	C2325	F.GLOB	
F. Glucose	mmol/L	C2330	F.Glu	
F.Amylase	U/L	C2335	F.AMY	
F.Urate	umol/L	C2340	F.URATE	
Fluid pH		C2341	F. pH	

Site	

Test Panel	**Folate**		
Synonyms	Serum Folate		
Abbreviation		*Lab Test Code*	Y017
Department	Clinical Biochemistry		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Light Sensitive Test - Minimise Exposure		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

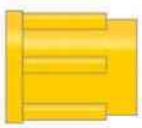
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index		C1026	HI	
Folic Acid Assay	ug/L	Y0022	ABBOTT Folate	

Site	

Reference Ranges

Test	Folate
ISS Code	Y017
ISS Test Name	SERUM FOLATE
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Folic Acid Assay	Female	0 Years	110 Years	3.1	20.5	ug/L	01/10/2011
Folic Acid Assay	Male	0 Years	110 Years	3.1	20.5	ug/L	01/10/2011
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000

Test Panel	**Follicle Stimulating Hormone**		
Synonyms			
Abbreviation	FSH	*Lab Test Code*	C202
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the assessment of ovarian failure (menopause), pituitary dysfunction and infertility. Levels vary through menstrual cycle. Sample blood between days 2-7 of the cycle (follicular phase) Most informative on day 3 of cycle. Levels vary through menstrual cycle.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.15ml
Requirements	Levels vary through menstrual cycle. Sample blood between days 2-7 of the cycle (follicular phase)		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Follicle-stimulating hormone	IU/L	C1272	ABBOTT FSH	

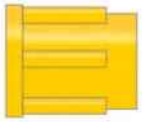
Site	Choose an item.

Test Panel	**FOQ Referral - Antenatal**		
Synonyms			
Abbreviation		*Lab Test Code*	H994
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 EDTA		
Request Forms	 Antenatal		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C Samples over 24hrs unsuitable for testing		
Comments			
Platform	Sysmex		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
MCH	pg	H0025	MEAN CELL HAEMOGLOBIN	
Screen Declined ?		H9901	SCREEN DECLINED	
Consorts Hosp No		H9903	Consorts Reg	
Consorts name		H9904	Consorts name	
Corsorts Address		H9905	Consorts Address	
		H9906	Consort Addrress2	
Consorts Postcode		H9907	Consorts Postcode	
Consorts D.O.B.		H9908	Consorts DOB	
MCH Screen :		H9909	MCH Screen.	

Site	

Test Panel	**Free Light Chains**		
Synonyms	Serum Free Kappa and Lambda Light Chains		
Abbreviation		*Lab Test Code*	W783
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

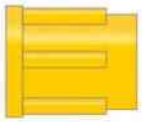
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Free kappa	mg/L	W8801	Free kappa	
Free lambda	mg/L	W8802	Free lambda	
kappa/lambda ratio		W8803	K/L RATIO	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Free Light Chains
ISS Code	W783
ISS Test Name	Serum Free Light Chains Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Free kappa	Female	20 Years	115 Years	3.3	19.4	mg/L	01/01/2011
Free kappa	Male	20 Years	115 Years	3.3	19.4	mg/L	01/01/2011
Free lambda	Female	20 Years	115 Years	5.7	26.3	mg/L	01/01/2011
Free lambda	Male	20 Years	115 Years	5.7	26.3	mg/L	01/01/2011
kappa/lambda ratio	Female	20 Years	115 Years	0.26	1.65		01/01/2011
kappa/lambda ratio	Male	20 Years	115 Years	0.26	1.65		01/01/2011

Test Panel	**Free T3**		
Synonyms			
Abbreviation	FT3	*Lab Test Code*	C157
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Free T3 measurement is of no value in the diagnosis of hypothyroidism. However, it is useful when investigating T3 Thyrotoxicosis		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Thyroid Stimulating Hormone	mU/L	C1242	ABBOTT TSH	
Free T4	pmol/L	C1247	ABBOTT FT4	
Thyroid Therapy		C1249	Thyroid Therapy	
Free T3	pmol/L	C1252	ABBOTT FT3	

Site	

Reference Ranges

Test	Free T3
ISS Code	C157
ISS Test Name	FT3
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Free T3	Female	0 Days	4 Days			pmol/L	07/10/2021
Free T3	Female	4 Days	365 Days	3.56	7.48	pmol/L	07/10/2021
Free T3	Female	1 Years	12 Years	4.29	6.79	pmol/L	07/10/2021
Free T3	Female	12 Years	15 Years	3.84	6.06	pmol/L	07/10/2021
Free T3	Female	15 Years	19 Years	3.55	5.7	pmol/L	07/10/2021
Free T3	Female	19 Years	110 Years	2.6	5.7	pmol/L	07/10/2021
Free T3	Male	0 Days	4 Days			pmol/L	07/10/2021
Free T3	Male	4 Days	365 Days	3.56	7.48	pmol/L	07/10/2021
Free T3	Male	1 Years	12 Years	4.29	6.79	pmol/L	07/10/2021
Free T3	Male	12 Years	15 Years	4.44	6.65	pmol/L	07/10/2021
Free T3	Male	15 Years	19 Years	3.46	5.92	pmol/L	07/10/2021
Free T3	Male	19 Years	110 Years	2.6	5.7	pmol/L	07/10/2021
Free T4	Female	0 Days	5 Days			pmol/L	07/10/2021
Free T4	Female	5 Days	14 Days	13.5	41.3	pmol/L	07/10/2021
Free T4	Female	15 Days	29 Days	8.7	32.5	pmol/L	07/10/2021
Free T4	Female	30 Days	365 Days	11.4	21.9	pmol/L	07/10/2021
Free T4	Female	1 Years	110 Years	9	19	pmol/L	07/10/2021
Free T4	Male	0 Days	5 Days			pmol/L	07/10/2021
Free T4	Male	5 Days	14 Days	13.5	41.3	pmol/L	07/10/2021
Free T4	Male	15 Days	29 Days	8.7	32.5	pmol/L	07/10/2021
Free T4	Male	30 Days	365 Days	11.4	21.9	pmol/L	07/10/2021
Free T4	Male	1 Years	110 Years	9	19	pmol/L	07/10/2021
Thyroid Stimulating Hormone	Female	0 Days	4 Days			mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	4 Days	182 Days	0.73	4.77	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	183 Days	5113 Days	0.7	4.17	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	5114 Days	6939 Days	0.47	3.41	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	19 Years	110 Years	0.35	4.94	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	0 Days	4 Days			mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	4 Days	182 Days	0.73	4.77	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	183 Days	5113 Days	0.7	4.17	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	5114 Days	6939 Days	0.47	3.41	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	19 Years	110 Years	0.35	4.94	mU/L	07/10/2021

Test Panel	**Fresh Frozen Plasma Issue**		
Synonyms			
Abbreviation	FFP	*Lab Test Code*	J334
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Blood group must have been established, if not Group & Save must be sent. Consultant Haematologist approval only, unless massive haemorrhage protocol activated.		
Availability	Routine hours & On Call		
Specimen		*Volume Required*	2ml
Requirements			
Containers	 EDTA X-Match		
	Minimum 2ml		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
COMPATIBILITY TEST		J0005	COMPATIBILITY	
UNIT NUMBER - FFP		J1300	UNIT NUMBER (F)	
PRODUCT - FFP		J1301	PRODUCT F	
UNIT GROUP - FFP		J1302	UNIT GROUP F	
FRACTION NUMBER - FFP		J1303	FRACTION NUMBER F	
FFP ISSUE		J1304	FFP ISSUE	

Site	

Test Panel	**Frozen section**		
Synonyms	Histology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Core hours only. Frozen sections should be pre-booked. Please contact Histology secretary on 01302 642843		
Specimen	Fresh tissue biopsy	*Volume Required*	
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Histology WPR2583		
Transport			
Storage notes	Refer to Short Term Stability	*Sample must be sent to the laboratory without delay*	
Stability	Send to laboratory immediately		
Long Term	Not Possible		

Comments

A lack of patient or sample information may result in the laboratory not conducting the analysis / examination.

A histology request will only be processed once the following acceptance criteria are met:

- A minimum of 3 patient identifiers on pot(s) and form. To include:
  - o Full name (forename & surname)
  - o DOB
  - o Address
  - o NHS/ District number
- Sample(s) received in a sterile universal, labelled with patient identifiers.

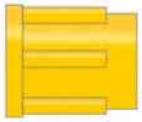
- Request form with corresponding patient identifiers, named clinician, sample site and relevant clinical details.

- For a multi-part case:

If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots.

All high risk specimens should be clearly marked 'Danger of infection' on both form and pot.

Platform	Choose an item.				
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	Choose an item.				

Test Panel	**Fructosamine**		
Synonyms			
Abbreviation		*Lab Test Code*	W245R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Fructosamine	umol/L	W2559	Fructosamine	
Predicted HbA1c	mmol/mol	W2565	Predicted HbA1c	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Fructosamine
ISS Code	W264
ISS Test Name	Fructosamine Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Fructosamine	Female	16 Years	150 Years	151	300	umol/L	14/02/2019
Fructosamine	Male	16 Years	150 Years	151	300	umol/L	14/02/2019

Test Panel	**Full Blood Count**		
Synonyms			
Abbreviation	FBC	*Lab Test Code*	H005 / H110
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Includes automated White Blood Cell Differential		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Please Include Clinical Details with Request.		
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform	Sysmex		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemoglobin	g/L.	H0001	HAEMOGLOBIN.	
WBC	x 10*9/L	H0006	WHITE CELL COUNT	
RBC	x 10*12/L	H0010	RED CELL COUNT	
Haematocrit	.	H0015	HAEMATOCRIT	
MCV	fL	H0020	MEAN CELL VOLUME	
MCH	pg	H0025	MEAN CELL HAEMOGLOBIN	
MCHC	g/L	H0030	MEAN CELL HAEM.CONC.	
Platelets	x 10*9/L	H0035	PLATELETS	
RDW	%	H0040	RDW	
Neut	x 10*9/L	H0100	NEUTROPHILS	
Lymph	x 10*9/L	H0105	LYMPHOCYTES	
Mono	x 10*9/L	H0110	MONOCYTES	
Eosin	x 10*9/L	H0115	EOSINOPHILS	
Baso	x 10*9/L	H0120	BASOPHILS	

Site	

Reference Ranges

Test	Full Blood Count
ISS Code	H005
ISS Test Name	FBC
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Haematocrit	Female	0 Days	7 Days	0.53	0.67	.	12/03/1996
Haematocrit	Female	7 Days	90 Days	0.45	0.65	.	12/03/1996
Haematocrit	Female	90 Days	366 Days	0.3	0.36	.	12/03/1996
Haematocrit	Female	1 Years	3 Years	0.37	0.41	.	12/03/1996
Haematocrit	Female	3 Years	6 Years	0.34	0.4	.	12/03/1996
Haematocrit	Female	6 Years	10 Years	0.35	0.41	.	12/03/1996
Haematocrit	Female	10 Years	12 Years	0.36	0.42	.	12/03/1996
Haematocrit	Female	12 Years	115 Years	0.37	0.47	.	12/03/1996
Haematocrit	Male	0 Days	7 Days	0.53	0.67	.	12/03/1996
Haematocrit	Male	7 Days	90 Days	0.45	0.65	.	12/03/1996
Haematocrit	Male	90 Days	366 Days	0.3	0.36	.	12/03/1996
Haematocrit	Male	1 Years	3 Years	0.37	0.41	.	12/03/1996
Haematocrit	Male	3 Years	6 Years	0.34	0.4	.	12/03/1996
Haematocrit	Male	6 Years	10 Years	0.34	0.4	.	12/03/1996
Haematocrit	Male	10 Years	12 Years	0.36	0.42	.	12/03/1996
Haematocrit	Male	12 Years	115 Years	0.42	0.52	.	12/03/1996
Haemoglobin	Female	0 Days	6 Days	162	206	g/L.	29/04/2013
Haemoglobin	Female	6 Days	90 Days	154	204	g/L.	29/04/2013
Haemoglobin	Female	3 Months	12 Months	108	118	g/L.	29/04/2013
Haemoglobin	Female	1 Years	3 Years	113	123	g/L.	29/04/2013
Haemoglobin	Female	3 Years	6 Years	117	137	g/L.	29/04/2013
Haemoglobin	Female	6 Years	10 Years	117	137	g/L.	29/04/2013
Haemoglobin	Female	10 Years	12 Years	122	142	g/L.	29/04/2013
Haemoglobin	Female	12 Years	115 Years	115	160	g/L.	29/04/2013
Haemoglobin	Female (Pregnant)	10 Years	12 Years	122	142	g/L.	29/04/2013
Haemoglobin	Female (Pregnant)	12 Years	115 Years	122	160	g/L.	29/04/2013
Haemoglobin	Male	0 Days	6 Days	162	206	g/L.	29/04/2013
Haemoglobin	Male	6 Days	90 Days	154	204	g/L.	29/04/2013
Haemoglobin	Male	3 Months	12 Months	108	118	g/L.	29/04/2013
Haemoglobin	Male	1 Years	3 Years	113	123	g/L.	29/04/2013
Haemoglobin	Male	3 Years	6 Years	117	137	g/L.	29/04/2013
Haemoglobin	Male	6 Years	10 Years	120	135	g/L.	29/04/2013
Haemoglobin	Male	10 Years	12 Years	122	142	g/L.	29/04/2013
Haemoglobin	Male	12 Years	115 Years	126	180	g/L.	29/04/2013
MCHC	Female	0 Days	7 Days	340	380	g/L	29/04/2013
MCHC	Female	7 Days	90 Days	330	370	g/L	29/04/2013
MCHC	Female	90 Days	366 Days	300	360	g/L	29/04/2013
MCHC	Female	1 Years	3 Years	290	350	g/L	29/04/2013
MCHC	Female	3 Years	6 Years	310	350	g/L	29/04/2013
MCHC	Female	6 Years	10 Years	310	350	g/L	29/04/2013
MCHC	Female	10 Years	12 Years	310	350	g/L	29/04/2013

MCHC	Female	12 Years	115 Years	310	350	g/L	29/04/2013
MCHC	Male	0 Days	7 Days	340	380	g/L	29/04/2013
MCHC	Male	7 Days	90 Days	330	370	g/L	29/04/2013
MCHC	Male	90 Days	366 Days	300	360	g/L	29/04/2013
MCHC	Male	1 Years	3 Years	290	350	g/L	29/04/2013
MCHC	Male	3 Years	6 Years	310	350	g/L	29/04/2013
MCHC	Male	6 Years	10 Years	310	350	g/L	29/04/2013
MCHC	Male	10 Years	12 Years	310	350	g/L	29/04/2013
MCHC	Male	12 Years	115 Years	310	350	g/L	29/04/2013
MCH	Female	0 Days	7 Days	31	39	pg	10/01/1996
MCH	Female	7 Days	90 Days	28.5	36.5	pg	10/01/1996
MCH	Female	90 Days	366 Days	24	34	pg	10/01/1996
MCH	Female	1 Years	3 Years	23	31	pg	10/01/1996
MCH	Female	3 Years	6 Years	24	30	pg	10/01/1996
MCH	Female	6 Years	10 Years	24	30	pg	10/01/1996
MCH	Female	10 Years	12 Years	24	30	pg	10/01/1996
MCH	Female	12 Years	115 Years	27	32	pg	10/01/1996
MCH	Male	0 Days	7 Days	31	39	pg	10/01/1996
MCH	Male	7 Days	90 Days	28.5	36.5	pg	10/01/1996
MCH	Male	90 Days	366 Days	24	34	pg	10/01/1996
MCH	Male	1 Years	3 Years	23	31	pg	10/01/1996
MCH	Male	3 Years	6 Years	24	30	pg	10/01/1996
MCH	Male	6 Years	10 Years	24	30	pg	10/01/1996
MCH	Male	10 Years	12 Years	24	30	pg	10/01/1996
MCH	Male	12 Years	115 Years	27	32	pg	10/01/1996
MCV	Female	0 Days	7 Days	99	117	fL	03/03/2001
MCV	Female	7 Days	90 Days	88	110	fL	03/03/2001
MCV	Female	90 Days	366 Days	80	96	fL	03/03/2001
MCV	Female	1 Years	3 Years	70	86	fL	03/03/2001
MCV	Female	3 Years	6 Years	79	95	fL	03/03/2001
MCV	Female	6 Years	10 Years	78	94	fL	03/03/2001
MCV	Female	10 Years	12 Years	77	93	fL	03/03/2001
MCV	Female	12 Years	115 Years	78	100	fL	03/03/2001
MCV	Male	0 Days	7 Days	99	117	fL	03/03/2001
MCV	Male	7 Days	90 Days	88	110	fL	03/03/2001
MCV	Male	90 Days	366 Days	80	96	fL	03/03/2001
MCV	Male	1 Years	3 Years	70	86	fL	03/03/2001
MCV	Male	3 Years	6 Years	79	95	fL	03/03/2001
MCV	Male	6 Years	10 Years	77	94	fL	03/03/2001
MCV	Male	10 Years	12 Years	78	96	fL	03/03/2001
MCV	Male	12 Years	115 Years	78	100	fL	03/03/2001
Platelets	Female	0 Years	115 Years	140	450	x 10*9/L	04/04/2014
Platelets	Male	0 Years	115 Years	140	450	x 10*9/L	04/04/2014
RDW	Female	1 Years	115 Years	11	16	%	10/01/1996
RDW	Female (Pregnant)	1 Years	115 Years	11	16	%	10/01/1996
RDW	Male	1 Years	115 Years	11	16	%	10/01/1996
RBC	Female	0 Days	7 Days	4.1	6.1	x 10*12/L	10/01/1996

RBC	Female	7 Days	90 Days	4.1	6.1	x 10*12/L	10/01/1996
RBC	Female	90 Days	366 Days	3.9	5.2	x 10*12/L	10/01/1996
RBC	Female	1 Years	3 Years	3.9	5.4	x 10*12/L	10/01/1996
RBC	Female	3 Years	6 Years	3.9	5.4	x 10*12/L	10/01/1996
RBC	Female	6 Years	10 Years	4	5.3	x 10*12/L	10/01/1996
RBC	Female	10 Years	12 Years	4.1	5.3	x 10*12/L	10/01/1996
RBC	Female	12 Years	115 Years	4.2	5.4	x 10*12/L	10/01/1996
RBC	Male	0 Days	7 Days	4.1	6.1	x 10*12/L	10/01/1996
RBC	Male	7 Days	90 Days	4.1	6.1	x 10*12/L	10/01/1996
RBC	Male	90 Days	366 Days	3.9	5.2	x 10*12/L	10/01/1996
RBC	Male	1 Years	3 Years	3.9	5.3	x 10*12/L	10/01/1996
RBC	Male	3 Years	6 Years	3.9	5.4	x 10*12/L	10/01/1996
RBC	Male	6 Years	10 Years	4	5.3	x 10*12/L	10/01/1996
RBC	Male	10 Years	12 Years	4.1	5.3	x 10*12/L	10/01/1996
RBC	Male	12 Years	115 Years	4.4	6	x 10*12/L	10/01/1996
WBC	Female	0 Days	7 Days	9	30	x 10*9/L	10/01/1996
WBC	Female	7 Days	90 Days	5	21	x 10*9/L	10/01/1996
WBC	Female	90 Days	366 Days	6	15	x 10*9/L	10/01/1996
WBC	Female	1 Years	3 Years	6	15	x 10*9/L	10/01/1996
WBC	Female	3 Years	6 Years	5	12	x 10*9/L	10/01/1996
WBC	Female	6 Years	10 Years	5	12	x 10*9/L	10/01/1996
WBC	Female	10 Years	12 Years	5	12	x 10*9/L	10/01/1996
WBC	Female	12 Years	115 Years	4	12	x 10*9/L	10/01/1996
WBC	Female (Pregnant)	1 Years	115 Years	4	18	x 10*9/L	10/01/1996
WBC	Male	0 Days	7 Days	9	30	x 10*9/L	10/01/1996
WBC	Male	7 Days	90 Days	5	21	x 10*9/L	10/01/1996
WBC	Male	90 Days	366 Days	6	15	x 10*9/L	10/01/1996
WBC	Male	1 Years	3 Years	5	12	x 10*9/L	10/01/1996
WBC	Male	3 Years	6 Years	5	12	x 10*9/L	10/01/1996
WBC	Male	6 Years	10 Years	5	12	x 10*9/L	10/01/1996
WBC	Male	10 Years	12 Years	5	12	x 10*9/L	10/01/1996
WBC	Male	12 Years	115 Years	4	12	x 10*9/L	10/01/1996

Reference Ranges

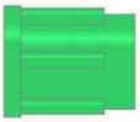
Test	FBC - Automated Differential
ISS Code	H110
ISS Test Name	AUTO.DIFF
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Baso	Female	0 Days	7 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Female	7 Days	90 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Female	90 Days	366 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Female	1 Years	3 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	3 Years	6 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	6 Years	10 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	10 Years	12 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Female	12 Years	115 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	0 Days	7 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Male	7 Days	90 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Male	90 Days	366 Days	0	0.1	x 10*9/L	10/01/1996
Baso	Male	1 Years	3 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	3 Years	6 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	6 Years	10 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	10 Years	12 Years	0	0.1	x 10*9/L	10/01/1996
Baso	Male	12 Years	115 Years	0	0.1	x 10*9/L	10/01/1996
Eosin	Female	0 Days	7 Days	0.2	0.9	x 10*9/L	10/01/1996
Eosin	Female	7 Days	90 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	90 Days	366 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	1 Years	3 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	3 Years	6 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	6 Years	10 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	10 Years	12 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Female	12 Years	115 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	0 Days	7 Days	0.2	0.9	x 10*9/L	10/01/1996
Eosin	Male	7 Days	90 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	90 Days	366 Days	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	1 Years	3 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	3 Years	6 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	6 Years	10 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	10 Years	12 Years	0.01	0.7	x 10*9/L	10/01/1996
Eosin	Male	12 Years	115 Years	0.01	0.7	x 10*9/L	10/01/1996
Lymph	Female	0 Days	7 Days	2.7	11	x 10*9/L	10/01/1996
Lymph	Female	7 Days	90 Days	2	17	x 10*9/L	10/01/1996
Lymph	Female	90 Days	366 Days	4	12	x 10*9/L	10/01/1996
Lymph	Female	1 Years	3 Years	5	10	x 10*9/L	10/01/1996
Lymph	Female	3 Years	6 Years	5.5	8	x 10*9/L	10/01/1996
Lymph	Female	6 Years	10 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Female	10 Years	12 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Female	12 Years	115 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Male	0 Days	7 Days	2.7	11	x 10*9/L	10/01/1996
Lymph	Male	7 Days	90 Days	2	17	x 10*9/L	10/01/1996

Lymph	Male	90 Days	366 Days	4	12	x 10*9/L	10/01/1996
Lymph	Male	1 Years	3 Years	5	10	x 10*9/L	10/01/1996
Lymph	Male	3 Years	6 Years	5.5	8	x 10*9/L	10/01/1996
Lymph	Male	6 Years	10 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Male	10 Years	12 Years	1.5	4	x 10*9/L	10/01/1996
Lymph	Male	12 Years	115 Years	1.5	4	x 10*9/L	10/01/1996
Mono	Female	0 Days	7 Days	0.4	3.1	x 10*9/L	10/01/1996
Mono	Female	7 Days	90 Days	0.3	2.7	x 10*9/L	10/01/1996
Mono	Female	90 Days	366 Days	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	1 Years	3 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	3 Years	6 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	6 Years	10 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	10 Years	12 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Female	12 Years	115 Years	0.2	0.95	x 10*9/L	10/01/1996
Mono	Male	0 Days	7 Days	0.4	3.1	x 10*9/L	10/01/1996
Mono	Male	7 Days	90 Days	0.3	2.7	x 10*9/L	10/01/1996
Mono	Male	90 Days	366 Days	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	1 Years	3 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	3 Years	6 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	6 Years	10 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	10 Years	12 Years	0.2	1.5	x 10*9/L	10/01/1996
Mono	Male	12 Years	115 Years	0.2	0.95	x 10*9/L	10/01/1996
Neut	Female	0 Days	7 Days	4.5	13.2	x 10*9/L	10/01/1996
Neut	Female	7 Days	90 Days	1.5	10	x 10*9/L	10/01/1996
Neut	Female	90 Days	366 Days	1.5	7	x 10*9/L	10/01/1996
Neut	Female	1 Years	3 Years	1.5	7	x 10*9/L	10/01/1996
Neut	Female	3 Years	6 Years	2	6	x 10*9/L	10/01/1996
Neut	Female	6 Years	10 Years	2	6	x 10*9/L	10/01/1996
Neut	Female	10 Years	12 Years	2	6	x 10*9/L	10/01/1996
Neut	Female	12 Years	115 Years	2	7.5	x 10*9/L	10/01/1996
Neut	Male	0 Days	7 Days	4.5	13.2	x 10*9/L	10/01/1996
Neut	Male	7 Days	90 Days	1.5	10	x 10*9/L	10/01/1996
Neut	Male	90 Days	366 Days	1.5	7	x 10*9/L	10/01/1996
Neut	Male	1 Years	3 Years	1.5	7	x 10*9/L	10/01/1996
Neut	Male	3 Years	6 Years	2	6	x 10*9/L	10/01/1996
Neut	Male	6 Years	10 Years	2	6	x 10*9/L	10/01/1996
Neut	Male	10 Years	12 Years	2	6	x 10*9/L	10/01/1996
Neut	Male	12 Years	115 Years	2	7.5	x 10*9/L	10/01/1996

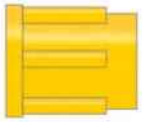
Test Panel	**Full HLA Type**		
Synonyms			
Abbreviation		*Lab Test Code*	J812
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Consultant Referral Required - sent to NHSBT		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 EDTA X-Match	 EDTA	
Request Forms	 Blood Bank & NHSBT		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Galactosaemia Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	C585
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	This screening test is used to screen for a rare genetic metabolic disorder affecting carbohydrate metabolism. Test not valid if patient transfused within the last 3 months - please contact the laboratory for further advice on alternative tests.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Heparin		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Galactose-1-Phosphate Uridyl Transferase		C8585	GALACTOSAEMIA	

Site	

Test Panel	**Gamma Glutamyl Transferase**		
Synonyms	Gamma GT		
Abbreviation	GGT	*Lab Test Code*	C132
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

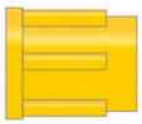
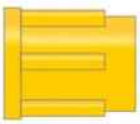
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Alk.Phos :	IU/L	C1067	ABBOTT ALP	
GGT	U/L	C1075	GGT	

Site	

Reference Ranges

Test	Gamma Glutamyl Transferase
ISS Code	C132
ISS Test Name	GGT
Ref Range Comments	

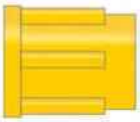
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Alk.Phos :	Female	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Female	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Female	16 Years	110 Years	30	130	IU/L	01/11/2011
Alk.Phos :	Male	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Male	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Male	16 Years	110 Years	30	130	IU/L	01/11/2011
GGT	Female	0 Years	115 Years	9	36	U/L	12/12/2011
GGT	Male	0 Years	115 Years	12	64	U/L	12/12/2011

Test Panel	**Gentamicin Assay**		
Synonyms			
Abbreviation		*Lab Test Code*	M876
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Please provide dosing information. Assays with incomplete dosing and specimen details may be rejected.		
Availability	Available 7 days per week between the hours of 08:00 and 20:00. Requests outside this time frame must be discussed with Consultant Microbiologists.		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST 		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

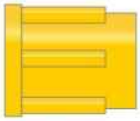
Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Dosage Frequency		M0027	DOSAGE FREQUENCY	
Dosage Given	mg/l	M0028	DOSAGE GIVEN	
Dose (Pre or Post):		M0062	Dose.	
FILED BY MICRO BMS		M0076	FILED BY MICRO	
Received full details?		M0096	DETAILS RECEIVED	
Dosing Regimen:		M8555	DOSE REGIMEN	
Gentamicin	mg/L	M8556	GLEVEL	
Date of sample collection:		M8560	DATE COLLECTED	
Time of last dose:		M8571	DOSE G	
Time of sample collection:		M8572	SAMPLE G	
Date of last dose:		M8573	Date of last infusion	

Site	

Test Panel	**Glandular Fever Test**		
Synonyms			
Abbreviation		*Lab Test Code*	H015
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Will also be requested by lab staff as indicated by other results - Reported as Positive/Negative/Equivocal		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Should be requested in Conjunction with FBC		
Containers	 EDTA  SST		
	EDTA or SST tubes can be used		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Sysmex		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Glandular Fever Test		Y0005	GLANDULAR FEVER TEST	
	Will also be requested by lab staff as indicated by other results - Reported as Positive/Negative/Equivocal				
Site					

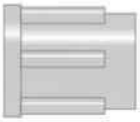
Test Panel	Glomerular Basement Membrane Antibodies Quantitative		
Synonyms			
Abbreviation	GBM	*Lab Test Code*	W434R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Rapidly progressive Glomerulonephritis and Goodpasture's syndrome		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Positive results to be sent to reference labs for confirmation and level		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal Result= Negative		
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Glom.Base Membrane		C3070	GBM	
Site					

Reference Ranges

Test	Glomerular Basement Membrane Antibodies Quantitative
ISS Code	W434R
ISS Test Name	Quantitative GBM Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Glom Basement Membrane	Female	0 Years	120 Years	0	7	U/mL	01/01/2014
Glom Basement Membrane	Male	0 Years	120 Years	0	7	U/mL	01/01/2014

Test Panel	**5 hr Glucose Tolerance Test**		
Synonyms			
Abbreviation	5GTT	*Lab Test Code*	E675
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the assessment of glycaemic control.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 Fluoride Oxalate	 Fluoride Oxalate	
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Sample disposed of after 24 hrs		
Comments			
Platform	Abbott Architect		

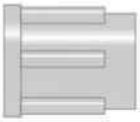
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Glucose	mmol/L	C1045	GLUCOSE	
	S.TIME		C1600	STIM	

Site	

Reference Ranges

Test	5 hr Glucose Tolerance Test
ISS Code	E675
ISS Test Name	Extended Glucose Tolerance Test
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Glucose	Female	0 Years	16 Years	3.3	6	mmol/L	12/12/2011
Glucose	Female	16 Years	115 Years	3.3	6	mmol/L	12/12/2011
Glucose	Male	0 Years	16 Years	3.3	6	mmol/L	12/12/2011
Glucose	Male	16 Years	115 Years	3.3	6	mmol/L	12/12/2011

Test Panel	**Glucose Tolerance Test**		
Synonyms			
Abbreviation		*Lab Test Code*	E002
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the assessment of glycaemic control.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 Fluoride Oxalate	 Fluoride Oxalate	
	2 x fluoride Oxalate containers required		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Sample disposed of after 24 hrs		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Fasting Glucose	mmol/L	E1977	FASTING GLU	
120 Min Glucose :	mmol/L	E1978	120MIN GLU :	

Site	

Reference Ranges

Test	Glucose Tolerance Test
ISS Code	E002
ISS Test Name	2GTT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Fasting Glucose	Female	0 Years	115 Years	3.3	6	mmol/L	01/02/2011
Fasting Glucose	Male	0 Years	115 Years	3.3	6	mmol/L	01/02/2011

Test Panel	**Glucose**		
Synonyms			
Abbreviation		*Lab Test Code*	C105
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the assessment of glycaemic control		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Fluoride Oxalate		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Glucose	mmol/L	C1045	GLUCOSE	
Site					

Reference Ranges

Test	Glucose
ISS Code	C105
ISS Test Name	GLUCOSE
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Glucose	Female	0 Years	16 Years	3.3	6	mmol/L	12/12/2011
Glucose	Female	16 Years	115 Years	3.3	6	mmol/L	12/12/2011
Glucose	Male	0 Years	16 Years	3.3	6	mmol/L	12/12/2011
Glucose	Male	16 Years	115 Years	3.3	6	mmol/L	12/12/2011

Test Panel	**Glucose-6-Phosphate Dehydrogenase**		
Synonyms			
Abbreviation	G6PD	*Lab Test Code*	W330
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

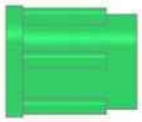
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	G6PD		W6601	G6PD :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Glucose-6-Phosphate Dehydrogenase
ISS Code	W330
ISS Test Name	Glucose-6-Phosphate Dehydrogenase Result
Ref Range Comments	

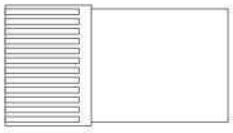
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
G6PD	Female	0 Years	1 Years	4.5	10		03/03/2011
G6PD	Male	0 Years	1 Years	4.5	10		03/03/2011

Test Panel	**Glycogen Storage Disorders**		
Synonyms			
Abbreviation		*Lab Test Code*	W849R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Contact referral lab before sending any specimens Includes Glucose-6-Phosphatase and other enzymes Take sample on ice, keep upright at all times. Must arrive at referral lab within 3 hours of collection.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Heparin		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	On ICE		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		W0085	GLYSTOR1	
		W0086	GLYSTOR2	
		W0087	GLYSTOR3	
		W0088	GLYSTOR4	
		W0089	GLYSTOR5	
		W0090	GLYSTOR6	
		W0091	GLYSTOR7	
		W0092	GLYSTOR8	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Glycosaminoglycans, GAGs (Urine)		
Synonyms	GAGs		
Abbreviation		*Lab Test Code*	C722
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	This is a screening test. Samples will be referred for confirmatory testing, if required. Performed as part of the metabolic screen (urine), to screen for mucopolysacchidoses.		
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	10ml
Requirements	Samples should be sent to the laboratory on the day of collection.		
Containers	 24hr Urine		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Camspec M550		
Tests in Panel			
Site	In-House Test (DRI)		

Test Panel	**Gonorrhoea Culture**		
Synonyms			
Abbreviation	GC	*Lab Test Code*	M380A
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Charcoal Transport Swab	*Volume Required*	
Requirements	Please refer to Special Instructions sheet on following page for this test.		
Containers	 Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
MALDI ID		M0071	MALDI ID	
MALDI VALUE		M0072	MALDI VALUE	
PHADEBACT:		M0095	PHADEBACT	
OXIDASE		M1230	OXIDASE	
Gram		M1236	GRAM2	
CLED		M1245	CLED	
API NH		M1255	API NH	
E-Test		M1260	E-TEST	
B-lactamase		M1265	BLACT	
Culture Result:		M1317	NGN	
Isolate 1		M8100	MISOLATE1	

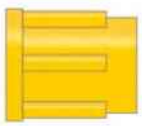
Site	

Test Panel	**Group B Streptococcus Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	M301A
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Charcoal Transport Swab	*Volume Required*	
Requirements			
Containers	 Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
MALDI ID		M0071	MALDI ID	
MALDI VALUE		M0072	MALDI VALUE	
Culture Result:		M1321	BHS	
Isolate 1		M8100	MISOLATE1	
Isolate 2		M8120	ISOLATE2	

Site	

Test Panel	**Growth Hormone**		
Synonyms			
Abbreviation		*Lab Test Code*	E825
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	This test is used as part of an evaluation of pituitary function. A random GH result is can be difficult to interpret as levels vary throughout the day and many factors are known to influence GH secretion. Suggest measure growth hormone only as part of DFTs.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Diasorin Liaison XL		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Growth Hormone (ug/L)	ug/L	C1311	Growth Hormone (ug/L)	

Site	

Test Panel	**GUM GC Identification**		
Synonyms			
Abbreviation		*Lab Test Code*	M385A
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	This method is for in-house identification of Neisseria gonorrhoea following an initial screening test.		
Availability	Routine hours only		
Specimen	Swab	*Volume Required*	
Requirements	Charcoal Transport swab or plates pre cultured by GUM		
Containers	 Swab 		
	Plates arrive pre cultured by GUM		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
MALDI ID		M0071	MALDI ID	
MALDI VALUE		M0072	MALDI VALUE	
PHADEBACT:		M0095	PHADEBACT	
OXIDASE		M1230	OXIDASE	
Gram		M1236	GRAM2	
CLED		M1245	CLED	
API NH		M1255	API NH	
E-Test		M1260	E-TEST	
B-lactamase		M1265	BLACT	
Positive sites:		M2011	SITE POSITIVE	
VITEK/API NUMBER		M2548	VITEK	
Isolate 1		M8100	MISOLATE1	

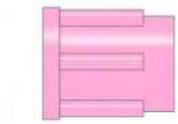
Site	

Test Panel	**GUM Microscopy and Culture**		
Synonyms	GUM GC Culture		
Abbreviation	GUM GC Culture	*Lab Test Code*	M335D
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	This method is only for the GUM department for the isolation of Neisseria gonorrhoea and Candida.		
Availability	Routine hours only		
Specimen	Charcoal Transport Swab	*Volume Required*	
Requirements	Charcoal Transport swab or plates pre cultured by GUM		
Containers	 Swab 		
	Plates arrive pre cultured by GUM		
Request Forms	 Pathology Combined		
	This method is only for GUM patients. When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
MALDI ID		M0071	MALDI ID	
MALDI VALUE		M0072	MALDI VALUE	
PHADEBACT:		M0095	PHADEBACT	
URETHRAL:		M1350	UR	
CERVICAL:		M1360	CX	
THROAT:		M1370	TSGC	
RECTAL:		M1380	RECGC	
OTHER:		M1390	OTHERGC	
SITE		M1400	GC SITE	
VAGINAL:		M1405	VAG	
SUB PREP:		M1410	SUB PREP	

Site	

Test Panel	Gut Hormone Screen		
Synonyms			
Abbreviation		*Lab Test Code*	W745A
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Fasting sample only. Calcium and U&E required for interpretation		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Send sample on ice. Contact lab before sending.		
Containers	 Preferred Pink EDTA  EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Transport on Ice - Up to 10 minutes		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

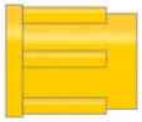
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
VIP :	pmol/L	W1452	VIP :	
PP :	pmol/L	W1453	PP :	
Glucagon :	pmol/L	W1455	Glucagon :	
Gastrin :	pmol/L	W1544	Gastrin :	
Somatostatin :	pmol/L	W1547	Somatostatin :	
Chromogranin A :	pmol/L	W1548	Chrom. A :	
Chromogranin B :	pmol/L	W1549	Chrom. B :	
CART:	pmol/L	W1550	CART	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Gut Hormone Screen
ISS Code	W745A
ISS Test Name	Gut Hormone Screen Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CART:	Female	0 Years	115 Years		<85	pmol/L	02/01/2012
CART:	Male	0 Years	115 Years		<85	pmol/L	02/01/2012
Chromogranin A :	Female	0 Years	110 Years	0	60	pmol/L	03/03/2011
Chromogranin A :	Male	0 Years	110 Years	0	60	pmol/L	03/03/2011
Chromogranin B :	Female	0 Years	110 Years	0	150	pmol/L	03/03/2011
Chromogranin B :	Male	0 Years	110 Years	0	150	pmol/L	03/03/2011
Gastrin :	Female	0 Years	110 Years	0	40	pmol/L	03/03/2011
Gastrin :	Male	0 Years	110 Years	0	40	pmol/L	03/03/2011
Glucagon :	Female	0 Years	110 Years	0	50	pmol/L	03/03/2011
Glucagon :	Male	0 Years	110 Years	0	50	pmol/L	03/03/2011
PP :	Female	0 Years	110 Years	0	300	pmol/L	03/03/2011
PP :	Male	0 Years	110 Years	0	300	pmol/L	03/03/2011
Somatostatin :	Female	0 Years	110 Years	0	150	pmol/L	03/03/2011
Somatostatin :	Male	0 Years	110 Years	0	150	pmol/L	03/03/2011
VIP :	Female	0 Years	110 Years	0	30	pmol/L	03/03/2011
VIP :	Male	0 Years	110 Years	0	30	pmol/L	03/03/2011

Test Panel	**Haemoglobin A1c**		
Synonyms			
Abbreviation	HbA1c	*Lab Test Code*	C130
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Follow NSF guidance on using HbA1c to monitor diabetes.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1.2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Tosoh		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	HbA1c (IFCC)	mmol/mol	C1052	HbA1c (IFCC)	

Site	

Reference Ranges

Test	Haemoglobin A1c
ISS Code	C130
ISS Test Name	HBA1C
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
HbA1c (IFCC)	Female	0 Years	110 Years	20	41	mmol/mol	27/10/2015
HbA1c (IFCC)	Male	0 Years	110 Years	20	41	mmol/mol	27/10/2015

Test Panel	Haemoglobinopathy Screening		
Synonyms			
Abbreviation		*Lab Test Code*	W051
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Choose an item.		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Haemoglobin F	%	Y0035	HAEMOGLOBIN F	
Haemoglobin A2	%	Y0040	HAEMOGLOBIN A2	
Haemoglobin Electrophoresis		Y0045	HB ELECTROPHORESIS	
Haemoglobin Structure		Y0050	HB STRUCTURE	
Zinc Protoporphyrin	umol/molHb	Y0055	ZINC PROTOPORPHYRIN.	
Sickle Test for Haemoglobin S		Y0060	SICKLE TEST	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Haemoglobinopathy Screening
ISS Code	W051
ISS Test Name	Ante-Natal Haemoglobinopathy Screen Result
Ref Range Comments	

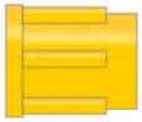
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Haemoglobin A2	Female	0 Years	110 Years	1.5	3.4	%	06/12/2006
Haemoglobin A2	Female (Pregnant)	0 Years	110 Years	1.5	3.4	%	06/12/2006
Haemoglobin A2	Male	0 Years	110 Years	1.5	3.4	%	06/12/2006
Haemoglobin F	Female	0 Years	110 Years	0	2.5	%	06/10/2006
Haemoglobin F	Female (Pregnant)	0 Years	110 Years	0	2.5	%	06/10/2006
Haemoglobin F	Male	0 Years	110 Years	0	2.5	%	06/10/2006
Zinc Protoporphyrin	Female	0 Years	120 Years	30	80	umol/molHb	01/01/2015
Zinc Protoporphyrin	Male	0 Years	120 Years	30	80	umol/molHb	01/01/2015

Test Panel	**Haemophilus Molecular Testing**		
Synonyms			
Abbreviation		*Lab Test Code*	V466
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	For detection of acute Haemophilus infection, including influenzae and ducreyi. Please discuss with Consultant Microbiologists.		
Availability	Routine hours only		
Specimen	Dry swab, CSF, NPA, EDTA or Fluid	*Volume Required*	1ml
Requirements			
Containers	 Viral Swab  Sterile Universal		
	Dry swab, CSF, NPA, EDTA or Fluid		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemophilus influenzae DNA		V4265	Haem influenzae PCR	
Haemophilus ducreyi specific DNA		V4278	Haemophilus ducreyi DNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

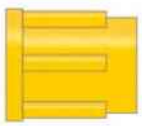
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Haemophilus Vaccine Response**		
Synonyms			
Abbreviation		*Lab Test Code*	V443
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	This test is used for measuring immunity against Haemophilus.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemophilus antibody:	ug/ml	V6771	HIBAB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Haptoglobin**		
Synonyms			
Abbreviation		*Lab Test Code*	C625
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Decreased levels in patients with normal liver function is likely to be due to an inacrease in intravascular haemolysis. Levels may also be low in liver disease. Haptoglobin is an acute phase protein and may be elevated due to inflammation or infection.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Haptoglobin	g/L	C4035	HAPTOGLOBIN	
Site					

Reference Ranges

Test	Haptoglobin
ISS Code	C625
ISS Test Name	Haptoglobin
Ref Range Comments	

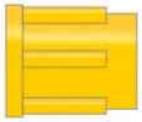
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Haptoglobin	Female	0 Years	115 Years	0.4	1.6	g/L	12/12/2011
Haptoglobin	Male	0 Years	115 Years	0.5	2	g/L	12/12/2011

Test Panel	**Helicobacter Pylori Antigen**		
Synonyms			
Abbreviation		*Lab Test Code*	V995
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Method for detection of Helicobacter pylori antigen in faeces.		
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	
Requirements			
Containers	 Faeces		
	Faeces		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Kit Lot No. :		V0032	MYCO BATCH	
QC passed?		V0063	QC PASSED	
Test performed by:		V0262	TEST PERFORMED BY	
Value		V0289	HPYS VALUE	
O.D.:		V0657	HIV OD	
Cut Off:		V0658	HIV CO	
H.pylori stool antigen		V6763	HPYF	

Site	

Test Panel	**Heparin Induced Thrombocytopenia Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	W505
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
	Samples must be sent to laboratory upon collection		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Send to laboratory immediately		
Long Term	Not Possible		
Comments			
Platform			

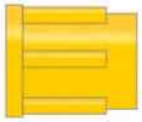
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	HIT IgG	U/ml	X5001	HIT IgG	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	HIT Screen
ISS Code	W505
ISS Test Name	HIT SCREEN Result
Ref Range Comments	

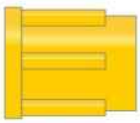
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
HIT IgG	Female	0 Years	120 Years	0	1	U/ml	01/10/2014
HIT IgG	Male	0 Years	120 Years	0	1	U/ml	01/10/2014

Test Panel	**Hepatitis A IgG (immunity check)**		
Synonyms			
Abbreviation	Hep A	*Lab Test Code*	V140B
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Test for past exposure to or immunisation against Hepatitis A.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hepatitis A Total Antibody :		V0119	HAV Total Ab	
Vidas Test Value		V6708	HAVTotOD	
Lot No.		V6709	HAVTotLot	

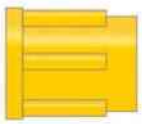
Site	

Test Panel	Hepatitis A IgM (screening assay)		
Synonyms			
Abbreviation	Hep A	*Lab Test Code*	V130B
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Part of acute Hepatitis investigation screen looking for serological evidence of acute Hepatitis A infection.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		V0250	VIR LAB NOTES	
Hepatitis A IgM antibody :		V6657	HAVM AB	
Vidas Test Value		V6658	HAVM VALUE	
Lot No.		V6659	HAVM LOT	

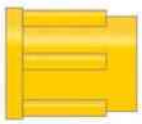
Site	Choose an item.

Test Panel	**Hepatitis B Antibody (post Vaccination)**		
Synonyms			
Abbreviation		*Lab Test Code*	V150D
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Should be tested 6-8 weeks after final dose of Hepatitis B vaccination. Please give vaccination history to allow interpretation.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hepatitis B surface ANTIBODY :		V1520	HEPBAB	
OD :		V1521	HEP B AB OD	
HBsAb level :	mIU/mL	V1522	HBSAB IU/ML	

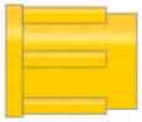
Site	

Test Panel	**Hepatitis B Confirmation**		
Synonyms			
Abbreviation	HbsAg	*Lab Test Code*	V091
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Only used for serological confirmation of Hepatitis B infection, following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hepatitis B surface antigen:		V0149	HBSAG REF	
Hepatitis B core IgM Antibody:		V0151	HEP B CORE IGM	
Hepatitis B surface antigen (2) :		V0152	HBSAG REF2	
Hepatitis B Status		V0153	HEP B STATUS	
Hepatitis B e Antibody:		V0155	HEP B E AB	
Hepatitis B e Antigen:		V0156	HEP B E AG	
Hep B Total Core Antibody		V0161	HBTCAB	
Hep B s Antigen Neutralisation		V0162	HBSAGN	
Hep B e Antigen Index		V0163	HBEAGI	
Hep B e Antibody Index		V0164	HBEABI	
Hep B surface Antigen sorin		V0165	HBSAGS	
		V0166	HB EXT 1	
		V0167	HB EXT 2	
			HBSAG (2)	
HBsAg (2) Quantification	IU/ML	V0179	QUANTIFICATION	
Date result received		V0181	DR2	
Reference Lab No		V0184	RN2	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

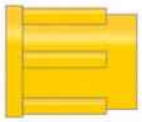
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Hepatitis B Core Antibody**		
Synonyms			
Abbreviation	HbcAg	*Lab Test Code*	V104C
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	72 Hours
Investigation Comments	A marker for current or past Hepatitis B infection		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hepatitis B core Total Antibody (Anti-HBc) :		V0135	HBcAb	
Vidas Test Value :		V0136	HBcAb TV	
Lot No. :		V0137	HBcAb LOT	

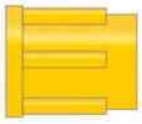
Site	

Test Panel	**Hepatitis B Surface Antigen (screening test)**		
Synonyms			
Abbreviation	HbSAg	*Lab Test Code*	V090
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	art of acute Hepatitis investigation screen Hepatitis B surface antigen tested as screen in acute or chronic infection. Hepatitis B core antibody, Hepatitis e antigen/antibody and Viral Load tested dependent on results and clinical history		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hepatitis B Surface Antigen (HBsAg)		V0112	HBsAg	
		V0250	VIR LAB NOTES OD HBSAG	
O.D. :		V0805	SCREEN C/O HBSAG	
Cut Off :		V0905	SCREEN	

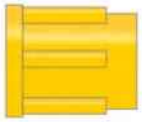
Site	

Test Panel	**Hepatitis B Viral Load PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V474
Department	Virology		
Clinical Contact	01142 266477		
Contact	01142 266477	*Turnaround Time*	4 Weeks
Investigation Comments	Molecular detection and quantification of Hepatitis B Virus. Only tested on Hepatitis B positive patients.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
	Please send EDTA if the sample is from a medical professional.		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Sample referred to external source		
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be refrigerated.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hep B DNA		V0157	HBD	
HBV Quantification Log	LOG IU/ML	V0159	HBVQL	
Date result received		V0181	DR2	
Reference Lab No		V0184	RN2	
HBV PCR Lower Detection Limit	IU/ml	V0247	HBVLDL	
HBV Quantification Number	IU/ML	V1158	HBQUANT	

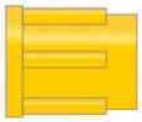
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Hepatitis C Antibody (screening test)**		
Synonyms			
Abbreviation		*Lab Test Code*	V110A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Result:		V0111	HCV	
		V0191	HCV TEST KIT	
		V0250	VIR LAB NOTES	
O.D. :		V0803	OD HCV SCREEN	
Cut Off :		V0904	C/O HCV EIA RPT	

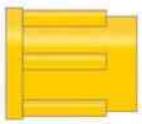
Site	

Test Panel	**Hepatitis C Confirmation**		
Synonyms			
Abbreviation		*Lab Test Code*	V117A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Only used for serological confirmation of Hepatitis C infection, following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hep C Antibody		V0240	Hep C Antibody	
HCV Antibody (Bio Rad)		V0244	HCABBIO	
HCV Antigen/Antibody		V0249	HCV AG/AB	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
Date result received		V6832	CDRE	
Reference Lab No.		V6833	CRLN	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

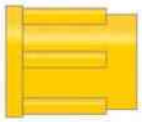
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Hepatitis C Genotyping and Subtyping**		
Synonyms			
Abbreviation		*Lab Test Code*	V477
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Molecular identification of Hepatitis C Virus Genotype . Only tested on Hepatitis C positive patients with a quantifiable viral load.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HCV genotyping/subtyping: Type		V6820	HCGEN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
Date result received		V6832	CDRE	
Reference Lab No.		V6833	CRLN	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

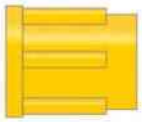
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Hepatitis C Polymorphism**		
Synonyms			
Abbreviation		*Lab Test Code*	V491
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Molecular method for Mutation detection in Hepatitis C infection. Please discuss with Consultants at Sheffield Virology Services before requesting.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST  EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HCV NS3 Q80K polymorphism:		V4994	HCV NS3 Q80K POLY	
Q80K polymorphism		V4995	Q80K POLY	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
Date result received		V6832	CDRE	
Reference Lab No.		V6833	CRLN	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

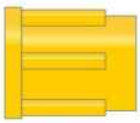
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Hepatitis C Viral Load PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V476
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Molecular detection and quantification of Hepatitis C Virus. Only tested on Hepatitis C positive patients.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hep C RNA			V0241	HCRNA
HCV Quantification Number	IU/ml		V0242	HCQNUM
HCV Quantification Log	Log IU/ml		V0243	HCQLOG
HCV PCR Lower Detection Limit	IU/ml		V0245	HCVLDL
HCV RNA quantitation	HCV RNA IU/ml		V0248	HCRQNUM
HCV RNA quantitation:			V6815	HCQN
REF LAB DATE REC			V6825	REF LAB DATE RECEIVED
Date result received			V6832	CDRE
Reference Lab No.			V6833	CRLN
REF LAB DATE REPORTED			V6835	REF LAB DATE REPORTED
Referred Test :			W4321	Referred Test

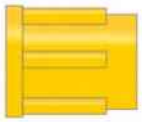
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Hepatitis D		
Synonyms			
Abbreviation		*Lab Test Code*	V460
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Serolological and molecular methods for screening for and monitoring Hepatitis D (delta) infection. Testing available for Hepatitis B positive patients only.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hepatitis D RNA		V4224	Hepatitis D virus RNA	
ANTI - HDV		V4425	ANTI-HDV	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Hepatitis E**		
Synonyms			
Abbreviation		*Lab Test Code*	V459
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Test for past exposure to (or immunity against) Hepatitis E or acute infection. If pregnant, test can be carried out on the booking sample if available. Please contact virology at DRI to discuss.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hepatitis E IgG Antibody		V4222	HEP E IgG ANTIBODY	
Hepatitis E IgM Antibody		V4223	HEP E IGM AB	
Hepatitis E RNA		V4264	HEP E RNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Hereditary Spherocytosis Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	W334
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

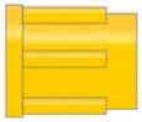
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Hereditary Spherocytosis Screen		W0128	HEREDITARY SPHEROCYTOSIS	
	Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Hereditary Spherocytosis Screen
ISS Code	W334
ISS Test Name	HEREDITARY SPHEROCYTOSIS SCREEN Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Hereditary Spherocytosis Screen	Female	0 Years	115 Years	4.5	10		03/03/2011
Hereditary Spherocytosis Screen	Male	0 Years	115 Years	4.5	10		03/03/2011

Test Panel	**Herpes Group Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V410
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Include clinical details or the test may not be processed.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Anti - HSV - 1 IgG		V4152	HSV1	
Anti - HSV - 2 IgG		V4153	HSV2	
Anti - HSV - IgG		V4154	AHSV	
Anti - HSV - 1 IgM		V4163	Anti HSV-1 IgM	
Anti - HSV - 2 IgM		V4164	Anti HSV -2 IgM	
Anti - HSV - IgM		V4165	Anti HSV IgM	
HSV type 1 IgG		V4311	HSV 1	
HSV type 2 IgG		V4312	HSV 2	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Herpes PCR**		
Synonyms	HSV		
Abbreviation		*Lab Test Code*	V493 (In-House) V438 (Referred)
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Week
Investigation Comments			
Availability	Routine hours only		
Specimen	CSF, Whole Blood, Viral Swab	*Volume Required*	1ml (Sample type Dependant)
Requirements			
Containers	 EDTA  Universal		
	 Viral Swab		
	CSF, Venous blood, Fluid, or Viral Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HSV PCR Result:		V1005	HSV PCR RESULT	
Herpes Simplex PCR DNA		V4120	HSVPCR	
HHV6 DNA:		V4187	HHV6 DNA	
HHV8 DNA:		V4188	HHV8	

Site	This test is processed In-house or referred to an external centre depending on sample type, contact the laboratory if further details of external centre required

Test Panel	**HFE Gene Analysis**		
Synonyms	Haemochromatosis Gene		
Abbreviation	HFE	*Lab Test Code*	W499B
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	2 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
RESULT SUMMARY		Y4331	SUMMARY	
H63D PCR		Y4332	H63D	
C282Y PCR		Y4333	C282Y	

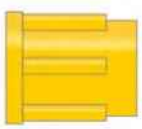
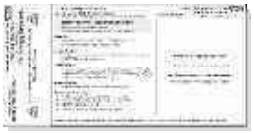
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**High Vaginal Swab**		
Synonyms			
Abbreviation		*Lab Test Code*	M300A
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	If GBS screen required please state on request form		
Availability	Routine hours only		
Specimen	Charcoal Transport Swab	*Volume Required*	
Requirements			
Containers	 Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
MALDI ID		M0071	MALDI ID	
MALDI VALUE		M0072	MALDI VALUE	
		M0080	LAB COMMENTS	
Culture Result:		M0097	Bacterial Culture	
GBS Screen:		M0111	GBS SCREEN	
Trichomonas vaginalis		M1301	TVAG	
Bacterial Vaginosis:		M1302	BV	
Metronidazole		M1303	BVCOMM	
Workflow comment:		M2008	WORKFLOW COMMENT	
Y for complete S for extra sens :		M6200	REPCOM1	
Not isolated:		M6205	REPCOMM2	
Isolate 1		M8100	MISOLATE1	
Isolate 2		M8120	ISOLATE2	
Isolate 3		M8140	MISOLATE3	

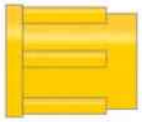
Site	

Test Panel	**Anti Histone Antibodies**		
Synonyms	Histone Ab		
Abbreviation		*Lab Test Code*	W712R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Systemic lupus erythematosus (SLE), drug induced SLE (DIL)		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Assay does not mean antibody concentration but antibody activity. This can be affected by a number of parameters such as antibody avidity		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Assay does not mean antibody concentration but antibody activity. This can be affected by a number of parameters such as antibody avidity		
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Histone Antibodies :	U/mL	W7122	Histone Ab :	

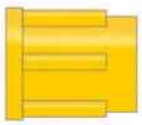
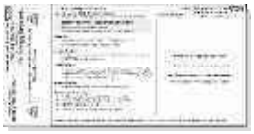
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HIV Avidity**		
Synonyms			
Abbreviation		*Lab Test Code*	V488
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Used as part of HIV confirmation panel to help confirm diagnosis.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	For diagnosing length of HIV infection.		
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HIV Avidity Index	%	V1032	HIV Avidity Index	
HIV LAg-Avidity EIA		V1034	HIVLAG	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	

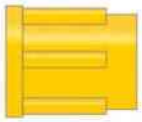
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HIV Combined AbAg (screening test)**		
Synonyms			
Abbreviation		*Lab Test Code*	V120D
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	72 Hours
Investigation Comments	This is a screening assay for seroligical evidence of HIV infection.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Patient consent essential, pre-test counselling may be arranged with GUM. Can be tested urgently if required, following discussion with Microbiologist.		
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		V0250	VIR LAB NOTES	
O.D.:		V0657	HIV OD	
Cut Off:		V0658	HIV CO	
HIV 1+2 Antibody/ Antigen:		V2501	HIV	

Site	

Test Panel	**HIV Confirmation**		
Synonyms			
Abbreviation		*Lab Test Code*	V462
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Only used for serological confirmation of HIV infection following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date result received		V0982	DR3	
Reference Lab No		V0984	RN3	
HIV Antigen/Antibody Screen		V1024	HIVS	
HIV 1 + 2 Antibody		V1028	HIV12	
HIV Ab by Line Immunoassay		V1029	HIVLINE	
HIV Antigen/Antibody Screen (2)		V1031	HIVAGAB2	
HIV Antigen/Antibody Screen (3)		V1036	HIV AGAB3	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

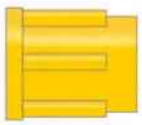
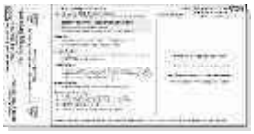
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HIV Genotypic Resistance**		
Synonyms			
Abbreviation		*Lab Test Code*	V463
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	A molecular assay used for detecting resistance markers in Reteroviral positive patients. To be discussed with GUM / Virology prior to requesting		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample. To be discussed with GUM / Virology prior to requesting		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date result received		V0982	DR3	
Reference Lab No		V0984	RN3	
HIV Genotype Resistance test sent		V1033	HIV resistance test sent	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HIV Maternal Transmission Investigation**		
Synonyms			
Abbreviation		*Lab Test Code*	V135
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	EDTA for PCR, SST for serology. Please provide a separate request form and EDTA from mother for HIV primer investigation if applicable.		
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HIV Lower Detection Limit	IU/ml	V0246	HIVLDL	
Date result received		V0982	DR3	
Reference Lab No		V0984	RN3	
HIV Quantification Number	IU/ml	V1021	HIVQN	
HIV Quantification Log	Log IU/ml	V1022	HIVQL	
HIV Antigen/Antibody Screen		V1024	HIVS	
HIV Antigen/Antibody Screen		V1025	HIVSA	
HIV 1 + 2 Antibody		V1028	HIV12	
HIV Ab by Line Immunoassay		V1029	HIVLINE	
HIV 1 RNA:		V1030	HIV1RNA	
HIV Antigen/Antibody Screen (2)		V1031	HIVAGAB2	
ANTI - HIV 1		V4230	ANTI HIV 1	
ANTI - HIV 2		V4231	ANTI - HIV 2	
HIV-1 nucleic acid		V4235	HIV-1 nucleic acid	
Anti-HIV 1/2 + p24ag		V4236	AHIV1/2 INT	
HIV-1 proviral DNA		V4238	HIV PROVIRAL	

	REF LAB DATE REC	V6825	REF LAB DATE RECEIVED
	REF LAB DATE REPORTED	V6835	REF LAB DATE REPORTED
	Referred Test :	W4321	Referred Test
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**HIV Oral Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	V423
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Oral fluid testing has been validated only for chronic HIV infection screening. Clotted blood should be tested if acute infection or seroconversion is suspected.		
Availability	Routine hours only		
Specimen	Saliva Swab	*Volume Required*	1ml
Requirements	Request form must be signed and consent gained		
Containers	 Saliva Swab		
	Sample must be an ORASURE swab or similar		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HIV serology		V1015	HIV SEROLOGY	
HIV serology (2)		V1016	HIV SEROLOGY 2	
Total IgG	mg/L	V1017	Total IgG	
HIV serology (3)		V1018	HIV serology(3)	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HIV Tropism Investigation**		
Synonyms			
Abbreviation		*Lab Test Code*	V478
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Contact laboratory to arrange immediate transportation to Reference laboratory. This should only be requested from GUM or following discussion with Sheffield Virology Services.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Must be received by laboratory within 4 hours so that the sample can be prepared.		
Containers	 EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Refer to Short Term Stability		
Storage notes	Must be received by laboratory within 4 hours so that the sample can be prepared.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	HIV Tropism reported		V1035	HIV TROPISM	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HIV Viral Load**		
Synonyms			
Abbreviation		*Lab Test Code*	V461
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Contact laboratory to arrange immediate transportation to Reference laboratory.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Must be received by laboratory within 4 hours so that the sample can be prepared before forwarding to the reference laboratory. Please contact virology at DRI when sending a sample so to avoid rejection. Where possible please ensure samples are forwarde		
Containers	 EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HIV Lower Detection Limit	IU/ml	V0246	HIVLDL	
Date result received		V0982	DR3	
Reference Lab No		V0984	RN3	
HIV Quantification Number	IU/ml	V1021	HIVQN	
HIV Quantification Log	Log IU/ml	V1022	HIVQL	
HIV 1 RNA:		V1030	HIV1RNA	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HLA A29**			
Synonyms				
Abbreviation		*Lab Test Code*	J823	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	1 Week	
Investigation Comments	Sent to NHSBT			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*		
Requirements				
Containers	 EDTA X-Match		 EDTA	
Request Forms	 Blood Bank			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	4°C for 6 days			
Long Term	Not Possible			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HLA B5**		
Synonyms			
Abbreviation		*Lab Test Code*	J821
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Sent to NHSBT		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 EDTA X-Match	 EDTA	
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**HLA B17**		
Synonyms			
Abbreviation		*Lab Test Code*	J818
Department	Haematology		
Clinical Contact	Clinical Haematologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Sent to NHSBT		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	3ml
Requirements			
Containers	 EDTA X-Match  EDTA		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Samples sent to:		J8111	SENT TO:	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HLA B27**		
Synonyms			
Abbreviation		*Lab Test Code*	J811
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Sent to NHSBT		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 EDTA X-Match	 EDTA	
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**HLA B51**			
Synonyms				
Abbreviation		*Lab Test Code*	J817	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	1 Week	
Investigation Comments	Sent to NHSBT			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*		
Requirements				
Containers	 EDTA X-Match		 EDTA	
Request Forms	 Blood Bank			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	4°C for 6 days			
Long Term	Not Possible			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HLA B57**			
Synonyms				
Abbreviation		*Lab Test Code*	J815	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	1 Week	
Investigation Comments	Sent to NHSBT			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*		
Requirements				
Containers	 EDTA X-Match		 EDTA	
Request Forms	 Blood Bank			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	4°C for 6 days			
Long Term	Not Possible			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HLA Cw6**		
Synonyms			
Abbreviation		*Lab Test Code*	J819
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Sent to NHSBT		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	3ml
Requirements			
Containers	 EDTA X-Match  EDTA		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Samples sent to:		J8111	SENT TO:	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HLA DQ2 & DQ8**			
Synonyms				
Abbreviation		*Lab Test Code*	J814	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	1 Week	
Investigation Comments	Sent to NHSBT			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*		
Requirements				
Containers	 EDTA X-Match		 EDTA	
Request Forms	 Blood Bank			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	4°C for 6 days			
Long Term	Not Possible			
Comments				
Platform				

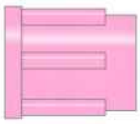
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**HLA DR4**			
Synonyms				
Abbreviation		*Lab Test Code*	J816	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	1 Week	
Investigation Comments	Sent to NHSBT			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*		
Requirements				
Containers	 EDTA X-Match		 EDTA	
Request Forms	 Blood Bank			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	4°C for 6 days			
Long Term	Not Possible			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Homocysteine		
Synonyms			
Abbreviation		*Lab Test Code*	W342
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used in the investigation of early CHD and stroke and in patients who have a family history of CHD or stroke but no other known risk factors. Can also be used to investigate folate and vitamin B12 deficiency and for the diagnosis and monitoring of homocysteine		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Patient must be fasted overnight. Samples must be separated within one hour of collection. Please inform lab before collection.		
Containers	 Preferred Pink EDTA  EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Separate within 1 hour of collection		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Homocysteine :	umol/L	W6499	NEWHOMCYS	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Homocysteine
ISS Code	W342
ISS Test Name	Homocysteine Result
Ref Range Comments	

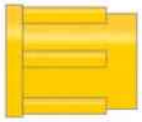
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Homocysteine :	Female	0 Years	110 Years	0	16	umol/L	17/02/2010
Homocysteine :	Male	0 Years	110 Years	0	18	umol/L	17/02/2010

Test Panel	**hs Troponin**		
Synonyms	High Sensitivity Troponin		
Abbreviation		*Lab Test Code*	C234
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Refer to the Algorithm for the investigation of NSTEMI using high sensitivity Troponin I.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Haemolysed samples will not be assayed.		
Containers	 Heparin		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) [8 Hours]		
Long Term	2 - 8°C [Up to 24 hours]		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index		C1026	HI	
hsTropI	ng/L	C1332	hsTropI	
Troponin I Comment		C1339	Troponin I Result comment	

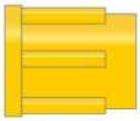
Site	

Test Panel	**Human T-cell lymphotropic virus**		
Synonyms	HTLV		
Abbreviation	HTLV	*Lab Test Code*	V458
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	A serological screen for HTLV infection.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HTLV 1+2 Antibody		V4220	HTLV	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

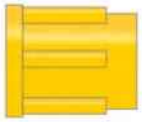
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Human Chorionic Gonadotrophin (Tumour Marker)		
Synonyms			
Abbreviation	HCG	*Lab Test Code*	C250
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	HCG should be used to diagnose and monitor treatment of an established germ cell (ovarian/testicular tumour only). The test must not be used to screen for tumours.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.4ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Tumour HCG	IU/L	C1322	Tumour HCG	

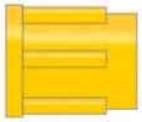
Site	

Test Panel	**Hydatid Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V428
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Must provide clinical details to support testing.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Hydatid ELISA		V4184	Hydatid ELISA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**IgD**		
Synonyms	Immunoglobulin D		
Abbreviation	IgD	*Lab Test Code*	W353B
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Hyper IgD syndrome, periodic fever syndrome		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

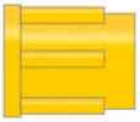
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
IgD	KU/L	W3010	IGD	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

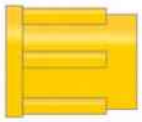
Reference Ranges

Test	IgD
ISS Code	W353B
ISS Test Name	IgD results
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
IgD	Female	0 Years	115 Years	2	100	KU/L	01/04/2012
IgD	Male	0 Years	115 Years	2	100	KU/L	01/04/2012

Test Panel	**IgG Subclasses**			
Synonyms				
Abbreviation		*Lab Test Code*	W356	
Department	Immunology			
Clinical Contact	Clinical Biochemist			
Contact	01302 642870	*Turnaround Time*	2 Weeks	
Investigation Comments				
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	2ml	
Requirements				
Containers	 SST			
Request Forms	 Pathology Combined			
Transport	Refer to Short Term Stability			
Storage notes				
Stability	4 - 10°C			
Long Term	4 - 10°C			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Immunoglobulin E (IgE)**		
Synonyms			
Abbreviation	IgE	*Lab Test Code*	C974
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	A normal total IgE does not exclude allergy, nor does a raised value prove allergy. Hyper IgE syndrome/ atopic eczema/Wiskott–Aldrich syndrome / allergic bronchopulmonary aspergillosis / lymphoma and parasitic infections.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection.		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform			

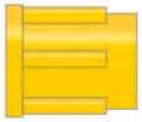
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Serum IgE:	kU/L	C6352	IGE	

Site	

Reference Ranges

Test	Immunoglobulin E
ISS Code	C974
ISS Test Name	Total IgE-
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Serum IgE:	Female	1 Days	93 Days	0	5	kU/L	22/03/2018
Serum IgE:	Female	3 Months	12 Months	0	11	kU/L	22/03/2018
Serum IgE:	Female	1 Years	5 Years	0	29	kU/L	22/03/2018
Serum IgE:	Female	5 Years	10 Years	0	52	kU/L	22/03/2018
Serum IgE:	Female	10 Years	15 Years	0	63	kU/L	22/03/2018
Serum IgE:	Female	15 Years	16 Years	0	75	kU/L	22/03/2018
Serum IgE:	Female	16 Years	150 Years	0	81	kU/L	22/03/2018
Serum IgE:	Male	1 Days	93 Days	0	5	kU/L	22/03/2018
Serum IgE:	Male	3 Months	12 Months	0	11	kU/L	22/03/2018
Serum IgE:	Male	1 Years	5 Years	0	29	kU/L	22/03/2018
Serum IgE:	Male	5 Years	10 Years	0	52	kU/L	22/03/2018
Serum IgE:	Male	10 Years	15 Years	0	63	kU/L	22/03/2018
Serum IgE:	Male	15 Years	16 Years	0	75	kU/L	22/03/2018
Serum IgE:	Male	16 Years	150 Years	0	81	kU/L	22/03/2018

Test Panel	**Immunoglobulins (IgG, IgA, IgM)**		
Synonyms			
Abbreviation		*Lab Test Code*	C126
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index		C1026	HI	
Total Protein	g/L	C1050	T.PROTEIN	
Albumin	g/L	C1055	ALBUMIN	
Globulin	g/L	C1060	GLOBULIN	
Immunoglobulin G	g/L	C4000	IGG	
Immunoglobulin M	g/L	C4005	IGM	
Immunoglobulin A	g/L	C4010	IGA	
Glob gap	g/L	C4011	GLOB GAP	
Tot Ig	g/L	C4026	TOT IG	

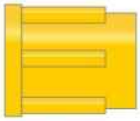
Site	

Reference Ranges

Test	Immunoglobulins (IgG, IgA, IgM)
ISS Code	C126
ISS Test Name	Immunoglobulins
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Albumin	Female	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Female	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Female	16 Years	115 Years	35	50	g/L	12/12/2011
Albumin	Male	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Male	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Male	16 Years	115 Years	35	50	g/L	12/12/2011
Glob gap	Female	0 Years	115 Years	5	25	g/L	09/02/2000
Glob gap	Female (Pregnant)	0 Years	115 Years	5	25	g/L	09/02/2000
Glob gap	Male	0 Years	115 Years	5	25	g/L	09/02/2000
Globulin	Female	0 Years	115 Years	23	40	g/L	21/06/2012
Globulin	Male	0 Years	115 Years	23	40	g/L	21/06/2012
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Immunoglobulin A	Female	0 Days	14 Days	0.01	0.08	g/L	04/09/2020
Immunoglobulin A	Female	14 Days	42 Days	0.02	0.15	g/L	04/09/2020
Immunoglobulin A	Female	42 Days	90 Days	0.05	0.4	g/L	04/09/2020
Immunoglobulin A	Female	3 Months	6 Months	0.1	0.5	g/L	04/09/2020
Immunoglobulin A	Female	6 Months	9 Months	0.15	0.7	g/L	04/09/2020
Immunoglobulin A	Female	9 Months	12 Months	0.2	0.7	g/L	04/09/2020
Immunoglobulin A	Female	1 Years	2 Years	0.3	1.2	g/L	04/09/2020
Immunoglobulin A	Female	2 Years	3 Years	0.3	1.3	g/L	04/09/2020
Immunoglobulin A	Female	3 Years	6 Years	0.4	2	g/L	04/09/2020
Immunoglobulin A	Female	6 Years	9 Years	0.5	2.4	g/L	04/09/2020
Immunoglobulin A	Female	9 Years	12 Years	0.7	2.5	g/L	04/09/2020
Immunoglobulin A	Female	12 Years	45 Years	0.8	2.8	g/L	04/09/2020
Immunoglobulin A	Female	45 Years	110 Years	0.8	4	g/L	04/09/2020
Immunoglobulin A	Male	0 Days	14 Days	0.01	0.08	g/L	04/09/2020
Immunoglobulin A	Male	14 Days	42 Days	0.02	0.15	g/L	04/09/2020
Immunoglobulin A	Male	42 Days	90 Days	0.05	0.4	g/L	04/09/2020
Immunoglobulin A	Male	3 Months	6 Months	0.1	0.5	g/L	04/09/2020
Immunoglobulin A	Male	6 Months	9 Months	0.15	0.7	g/L	04/09/2020
Immunoglobulin A	Male	9 Months	12 Months	0.2	0.7	g/L	04/09/2020
Immunoglobulin A	Male	1 Years	2 Years	0.3	1.2	g/L	04/09/2020
Immunoglobulin A	Male	2 Years	3 Years	0.3	1.3	g/L	04/09/2020
Immunoglobulin A	Male	3 Years	6 Years	0.4	2	g/L	04/09/2020
Immunoglobulin A	Male	6 Years	9 Years	0.5	2.4	g/L	04/09/2020
Immunoglobulin A	Male	9 Years	12 Years	0.7	2.5	g/L	04/09/2020
Immunoglobulin A	Male	12 Years	45 Years	0.8	2.8	g/L	04/09/2020
Immunoglobulin A	Male	45 Years	110 Years	0.8	4	g/L	04/09/2020
Immunoglobulin G	Female	0 Days	14 Days	5	17	g/L	12/12/2011
Immunoglobulin G	Female	15 Days	42 Days	3.9	13	g/L	12/12/2011

Immunoglobulin G	Female	43 Days	90 Days	2.1	7.7	g/L	12/12/2011
Immunoglobulin G	Female	3 Months	6 Months	2.4	8.8	g/L	12/12/2011
Immunoglobulin G	Female	6 Months	9 Months	3	9	g/L	12/12/2011
Immunoglobulin G	Female	9 Months	12 Months	3	10.9	g/L	12/12/2011
Immunoglobulin G	Female	1 Years	2 Years	3.1	13.8	g/L	12/12/2011
Immunoglobulin G	Female	2 Years	3 Years	3.7	15.8	g/L	12/12/2011
Immunoglobulin G	Female	3 Years	6 Years	4.9	16.1	g/L	12/12/2011
Immunoglobulin G	Female	6 Years	16 Years	5.4	16.1	g/L	12/12/2011
Immunoglobulin G	Female	16 Years	115 Years	6	16	g/L	12/12/2011
Immunoglobulin G	Male	0 Days	14 Days	5	17	g/L	12/12/2011
Immunoglobulin G	Male	15 Days	42 Days	3.9	13	g/L	12/12/2011
Immunoglobulin G	Male	43 Days	82 Days	2.1	7.7	g/L	12/12/2011
Immunoglobulin G	Male	3 Months	6 Months	2.4	8.8	g/L	12/12/2011
Immunoglobulin G	Male	6 Months	9 Months	3	9	g/L	12/12/2011
Immunoglobulin G	Male	9 Months	12 Months	3	10.9	g/L	12/12/2011
Immunoglobulin G	Male	1 Years	2 Years	3.1	13.8	g/L	12/12/2011
Immunoglobulin G	Male	2 Years	3 Years	3.7	15.8	g/L	12/12/2011
Immunoglobulin G	Male	3 Years	6 Years	4.9	16.1	g/L	12/12/2011
Immunoglobulin G	Male	6 Years	16 Years	5.4	16.1	g/L	12/12/2011
Immunoglobulin G	Male	16 Years	115 Years	6	16	g/L	12/12/2011
Immunoglobulin M	Female	0 Days	14 Days	0.05	0.2	g/L	12/12/2011
Immunoglobulin M	Female	15 Days	42 Days	0.08	0.4	g/L	12/12/2011
Immunoglobulin M	Female	43 Days	90 Days	0.15	0.7	g/L	12/12/2011
Immunoglobulin M	Female	3 Months	6 Months	0.2	1	g/L	12/12/2011
Immunoglobulin M	Female	6 Months	9 Months	0.4	1.6	g/L	12/12/2011
Immunoglobulin M	Female	9 Months	12 Months	0.6	2.1	g/L	12/12/2011
Immunoglobulin M	Female	1 Years	3 Years	0.5	2.2	g/L	12/12/2011
Immunoglobulin M	Female	3 Years	6 Years	0.5	2	g/L	12/12/2011
Immunoglobulin M	Female	6 Years	12 Years	0.5	1.8	g/L	12/12/2011
Immunoglobulin M	Female	12 Years	15 Years	0.5	1.9	g/L	12/12/2011
Immunoglobulin M	Female	15 Years	45 Years	0.5	1.9	g/L	12/12/2011
Immunoglobulin M	Female	45 Years	115 Years	0.5	2	g/L	12/12/2011
Immunoglobulin M	Male	0 Days	14 Days	0.05	0.2	g/L	12/12/2011
Immunoglobulin M	Male	15 Days	42 Days	0.08	0.4	g/L	12/12/2011
Immunoglobulin M	Male	43 Days	90 Days	0.15	0.7	g/L	12/12/2011
Immunoglobulin M	Male	3 Months	6 Months	0.2	1	g/L	12/12/2011
Immunoglobulin M	Male	6 Months	9 Months	0.4	1.6	g/L	12/12/2011
Immunoglobulin M	Male	9 Months	12 Months	0.6	2.1	g/L	12/12/2011
Immunoglobulin M	Male	1 Years	3 Years	0.5	2.2	g/L	12/12/2011
Immunoglobulin M	Male	3 Years	6 Years	0.5	2	g/L	12/12/2011
Immunoglobulin M	Male	6 Years	12 Years	0.5	1.8	g/L	12/12/2011
Immunoglobulin M	Male	12 Years	15 Years	0.5	1.9	g/L	12/12/2011
Immunoglobulin M	Male	15 Years	45 Years	0.5	1.9	g/L	12/12/2011
Immunoglobulin M	Male	45 Years	115 Years	0.5	2	g/L	12/12/2011
Total Protein	Female	0 Years	115 Years	60	80	g/L	12/12/2011
Total Protein	Male	0 Years	115 Years	60	80	g/L	12/12/2011

Test Panel	Infliximab Drug & Antibody Level		
Synonyms			
Abbreviation		*Lab Test Code*	W481
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Inhibin**		
Synonyms			
Abbreviation		*Lab Test Code*	W358C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used in the diagnosis and monitoring of granulosa cell tumours of the ovary or sertoli cell tumours of the testis.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

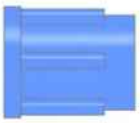
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Inhibin A	pg/mL	W1338	Inhibin A	
Inhibin B	pg/mL	W1339	Inhibin B	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Inhibin
ISS Code	W358C
ISS Test Name	Inhibin A + B Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Inhibin B	Female	0 Years	1 Years		<91	pg/mL	01/09/2022
Inhibin B	Female	1 Years	3 Years		<44	pg/mL	01/09/2022
Inhibin B	Female	3 Years	6 Years		<25	pg/mL	01/09/2022
Inhibin B	Female	6 Years	9 Years		<35	pg/mL	01/09/2022
Inhibin B	Female	9 Years	11 Years		<72	pg/mL	01/09/2022
Inhibin B	Female	11 Years	16 Years		<143	pg/mL	01/09/2022
Inhibin B	Male	0 Years	1 Years	68	630	pg/mL	01/09/2022
Inhibin B	Male	1 Years	2 Years	87	419	pg/mL	01/09/2022
Inhibin B	Male	2 Years	6 Years	42	268	pg/mL	01/09/2022
Inhibin B	Male	6 Years	10 Years	35	167	pg/mL	01/09/2022
Inhibin B	Male	10 Years	11 Years	50	310	pg/mL	01/09/2022
Inhibin B	Male	11 Years	12 Years	104	481	pg/mL	01/09/2022
Inhibin B	Male	12 Years	17 Years	74	470	pg/mL	01/09/2022
Inhibin B	Male	17 Years	100 Years	24	325	pg/mL	01/09/2022

Test Panel	**INR & Anti Coagulant Dosing**			
Synonyms				
Abbreviation		*Lab Test Code*	B506	
Department	Haematology			
Clinical Contact	Anti-coagulation Monitoring Services			
Contact	01302 642880	*Turnaround Time*	24 hours	
Investigation Comments	Patient MUST be referred to Anticoagulant clinic prior to sample being sent.			
Availability	Core Hours Only			
Specimen	Venous Blood	*Volume Required*	4.5ml	
Requirements				
Containers	 Citrate			
	Must be filled to the blue line on the side of the tube			
Request Forms	 Pathology Combined			
	Existing Patients - AMS Slip, New Patients - A/C Referral Forms			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours			
Long Term				
Comments				
Platform	Sysmex			

Tests in Panel

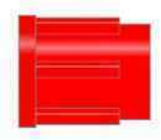
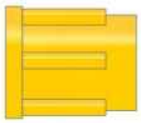
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Prothrombin Time	secs	X1000	Prothrombin Time	
INR		X5020	INR	
INR	Unit	X5022	Dawn INR	

Site	

Reference Ranges

Test	INR & Anti Coagulant Dosing
ISS Code	B506
ISS Test Name	DAWN AC
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Prothrombin Time	Female	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Female	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Female	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Female	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Female	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Female	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Female	17 Years	120 Years	9.4	12.5	secs	18/11/2019
Prothrombin Time	Male	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Male	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Male	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Male	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Male	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Male	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Male	17 Years	120 Years	9.4	12.5	secs	18/11/2019

Test Panel	Insulin and C-Peptide		
Synonyms			
Abbreviation		*Lab Test Code*	W556
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used to evaluate insulin production, diagnose an insulinoma and investigate the cause of a low blood glucose. May be requested as part of a dynamic function test.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements	Send to laboratory immediately on ice. In the routine investigation of hypoglycaemia, samples will not be sent to referral laboratory if glucose >2.2 mmol/L. Separate promptly - Less than 30 minutes		
Containers	 Preferred Plain  SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes	Separate promptly - Less than 30 minutes		
Stability	Freeze ASAP		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

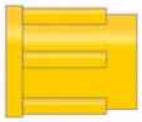
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Requested Test:		W0100	REQTEST	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Time Sample Taken :		W5556	Taken :	
C Peptide :	pmol/L	W5557	C Peptide :	
Insulin :	pmol/L	W5558	Insulin :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Insulin and C-Peptide
ISS Code	W556
ISS Test Name	Insulin and C-peptide Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
C Peptide :	Female	0 Years	110 Years	370	1470	pmol/L	29/05/2018
C Peptide :	Female	3 Years	110 Years	370	1470	pmol/L	29/05/2018
C Peptide :	Male	0 Years	110 Years	370	1470	pmol/L	29/05/2018
C Peptide :	Male	3 Years	110 Years	370	1470	pmol/L	29/05/2018
Insulin :	Female	0 Years	110 Years	17.8	173	pmol/L	29/05/2018
Insulin :	Male	0 Years	110 Years	17.8	173	pmol/L	29/05/2018

Test Panel	**Insulin-like Growth Factor (IGF-1)**		
Synonyms			
Abbreviation	IGF1	*Lab Test Code*	C605
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Used to identify diseases and conditions caused by deficiencies and over-production of growth hormone, to detect pituitary disease and to monitor effectiveness of growth hormone replacement. May be requested as part of a pituitary function test.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Insulin-Like Growth Factor -1	ug/L	C1308	IGF-1	

Site	

Reference Ranges

Test	Insulin-like Growth Factor
ISS Code	C605
ISS Test Name	IGF1
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Insulin-Like Growth Factor -1	Female	0 Years	1 Years	8	131	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	1 Years	2 Years	9	146	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	2 Years	3 Years	11	165	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	3 Years	4 Years	13	187	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	4 Years	5 Years	15	216	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	5 Years	6 Years	19	251	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	6 Years	7 Years	24	293	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	7 Years	8 Years	30	342	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	8 Years	9 Years	39	396	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	9 Years	10 Years	49	451	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	10 Years	11 Years	62	504	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	11 Years	12 Years	76	549	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	12 Years	13 Years	90	581	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	13 Years	14 Years	104	596	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	14 Years	15 Years	115	591	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	15 Years	16 Years	121	564	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	16 Years	17 Years	122	524	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	17 Years	18 Years	120	479	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	18 Years	19 Years	117	436	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	19 Years	20 Years	113	399	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	20 Years	21 Years	109	372	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	21 Years	22 Years	107	351	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	22 Years	23 Years	105	337	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	23 Years	24 Years	103	326	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	24 Years	25 Years	102	317	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	25 Years	26 Years	100	311	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	26 Years	27 Years	98	305	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	27 Years	28 Years	96	301	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	28 Years	29 Years	93	297	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	29 Years	30 Years	91	293	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	30 Years	31 Years	89	290	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	31 Years	32 Years	87	286	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	32 Years	33 Years	85	283	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	33 Years	34 Years	83	280	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	34 Years	35 Years	82	279	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	35 Years	36 Years	81	278	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	36 Years	37 Years	80	277	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	37 Years	38 Years	80	277	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	38 Years	39 Years	79	276	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	39 Years	40 Years	78	274	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	40 Years	41 Years	76	271	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	41 Years	42 Years	75	267	ug/L	01/08/2020

Insulin-Like Growth Factor -1	Female	42 Years	43 Years	73	263	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	43 Years	44 Years	71	258	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	44 Years	45 Years	69	253	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	45 Years	46 Years	66	249	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	46 Years	47 Years	64	246	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	47 Years	48 Years	62	243	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	48 Years	49 Years	60	240	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	49 Years	50 Years	59	238	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	50 Years	51 Years	57	236	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	51 Years	52 Years	55	235	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	52 Years	53 Years	53	234	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	53 Years	54 Years	52	233	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	54 Years	55 Years	51	233	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	55 Years	56 Years	49	234	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	56 Years	57 Years	48	235	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	57 Years	58 Years	47	236	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	58 Years	59 Years	46	238	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	59 Years	60 Years	44	240	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	60 Years	61 Years	43	241	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	61 Years	62 Years	41	243	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	62 Years	63 Years	40	244	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	63 Years	64 Years	38	244	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	64 Years	65 Years	36	244	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	65 Years	66 Years	34	241	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	66 Years	67 Years	32	238	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	67 Years	68 Years	30	235	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	68 Years	69 Years	28	231	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	69 Years	70 Years	27	228	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	70 Years	71 Years	26	226	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	71 Years	72 Years	24	224	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	72 Years	73 Years	24	222	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	73 Years	74 Years	23	221	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	74 Years	75 Years	22	220	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	75 Years	76 Years	21	218	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	76 Years	77 Years	20	216	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	77 Years	78 Years	20	214	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	78 Years	79 Years	19	210	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	79 Years	80 Years	18	206	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	80 Years	81 Years	18	200	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	81 Years	82 Years	18	193	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	82 Years	83 Years	17	186	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	83 Years	84 Years	17	179	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	84 Years	85 Years	17	173	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Female	85 Years	86 Years	17	167	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	0 Years	1 Years	11	100	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	1 Years	2 Years	12	120	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	2 Years	3 Years	13	143	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	3 Years	4 Years	14	169	ug/L	01/08/2020

Insulin-Like Growth Factor -1	Male	4 Years	5 Years	15	200	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	5 Years	6 Years	16	233	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	6 Years	7 Years	17	269	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	7 Years	8 Years	18	307	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	8 Years	9 Years	20	347	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	9 Years	10 Years	23	386	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	10 Years	11 Years	29	424	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	11 Years	12 Years	37	459	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	12 Years	13 Years	49	487	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	13 Years	14 Years	64	508	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	14 Years	15 Years	83	519	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	15 Years	16 Years	102	520	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	16 Years	17 Years	119	511	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	17 Years	18 Years	131	490	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	18 Years	19 Years	137	461	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	19 Years	20 Years	137	428	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	20 Years	21 Years	133	395	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	21 Years	22 Years	127	364	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	22 Years	23 Years	120	338	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	23 Years	24 Years	112	316	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	24 Years	25 Years	105	298	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	25 Years	26 Years	99	283	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	26 Years	27 Years	94	271	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	27 Years	28 Years	90	262	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	28 Years	29 Years	87	255	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	29 Years	30 Years	84	250	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	30 Years	31 Years	83	246	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	31 Years	32 Years	82	244	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	32 Years	33 Years	82	243	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	33 Years	34 Years	82	242	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	34 Years	35 Years	82	242	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	35 Years	36 Years	83	241	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	36 Years	37 Years	83	240	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	37 Years	38 Years	83	239	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	38 Years	39 Years	83	238	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	39 Years	40 Years	83	238	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	40 Years	41 Years	82	237	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	41 Years	42 Years	81	236	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	42 Years	43 Years	80	235	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	43 Years	44 Years	78	233	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	44 Years	45 Years	76	230	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	45 Years	46 Years	74	227	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	46 Years	47 Years	72	225	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	47 Years	48 Years	71	224	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	48 Years	49 Years	69	224	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	49 Years	50 Years	68	225	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	50 Years	51 Years	67	225	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	51 Years	52 Years	66	225	ug/L	01/08/2020

Insulin-Like Growth Factor -1	Male	52 Years	53 Years	65	222	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	53 Years	54 Years	64	218	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	54 Years	55 Years	62	214	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	55 Years	56 Years	61	210	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	56 Years	57 Years	59	206	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	57 Years	58 Years	58	204	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	58 Years	59 Years	56	203	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	59 Years	60 Years	55	203	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	60 Years	61 Years	53	206	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	61 Years	62 Years	51	209	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	62 Years	63 Years	49	214	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	63 Years	64 Years	46	219	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	64 Years	65 Years	43	225	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	65 Years	66 Years	40	231	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	66 Years	67 Years	37	236	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	67 Years	68 Years	34	240	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	68 Years	69 Years	31	243	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	69 Years	70 Years	29	245	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	70 Years	71 Years	27	246	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	71 Years	72 Years	26	245	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	72 Years	73 Years	25	242	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	73 Years	74 Years	24	236	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	74 Years	75 Years	23	229	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	75 Years	76 Years	22	221	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	76 Years	77 Years	22	212	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	77 Years	78 Years	21	204	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	78 Years	79 Years	20	196	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	79 Years	80 Years	19	189	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	80 Years	81 Years	18	184	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	81 Years	82 Years	17	180	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	82 Years	83 Years	16	177	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	83 Years	84 Years	16	176	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	84 Years	85 Years	16	176	ug/L	01/08/2020
Insulin-Like Growth Factor -1	Male	85 Years	86 Years	15	177	ug/L	01/08/2020

Test Panel	**Intermediary Metabolites**		
Synonyms			
Abbreviation		*Lab Test Code*	W854C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used to investigate the cause of a low blood glucose. Includes lactate, free fatty acids and B-hydroxybutyrate.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Send to laboratory immediately on ice. In the routine investigation of hypoglycaemia, samples will not be sent to referral laboratory if glucose >2.2 mmol/L.		
Containers	 Fluoride Oxalate		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Freeze ASAP		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

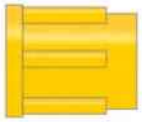
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:			W0125	RESULTRETURNED
Glucose (Assayed at SCH) :	mmol/L		W3698	SCH Glucose :
Lactate (Assayed at SCH) :	mmol/L		W3699	SCH Lactate :
Free Fatty Acid :	mmol/L		W3700	Free Fatty Acid :
3-Hydroxybutyrate :	mmol/L		W3701	3-Hydroxybutyrate :
Please note that this test was referred to an external laboratory for anlaysis.			W4321	Referred Test
Referred Test :			W4321	Referred Test

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

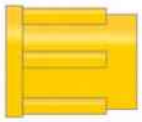
Test	Intermediary Metabolites
ISS Code	W854C
ISS Test Name	Intermediary Metabolites Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Glucose (Assayed at SCH) :	Female	0 Years	110 Years	3.2	6	mmol/L	20/07/2022
Glucose (Assayed at SCH) :	Male	0 Years	110 Years	3.2	6	mmol/L	20/07/2022
Lactate (Assayed at SCH) :	Female	0 Days	31 Days	0	3	mmol/L	03/03/2011
Lactate (Assayed at SCH) :	Female	32 Days	364 Days	0.9	1.8	mmol/L	03/03/2011
Lactate (Assayed at SCH) :	Female	1 Years	16 Years	0.9	1.8	mmol/L	03/03/2011
Lactate (Assayed at SCH) :	Male	0 Days	31 Days	0	3	mmol/L	03/03/2011
Lactate (Assayed at SCH) :	Male	32 Days	364 Days	0.9	1.8	mmol/L	03/03/2011
Lactate (Assayed at SCH) :	Male	1 Years	16 Years	0.9	1.8	mmol/L	03/03/2011

Test Panel	**Intrinsic Factor Antibodies**		
Synonyms	IFA		
Abbreviation		*Lab Test Code*	Y025
Department	Immunology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Investigation of pernicious anemia.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to the laboratory on day of collection		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal Result= Negative		
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Intrinsic Factor Antibody		Y0020	INTRINSIC FACTOR AB	

Site	

Test Panel	**Iron**		
Synonyms			
Abbreviation		*Lab Test Code*	C253
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in cases of suspected overdose and to monitor iron status in renal patients. For evaluation of iron status, request FBC, ferritin and transferrin. Ferritin is a better indicator of iron storage and in cases of iron overload		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.15ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

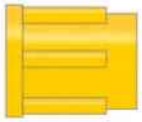
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Iron :	umol/L	C1120	IRON	

Site	

Reference Ranges

Test	Iron
ISS Code	C253
ISS Test Name	IRON.
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Iron	Female	0 Years	115 Years	9	30.4	umol/L	12/12/2011
Iron	Male	0 Years	115 Years	11.6	31.3	umol/L	12/12/2011

Test Panel	**Islet Cell Antibodies**		
Synonyms			
Abbreviation	ICAB	*Lab Test Code*	W410
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	Islet Cell Antibody:		W6236	Islet Cell Antibody:	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Jak-2**		
Synonyms			
Abbreviation		*Lab Test Code*	W498
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
RESULT		W0505	Result.	
Referred Test :		W4321	Referred Test	

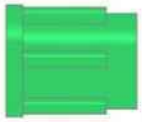
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**JAK2 Gene Exon 12 Analysis**		
Synonyms			
Abbreviation		*Lab Test Code*	W495
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	By arrangement with Consultant Haematologist		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:			W0125	RESULTRETURNED
RESULT			W0505	Result.
Referred Test :			W4321	Referred Test

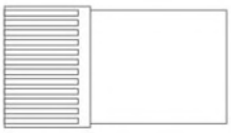
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Karyotype**		
Synonyms			
Abbreviation		*Lab Test Code*	W430
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Heparin		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Testing Laboratory:		W0260	TESTINGLAB	
Enquiry Line:		W0265	ENQUIRIES	
Report for:		W2515	NEWKARO1	
Result:		W2520	NEWKARO2	
Comments:		W2525	NEWKARO3	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Lactate (CSF)**		
Synonyms			
Abbreviation		*Lab Test Code*	C681
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	Use with blood lactate in the investigation of meningitis.		
Availability	Routine hours only - Must pre-arrange with the laboratory		
Specimen	Cerebro-Spinal Fluid	*Volume Required*	0.2ml
Requirements	Send immediately to laboratory.		
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	Transport on Ice - Up to 10 minutes		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	CSF Lactate	mmol/L	C2071	CSFLACTATE	
Site					

Reference Ranges

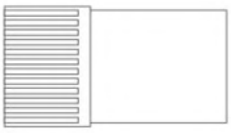
Test	Lactate (CSF)
ISS Code	C681
ISS Test Name	Lactate (CSF)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CSF Lactate	Female	0 Years	100 Years	1.2	2.1	mmol/L	20/03/1996
CSF Lactate	Male	0 Years	100 Years	1.2	2.1	mmol/L	20/03/1996

Reference Ranges

Test	CSF Lactate
ISS Code	W853
ISS Test Name	CSF Lactate Result
Ref Range Comments	

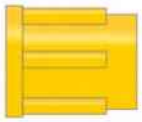
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CSF Lactate	Female	0 Days	28 Days	0	3	mmol/L	01/08/2021
CSF Lactate	Female	29 Days	365 Days	0.9	1.8	mmol/L	01/08/2021
CSF Lactate	Female	1 Years	16 Years	0.9	1.8	mmol/L	01/08/2021
CSF Lactate	Female	16 Years	100 Years	0.6	2.4	mmol/L	01/08/2021
CSF Lactate	Male	0 Days	28 Days	0	3	mmol/L	01/08/2021
CSF Lactate	Male	29 Days	365 Days	0.9	1.8	mmol/L	01/08/2021
CSF Lactate	Male	1 Years	16 Years	0.9	1.8	mmol/L	01/08/2021
CSF Lactate	Male	16 Years	100 Years	0.6	2.4	mmol/L	01/08/2021

Test Panel	**Lactate Dehydrogenase (fluid)**		
Synonyms			
Abbreviation	FLDH	*Lab Test Code*	C727
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used as a factor in Light's criteria in the differentiation in pleural fluid between a transudate and exudate.		
Availability	Routine hours only		
Specimen	Fluid	*Volume Required*	1ml
Requirements			
Containers	 Universal 		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
LDH	U/L	C1113	FLUID LDH	
Spec. Name		C1980	SP.NAM	

Site	

Test Panel	**Lactate Dehydrogenase**		
Synonyms			
Abbreviation	LDH	*Lab Test Code*	C121
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the investigation of tissue damage. Should only used as a general marker of cellular injuray as it is not useful for determining which specific cells are damaged. May be used in the monitoring of megaloblastic and pernicious anaemia, leukaemia		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.3ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Lactate Dehydrogenase :	U/L	C1114	ABBOTT LDH	

Site	

Reference Ranges

Test	Lactate Dehydrogenase
ISS Code	C121
ISS Test Name	LDH
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Lactate Dehydrogenase :	Female	0 Years	100 Years	125	243	U/L	09/12/2011
Lactate Dehydrogenase :	Male	0 Years	100 Years	125	243	U/L	09/12/2011
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000

Test Panel	**Lactate**		
Synonyms			
Abbreviation		*Lab Test Code*	C680
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the investigation of hypoglycaemia, sepsis and metabolic disorders.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.3ml
Requirements	Send immediately to laboratory.		
Containers	 Fluoride Oxalate		
Request Forms	 Pathology Combined		
Transport	On Ice		
Storage notes	Refer to Short Term Stability		
Stability	Transport on Ice - Up to 10 minutes		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index Glucose		C1028	HIG	
Lactate	mmol/L	C2070	LACTATE	

Site	

Reference Ranges

Test	Lactate
ISS Code	C680
ISS Test Name	LACTATE
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Lactate	Female	0 Years	16 Years	0.5	2.2	mmol/L	12/12/2011
Lactate	Female	16 Years	115 Years	0.5	2.2	mmol/L	12/12/2011
Lactate	Male	0 Years	16 Years	0.5	2.2	mmol/L	12/12/2011
Lactate	Male	16 Years	115 Years	0.5	2.2	mmol/L	12/12/2011

Test Panel	**Lamotrigine**		
Synonyms			
Abbreviation		*Lab Test Code*	W395
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	An anti-convulsant drug. Sample taken immediately before a dose, at least 5 days after initiation of treatment.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements	Take blood sample just before dose (ie trough level)		
Containers	 Plain		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

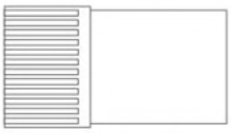
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Lamotrigine	mg/L	W2053	NEWLAMO2	
Drug Dose		W2056	Drug Dose	
Time of Dose		W2057	Time of Last Dose	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Lamotrigine
ISS Code	W395
ISS Test Name	Lamotrigine Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Lamotrigine	Female	0 Years	115 Years	3	15	mg/L	13/08/2012
Lamotrigine	Male	0 Years	115 Years	3	15	mg/L	13/08/2012

Test Panel	**Laxative Screen (Urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	W393R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	5ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Urine Anthraquinones		W0185	Urine Anthraquinones	
Urine Rhein (Senna)		W0186	Urine Rhein	
Urine Danthron		W0187	Urine Danthron	
Urine Phenolphtalein		W0188	Urine Phenolpthalein	
Urine Bisacodyl		W0189	Urine Bisacodyl	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Lead (blood)**		
Synonyms			
Abbreviation		*Lab Test Code*	W895
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Used in suspected cases of lead exposure. Adults who are working in industries known for lead exposure should be regularly screening for lead. Children are more susceptible to lead poisoning than adults.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

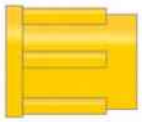
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Exposure		W6091	Exposure :	
Blood Lead	umol/L	W6092	Blood Lead :	
Blood Lead (Industry)	ug/dL	W6093	Blood Lead (Ind)	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Lead (blood)
ISS Code	W895
ISS Test Name	Blood Lead Result
Ref Range Comments	

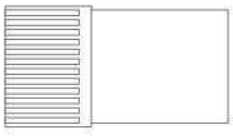
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Blood Lead	Female	0 Years	115 Years		<0.10	umol/L	07/07/2020
Blood Lead	Male	0 Years	115 Years		<0.10	umol/L	07/07/2020

Test Panel	**Legionella Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V465
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Part of atypical pneumonia screen. State date of onset of symptoms. Please note that this test is used rarely as part of Legionella diagnosis. Please discuss with Consultant Microbiologists and consider sending a urine for Legionella antigen.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Legionella PCR DNA		V4169	LEGIONELLA PCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

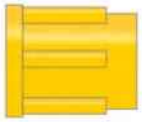
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Legionella Urine Antigen		
Synonyms			
Abbreviation		*Lab Test Code*	V926
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Method for detection of Legionella pneumophila serogroup I antigen in urine.		
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	5ml
Requirements	Screening test. Provide clinical details, travel history, CURB SCORE. Consultant Microbiologists will approve all requests outside of DCC or ITU		
Containers	 Sterile Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Result:		V1921	LEG REF 1	
		V1923	LEG REF 2	
		V1924	LEG REF 3	
		V1925	LEG REF 4	

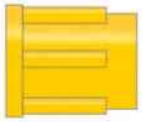
Site	

Test Panel	**Leishmania Screening**		
Synonyms			
Abbreviation		*Lab Test Code*	V415
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Please discuss with Consultant Microbiologists before requesting.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Leishmania DAT		V4290	Leishmania DAT	
Leishmania K39 test		V4291	Leishmania K39 test	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Leptospira (Weil's disease)**		
Synonyms			
Abbreviation		*Lab Test Code*	V449
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Please state date of onset, nature of symptoms and exposure history.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Leptospira IgM Antibody		V4142	LEPTO	
Pathogenic leptospira DNA		V4292	Pathogenic Leptospira DNA	
Leptospira Lip32 DNA		V4539	LEPTOSPIRA LIP32 DNA	
Leptospira 16S DNA		V4540	LEPTOSPIRA 16S DNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**LGV Specific PCR**		
Synonyms	Lymphogranuloma Venereum		
Abbreviation		*Lab Test Code*	V473
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Molecular detection of LGV (lymphogranuloma venereum)		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 Swab		
	Chlamydia Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
LGV SPECIFIC PCR		V4213	LGV SPECIFIC PCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Lipid Profile**		
Synonyms	Cholesterol		
Abbreviation		*Lab Test Code*	C145
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Lipid profile includes triglyceride, total cholesterol, LDL cholesterol. HDL cholesterol and a total cholesterol / HDL cholesterol ratio. LDL cholesterol is a calculated parameter. Calculation invalid if Triglyceride > 4.6 mmol/L or non-fasting blood sample provided		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Patient should be fasting if LDL cholesterol required.		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
	Ask: Is the patient fasting? Indicate on Form		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Triglyceride	mmol/L	C1125	TRIG	
Cholesterol	mmol/L	C1130	CHOLESTEROL	
HDL-Cholesterol	mmol/L	C1135	HDL-C	
Non-HDL C	mmol/L	C1138	Non-HDL C	
LDL	mmolL	C1140	LDL	
HDL-Ratio		C1145	HDLRAT	

Site	Choose an item.

Reference Ranges

Test	Lipid Profile
ISS Code	C145
ISS Test Name	Lipid Profile
Ref Range Comments	

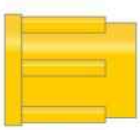
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Cholesterol	Female	1 Years	99 Years			mmol/L	17/01/1996
Cholesterol	Male	1 Years	99 Years			mmol/L	17/01/1996
HDL-Cholesterol	Female	0 Years	115 Years			mmol/L	30/03/2015
HDL-Cholesterol	Male	0 Years	115 Years			mmol/L	30/03/2015
HDL-Ratio	Female	0 Years	115 Years				30/03/2015
HDL-Ratio	Male	0 Years	115 Years				30/03/2015
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
LDL	Female	0 Years	115 Years			mmolL	30/03/2015
LDL	Male	0 Years	115 Years			mmolL	30/03/2015
Non-HDL C	Female	0 Years	115 Years			mmol/L	17/03/2015
Non-HDL C	Male	0 Years	115 Years			mmol/L	17/03/2015
Triglyceride	Female	0 Years	115 Years			mmol/L	30/03/2015
Triglyceride	Male	0 Years	115 Years			mmol/L	30/03/2015

Test Panel	**Listeria PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V453
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	A molecular assay for diagnosis of Listeria infection. Please state date of onset and nature of symptoms. Must be discussed with Consultant Microbiologist.		
Availability	Routine hours only		
Specimen	Venous Blood/CSF	*Volume Required*	1ml
Requirements			
Containers	 EDTA  Sterile Universal		
	EDTA or CSF		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Listeria PCR		V4252	Listeria PCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Lithium		
Synonyms			
Abbreviation		*Lab Test Code*	C175
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	A drug used in the treatment of bipolar disorders. Sample taken 12-18h post dose, at least 5 days after initiation of treatment.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements	Take blood sample 12-18h post dose.		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

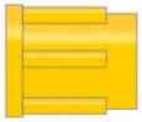
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Lithium	mmol/L	C1235	LITHIUM	
Dosage	mg	C1236	DOSAGE	
Frequency		C1237	FREQUENCY	
Hours Post Dose	hours	C1238	HPD	

Site	

Reference Ranges

Test	Lithium
ISS Code	C175
ISS Test Name	LITHIUM
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Dosage	Female	0 Years	100 Years			mg	02/02/1996
Dosage	Male	0 Years	100 Years			mg	02/02/1996
Lithium	Female	0 Years	115 Years	0.4	1	mmol/L	12/12/2011
Lithium	Male	0 Years	115 Years	0.4	1	mmol/L	12/12/2011

Test Panel	**Liver Function Test**		
Synonyms			
Abbreviation	LFT	*Lab Test Code*	C127
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

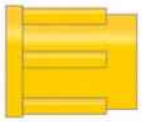
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index		C1026	HI	
Total Protein	g/L	C1050	T.PROTEIN	
Lipaemia Index		C1051	LINDEX	
Albumin	g/L	C1055	ALBUMIN	
Globulin	g/L	C1060	GLOBULIN	
Alb/Glob Ratio	g/L	C1061	ALB/GLOB RATIO	
Alk.Phos :	IU/L	C1067	ABBOTT ALP	
ALT	U/L	C1071	ALT	
T.Bilirubin	umol/L	C1080	TBIL	
C.Bilirubin	umol/L	C1085	CBIL.	

Site	Choose an item.

Reference Ranges

Test	Liver Function Test
ISS Code	C127
ISS Test Name	LFT
Ref Range Comments	

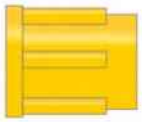
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Alk.Phos :	Female	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Female	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Female	16 Years	110 Years	30	130	IU/L	01/11/2011
Alk.Phos :	Male	0 Days	28 Days	70	380	IU/L	01/11/2011
Alk.Phos :	Male	29 Days	5844 Days	60	425	IU/L	01/11/2011
Alk.Phos :	Male	16 Years	110 Years	30	130	IU/L	01/11/2011
Albumin	Female	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Female	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Female	16 Years	115 Years	35	50	g/L	12/12/2011
Albumin	Male	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Male	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Male	16 Years	115 Years	35	50	g/L	12/12/2011
ALT	Female	0 Years	16 Years	0	55	U/L	13/04/2022
ALT	Female	16 Years	115 Years	0	55	U/L	13/04/2022
ALT	Male	0 Years	16 Years	0	55	U/L	13/04/2022
ALT	Male	16 Years	115 Years	0	55	U/L	13/04/2022
C.Bilirubin	Female	0 Years	115 Years	0	9	umol/L	12/12/2011
C.Bilirubin	Male	0 Years	115 Years	0	9	umol/L	12/12/2011
Globulin	Female	0 Years	115 Years	23	40	g/L	21/06/2012
Globulin	Male	0 Years	115 Years	23	40	g/L	21/06/2012
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Lipaemia Index	Female	0 Years	100 Years	0	3		28/09/2000
Lipaemia Index	Male	0 Years	100 Years	0	3		28/09/2000
Total Protein	Female	0 Years	115 Years	60	80	g/L	12/12/2011
Total Protein	Male	0 Years	115 Years	60	80	g/L	12/12/2011
T.Bilirubin	Female	0 Days	2 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Female	2 Days	14 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Female	14 Days	365 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Female	1 Years	115 Years	0	21	umol/L	12/12/2011
T.Bilirubin	Male	0 Days	2 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Male	2 Days	14 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Male	14 Days	365 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Male	1 Years	115 Years	0	21	umol/L	12/12/2011

Test Panel	**Liver, Kidney and Smooth Muscle (LKS) Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	C433
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	The LKS panel includes anti-gastric parietal cell (for pernicious anaemia and autoimmune gastritis), anti-mitochondrial for PBC and anti-smooth muscle for autoimmune hepatitis.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Gastric parietal cell antibody cannot be interpreted if mitochondrial antibodies present		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send to the laboratory on day of collection		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal Result= Negative		
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Anti-Mitochondrial		C3040	AMA	
Anti-Smooth Muscle		C3050	ASM	
Anti-Gastric Parietal		C3060	GPC	
Liver/Kidney Microsome		C3071	LKM	

Site	

Test Panel	**Luteinising Hormone**		
Synonyms			
Abbreviation	LH	*Lab Test Code*	C821
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	Assesment of ovarian failure, pituitary dysfunction and infertility. Do not use in the investigation of the menopause.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	In female patients, levels vary throughout menstrual cycle. Samples should be taken between days 2-7 of the cycle (follicular phase).		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Lutrophin	IU/L	C1268	ABBOTT LH	

Site	

Reference Ranges

Test	Luteinising Hormone
ISS Code	C821
ISS Test Name	LH
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Lutrophin	Female	0 Years	110 Years			IU/L	01/10/2011
Lutrophin	Male	0 Years	110 Years	0.57	12.07	IU/L	01/10/2011

Test Panel	**Lymphocyte Subsets**		
Synonyms			
Abbreviation		*Lab Test Code*	W123
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Absolute Lymphocytes:	Cells/uL	W1010	ABS LYM	
CD3 T-Lymphocytes	Cells/uL	W1011	CD3 T ABS	
		W1012	CD3 T %	
CD3/4 T-Helpers	Cells/uL	W1013	CD3/4 Help ABS	
		W1014	CD3/4 T-Help %	
CD3/8 T-Suppressors	Cells/uL	W1015	CD3/8 T-SUPP ABS	
		W1016	CD3/8 SUPP %	
CD19 B-Lymphocytes	Cells/uL	W1017	CD19 BLYM ABS	
		W1018	CD18 B LYM %	
CD16/56 NK Cells	Cells/uL	W1019	CD16/56 ABS	
		W1020	CD16/56 NK %	
CD4:8 RATIO		W1021	CD4:8 RA	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

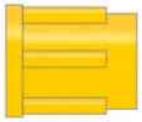
Reference Ranges

Test	Lymphocyte Subsets
ISS Code	W123
ISS Test Name	Lymphocyte Subsets Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Absolute Lymphocytes:	Female	0 Months	2 Months	3700	9600	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	2 Months	5 Months	3700	9600	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	5 Months	9 Months	3800	9900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	9 Months	15 Months	2600	10400	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	15 Months	24 Months	2700	11900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	2 Years	5 Years	1700	6900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	5 Years	10 Years	1100	5900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	10 Years	16 Years	1000	5300	Cells/uL	01/01/2019
Absolute Lymphocytes:	Female	16 Years	100 Years	1130	3300	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	0 Months	2 Months	3700	9600	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	2 Months	5 Months	3700	9600	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	5 Months	9 Months	3800	9900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	9 Months	15 Months	2600	10400	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	15 Months	24 Months	2700	11900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	2 Years	5 Years	1700	6900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	5 Years	10 Years	1100	5900	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	10 Years	16 Years	1000	5300	Cells/uL	01/01/2019
Absolute Lymphocytes:	Male	16 Years	100 Years	1130	3300	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	0 Days	7 Days	200	1900	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	7 Days	60 Days	300	800	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	2 Months	5 Months	200	1300	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	5 Months	9 Months	100	1000	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	9 Months	15 Months	200	1200	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	15 Months	24 Months	100	1400	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	2 Years	5 Years	100	1000	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	5 Years	10 Years	90	900	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	10 Years	16 Years	70	1200	Cells/uL	01/01/2019
CD16/56 NK Cells	Female	16 Years	100 Years	120	600	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	0 Days	7 Days	200	1900	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	7 Days	60 Days	300	800	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	2 Months	5 Months	200	1300	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	5 Months	9 Months	100	1000	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	9 Months	15 Months	200	1200	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	15 Months	24 Months	100	1400	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	2 Years	5 Years	100	1000	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	5 Years	10 Years	90	900	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	10 Years	16 Years	70	1200	Cells/uL	01/01/2019
CD16/56 NK Cells	Male	16 Years	100 Years	120	600	Cells/uL	01/01/2019
CD19 B-Lymphocytes	Female	16 Years	120 Years	120	640	Cells/uL	01/01/2012
CD19 B-Lymphocytes	Male	16 Years	120 Years	120	640	Cells/uL	01/01/2012
CD3 T-Lymphocytes	Female	0 Days	60 Days	2800	6500	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Female	2 Months	5 Months	2300	6500	Cells/uL	01/01/2019

CD3 T-Lymphocytes	Female	5 Months	9 Months	2400	6900	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Female	9 Months	15 Months	1600	6700	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Female	15 Months	24 Months	1400	8000	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Female	2 Years	5 Years	900	4500	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Female	5 Years	10 Years	700	4200	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Female	10 Years	16 Years	800	3500	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Female	16 Years	100 Years	750	2510	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	0 Days	60 Days	2800	6500	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	2 Months	5 Months	2300	6500	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	5 Months	9 Months	2400	6900	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	9 Months	15 Months	1600	6700	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	15 Months	24 Months	1400	8000	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	2 Years	5 Years	900	4500	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	5 Years	10 Years	700	4200	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	10 Years	16 Years	800	3500	Cells/uL	01/01/2019
CD3 T-Lymphocytes	Male	16 Years	100 Years	750	2510	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	0 Days	7 Days	500	3400	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	7 Days	60 Days	2100	4900	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	2 Months	5 Months	1500	5000	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	5 Months	9 Months	1400	5100	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	9 Months	15 Months	1000	4600	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	15 Months	24 Months	900	5500	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	2 Years	5 Years	500	2400	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	5 Years	10 Years	300	2000	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	10 Years	16 Years	400	2100	Cells/uL	01/01/2019
CD3/4 T-Helpers	Female	16 Years	100 Years	430	1690	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	0 Days	7 Days	500	3400	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	7 Days	60 Days	2100	4900	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	2 Months	5 Months	1500	5000	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	5 Months	9 Months	1400	5100	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	9 Months	15 Months	1000	4600	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	15 Months	24 Months	900	5500	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	2 Years	5 Years	500	2400	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	5 Years	10 Years	300	2000	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	10 Years	16 Years	400	2100	Cells/uL	01/01/2019
CD3/4 T-Helpers	Male	16 Years	100 Years	430	1690	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	0 Days	7 Days	300	1900	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	7 Days	60 Days	500	1600	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	2 Months	5 Months	500	1600	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	5 Months	9 Months	600	2200	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	9 Months	15 Months	400	2100	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	15 Months	24 Months	400	2300	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	2 Years	5 Years	300	1600	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	5 Years	10 Years	300	1800	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	10 Years	16 Years	200	1200	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Female	16 Years	100 Years	220	1210	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	0 Days	7 Days	300	1900	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	7 Days	60 Days	500	1600	Cells/uL	01/01/2019

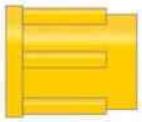
CD3/8 T-Suppressors	Male	2 Months	5 Months	500	1600	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	5 Months	9 Months	600	2200	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	9 Months	15 Months	400	2100	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	15 Months	24 Months	400	2300	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	2 Years	5 Years	300	1600	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	5 Years	10 Years	300	1800	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	10 Years	16 Years	200	1200	Cells/uL	01/01/2019
CD3/8 T-Suppressors	Male	16 Years	100 Years	220	1210	Cells/uL	01/01/2019
CD4:8 RATIO	Female	0 Years	120 Years	0.85	2.8		01/01/2012
CD4:8 RATIO	Male	0 Years	120 Years	0.85	2.8		01/01/2012

Test Panel	**M2 Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W853C
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Primary Biliary Cirrhosis		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal = Negative		
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
3E (BPO) Liver Antigen :		W5513	3E (BPO) Liver Antigen :	
gp210 Liver Antigen :		W5514	gp210 Liver Antigen :	
LC1 Liver Cytosol Antigen :		W5515	LC1 Liver Cytosol Antigen	
LKM1 Liver-Kidney Microsome Ag:		W5516	LKM1 Liver-Kidney Mic Ag	
AMA M2 Liver Antigen :		W5517	AMA M2 Liver Antigen :	
Ro52 Liver Antigen :		W5518	Ro52 Liver Antigen :	
SLA/LP Liver/ Pancreas Antigen :		W5519	SLA/LP Liver/ Pancreas Ag	
Sp100 Liver Antigen :		W5520	Sp100 Liver Antigen :	
PML Liver Antigen :		W5521	PML Liver Antigen :	
ANA (Mouse block) :		W8521	ANA (Mouse block) :	
Anti Mitochondrial Ab :		W8527	Anti Mitochondrial Ab :	
Gastric Parietal Cell Ab		W8528	Gastric Parietal Cell Ab	
Anti Smooth Muscle Ab :		W8529	Anti Smooth Muscle Ab :	
LKM Ab :		W8530	LKM Ab :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Macroprolactin**		
Synonyms	Macroprolactin Screening		
Abbreviation		*Lab Test Code*	C581
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Screening for Macroprolactin interference is automatically added to any prolactin results greater than 700mU/L. Results are then reported as a monomeric prolactin		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

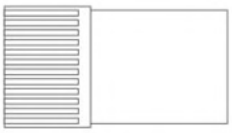
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Prolactin	mU/L	C1288	PROL.	
50/50 PEG Prolactin	mU/L	C1289	50/50 PEG Prolactin	
Recovery	%	C1291	RECOVERY	
Monomeric Prolactin	mU/L	C1296	Monomeric Prolactin	

Site	Choose an item.

Reference Ranges

Test	Macroprolactin
ISS Code	C581
ISS Test Name	MONOMERIC PROLACTIN
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Monomeric Prolactin	Female	0 Years	115 Years	39	422	mU/L	17/07/2019
Monomeric Prolactin	Male	0 Years	115 Years	32	309	mU/L	17/07/2019

Test Panel	**Magnesium (24 hr urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C526
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Useful in the investigation of hypomagnesaemia.		
Availability	Routine hours only		
Specimen	24hour Urine or Random Urine	*Volume Required*	3ml
Requirements	EMU or 24h collection.		
Containers	 24hr Urine  Universal		
	Preservative Free Urine Container		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

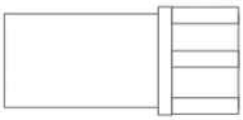
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
24 Hr Urine Volume.	Litres	C5000	UVOL	
U.Creat.Conc.	mmol/L	C5030	URINE CREATININE	
U.Creat.Exc.	mmol/24hr	C5040	U.Creat.Excretion	
Urine Magnesium	mmol/L	C5175	UMG	
Urine Magnesium Excretion	mmol/24hrs	C5176	UMGEX	

Site	

Reference Ranges

Test	Magnesium
ISS Code	C109
ISS Test Name	MAGNESIUM
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Magnesium	Female	0 Days	28 Days	0.6	1	mmol/l	12/12/2011
Magnesium	Female	29 Days	365 Days	0.7	1	mmol/l	12/12/2011
Magnesium	Female	1 Years	115 Years	0.7	1	mmol/l	12/12/2011
Magnesium	Male	0 Days	28 Days	0.6	1	mmol/l	12/12/2011
Magnesium	Male	29 Days	365 Days	0.7	1	mmol/l	12/12/2011
Magnesium	Male	1 Years	115 Years	0.7	1	mmol/l	12/12/2011

Test Panel	**Magnesium (random urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C525
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Useful in the investigation of hypomagnesaemia.		
Availability	Routine hours & On Call		
Specimen	Urine	*Volume Required*	3ml
Requirements	EMU or 24h collection.		
Containers	 Z10		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform	Abbott Architect		

Tests in Panel

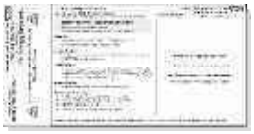
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
U.Creat.Conc.	mmol/L	C5030	URINE CREATININE	
Urine Magnesium	mmol/L	C5175	UMG	

Site	

Reference Ranges

Test	Magnesium (random urine)
ISS Code	C525
ISS Test Name	UMG.
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011

Test Panel	**Malaria Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	H712
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Send samples to laboratory as soon as possible to preserve integrity of any parasites.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	The requesting doctor will be contacted should this result be positive. Please state geographical location involved Inform the lab you are sending this test		
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Sysmex		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Malaria Screen		H0705	MALARIA SCREEN	

Site	

Test Panel	**Manganese**		
Synonyms			
Abbreviation		*Lab Test Code*	W302R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Minus 20°C		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel

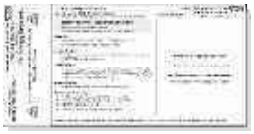
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Blood Manganese	nmol/L	W4550	Manganese	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Manganese
ISS Code	W302R
ISS Test Name	Manganese Result
Ref Range Comments	

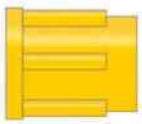
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Blood Manganese	Female	0 Years	120 Years	73	210	nmol/L	01/01/2012
Blood Manganese	Male	0 Years	120 Years	73	210	nmol/L	01/01/2012

Test Panel	**Measles PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V480
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Test designed for diagnosis of acute infection and not for determining immunity.		
Availability	Routine hours only		
Specimen	CSF, urine, saliva, mouth/throat swab	*Volume Required*	1ml
Requirements			
Containers	 Viral Swab  Sterile Universal		
	CSF, urine, saliva, mouth/throat swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Measles virus RNA		V4102	MEAS VRNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Measles Serology (IgG/IgM)**		
Synonyms			
Abbreviation		*Lab Test Code*	V432
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Test for past infection and immunity. For acute testing please consider sending a urine or viral throat swab for Measles PCR.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Measles IgM Antibody		V4100	MEAS IGM AB	
Measles IgG Antibody		V4101	MEAS IGG AB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Meningococcal PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V451
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	A molecular assay for diagnosis of Meningococcal infection. Please state date of onset and nature of symptoms.		
Availability	Routine hours only		
Specimen	Venous Blood/CSF	*Volume Required*	1ml
Requirements			
Containers	 EDTA  Sterile Universal		
	EDTA or CSF		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
WHO SENT?		V2586	WHO SENT?	
Neisseria meningitidis DNA		V4250	Meningo PCR	
N. meningitidis serogroup		V4258	NMENSERO	
Date sent		V6810	DS	
Reference lab:		V6812	RL	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Mercury (blood)**		
Synonyms			
Abbreviation		*Lab Test Code*	W899
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Used as an indication of recent exposure to mercury or exposure to alkyl mercury compounds. Can be used to investigate acute or chronic exposure and to monitor people exposed to mercury in the workplace.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Send samples immediately to avoid loss of Mercury on storage		
Containers	 EDTA  Heparin		
	EDTA or Heparin		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4°C - Overnight		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

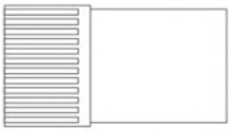
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Blood Mercury :	nmol/L	W6097	Mercury :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Mercury (blood)
ISS Code	W899
ISS Test Name	Blood Mercury Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Blood Mercury :	Female	0 Years	110 Years		<30	nmol/L	30/03/2011
Blood Mercury :	Male	0 Years	110 Years		<30	nmol/L	30/03/2011

Test Panel	**Mercury (urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	W349C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Blood is better indicator of exposure to mercury or exposure to alkyl mercury compounds. Urine can be used to test for exposure to metallic mercury and incorganic forms of mercury but it cannot be used to deterrmine exposure to methyl mercury.		
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	5ml
Requirements	Early morning Urine		
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

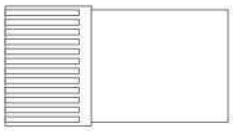
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Urine Creatinine :	mmol/L	W6565	Urine Creatinine :	
Urine Mercury :	nmol/L	W6566	Urine Mercury :	
Urine Hg / Cre Ratio :	nmol/mmol (Creat)	W6567	U Hg / Cre Ratio :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

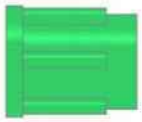
Reference Ranges

Test	Mercury (urine)
ISS Code	W349C
ISS Test Name	Urine Mercury Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Urine Hg / Cre Ratio :	Female	0 Years	110 Years	0	5.5	nmol/mmol (Creat)	10/03/2011
Urine Hg / Cre Ratio :	Male	0 Years	110 Years	0	5.5	nmol/mmol (Creat)	10/03/2011

Test Panel	Metabolic Screen (Urine)		
Synonyms			
Abbreviation		*Lab Test Code*	
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Urine metabolic screen consists of: • Reducing substances • Dipstick analysis • Amino acids (qualitative) • Cysteine/homocysteine screen • Organic acids • DMB screen for glycosaminoglycans (GAGs) See individual test pages for further details.		
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	10ml
Requirements	Samples should be sent to the laboratory on the day of collection.		
Containers	 Universal (Plain Urine)		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	2 - 8°C		
Comments			
Platform			
Tests in Panel			
Site	In-House Test (DRI)		

Test Panel	Methanol		
Synonyms			
Abbreviation		*Lab Test Code*	W561
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Contact the laboratory if results are required urgently.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Methotrexate**		
Synonyms			
Abbreviation		*Lab Test Code*	W435
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Methotrexate is used in the treatment of cancer, autoimmune diseases and in medical abortions. It acts by inhibiting the metabolism of folic acid.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Contact Reference Lab before collection - Chemical Pathology Sheffield Childrens Hospital 0114 277404		
Containers	 Heparin		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

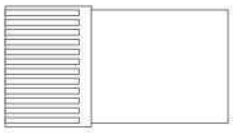
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Methotrexate	umol/L	W1756	MEHTOTRXATE :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Methotrexate
ISS Code	W435
ISS Test Name	METHOTREXATE RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Methotrexate	Female	0 Years	115 Years			umol/L	23/09/1997

Test Panel	Methylmalonate		
Synonyms			
Abbreviation		*Lab Test Code*	W389R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

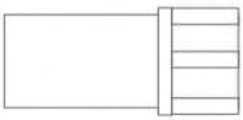
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Methylmalonate	umol/L	W6025	Methylmalonate	
MMA/Creatinine Ratio	umol/mmol Cr	W6026	MMA/Creat Ratio	
Urine Creatinine	mmol/L	W6027	Urine.Creat	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Methylmalonate
ISS Code	W389R
ISS Test Name	Methylmalonate Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
MMA/Creatinine Ratio	Female	0 Years	15 Years	1	8	umol/mmol Cr	01/10/2014
MMA/Creatinine Ratio	Female	15 Years	110 Years	0.2	2.4	umol/mmol Cr	01/10/2014
MMA/Creatinine Ratio	Male	0 Years	15 Years	1	8	umol/mmol Cr	01/10/2014
MMA/Creatinine Ratio	Male	15 Years	110 Years	0.2	2.4	umol/mmol Cr	01/10/2014

Test Panel	**Microalbumin**		
Synonyms			
Abbreviation		*Lab Test Code*	C661
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used as a screening tool for the early detection of kidney disease occurring as a complication of diabetes or hypertension. Also known as albumin / creatinine ratio (ACR)		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	0.2ml
Requirements	Early Morning Urine		
Containers	 Z10		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

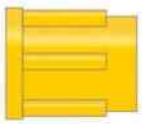
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
U.Albumin	mg/L	C3560		MALB
U.Albumin	mg/L	C3560		MALB
U.Albumin/creatinine ratio	mg/mmol Cr	C3565		ABBOTT Malb / cre ratio
U.Creat.Conc.	mmol/L	C5030		URINE CREATININE

Site	

Reference Ranges

Test	Microalbumin
ISS Code	C661
ISS Test Name	Microalbumin
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Albumin/creatinine ratio	Female	0 Years	115 Years		<3	mg/mmol Cr	01/02/2020
U.Albumin/creatinine ratio	Male	0 Years	115 Years		<3	mg/mmol Cr	01/02/2020
U.Albumin	Female	0 Years	115 Years			mg/L	12/12/2011
U.Albumin	Male	0 Years	115 Years			mg/L	12/12/2011
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011

Test Panel	**Moxifloxacin Assay**		
Synonyms			
Abbreviation		*Lab Test Code*	M046
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Please provide dosing information. Assays with incomplete dosing and specimen details may be rejected.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Random sample: Pre dose	mg/L	M0123	RAND	
	Moxifloxacin: Post dose	mg/L	M0138	MOXI PRE DOSE	
	Moxifloxacin:	mg/L	M0139	MOXI POST DOSE	

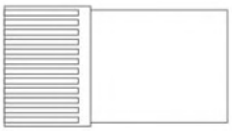
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**MPL Gene Analysis**		
Synonyms			
Abbreviation		*Lab Test Code*	W496
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
RESULT		W0505	Result.	
Referred Test :		W4321	Referred Test	

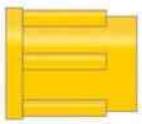
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**MRSA Screen (and any sensitivities)**		
Synonyms			
Abbreviation		*Lab Test Code*	M105
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Charcoal Transport Swab or Urine (catheter)	*Volume Required*	
Requirements	MRSA screen swabs should be obtained from nose, groin and other wounds, skin lesions or invasive devices. Specimens from other sites will be rejected.		
Containers	 Swab  Universal		
	Swab (Nose, Groin or Wound site) and Urine (catheter).		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Specimen:		M1019	M1	
NO OF SPEC TAKEN		M1076	NOS	
Specimen		M2019	M2	
Specimen:		M2119	M3	
Specimen		M2219	M4	
Specimen:		M2319	M5	
Specimen		M2419	M6	
Specimen:		M2519	M7	
Specimen		M2619	M8	
Specimen-		M2719	M9	
Site:		M2721	WS SITE1	
Specimen.		M2819	M10	
Site:		M2821	WSSITE2	
		M8160	MRSA Status	
Status		M8170	STATUS 1	

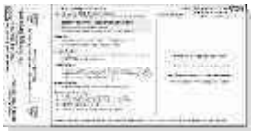
Site	

Test Panel	**Mumps Serology (IgG/IgM)**		
Synonyms			
Abbreviation		*Lab Test Code*	V433
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Test for past infection and immunity. For acute testing please consider sending a urine or viral throat swab for Mumps PCR.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Mumps IgG Antibody		V4103	MUMP IGGAB	
Mumps IgM Antibody		V4104	MUMP IGM AB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

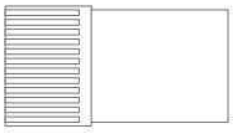
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Mumps Virus PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V479
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Test designed for diagnosis of acute infection and not for determining immunity.		
Availability	Routine hours only		
Specimen	CSF, urine, saliva, mouth/throat swab	*Volume Required*	
Requirements			
Containers	 Viral Swab  Sterile Universal		
	CSF, urine, saliva, mouth/throat swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Mumps virus RNA		V4105	MUMVRNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

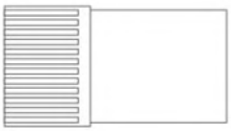
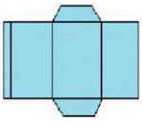
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Mycobacterium PCR		
Synonyms			
Abbreviation		*Lab Test Code*	V431
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Molecular detection of Mycobacterium		
Availability	Routine hours only		
Specimen	Respiratory Samples (pleural fluids, sputum, Bronchial washings, biopsies), Liquid Culture, Tissue, Fluids, CSF	*Volume Required*	2ml
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Mycobacterium genus DNA		V4257	Mycobacterium genus DNA	
Mycobacterium tb/avium complexes DNA		V4263	MYCO COMPLEX DNA	
M. tuberculosis complex		V4294	M TUBERCULOSIS COMPLEX	

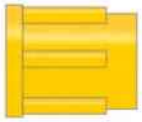
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Mycology Microscopy & Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M850
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Skin, Nail, Hair	*Volume Required*	
Requirements	Specimens should be collected using appropriate CE marked leak proof containers e.g. Sterile Universal or commercially available packets e.g. Dermapak, designed specifically for the collection and transport of skin, nail and hair samples.		
Containers	 Universal  Transport packet		
	Please refer to special requirements		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Structures seen:		M0009	STRUCTURES	
Specimen type:		M8000	SPEC TYPE	
Microscopy:		M8010	MICRO	

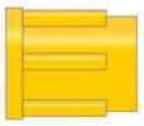
Site	

Test Panel	**Mycoplasma Antibody**		
Synonyms			
Abbreviation		*Lab Test Code*	V270A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Tested on Atypical Pneumonia Screen requests.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Kit Lot No. :		V0032	MYCO BATCH	
QC passed?		V0063	QC PASSED	
Mycoplasma Gel PA Titre :		V0090	Mycoplasma Gel PA	
Test performed by:		V0262	TEST PERFORMED BY	

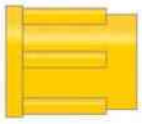
Site	

Test Panel	**Mycoplasma Serology**		
Synonyms	Mycoplasma (Extended testing)		
Abbreviation		*Lab Test Code*	V411
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	For Diagnosis of mycoplasma other than M.pneumoniae, including M.genitallum and M.hominus.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST  Swab		
	Green Topped Viral Genital Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Mycoplasma Gel PA Titre :		V0090	Mycoplasma Gel PA	
M. pnuemoniae CFT Titre		V0203	MYCO.PNEUM. CFT1	
Mycoplasma genitalium		V1090	Mycoplasma genitalium DNA	
Mycoplasma genus DNA		V1091	Mycoplasma genus DNA	
Mycoplasma hominis PCR DNA		V1092	MYCOPLASMA HOMINIS PCR	
Mycoplasma culture:		V1093	MYCOPLASMA CULTURE	
Trichomonas vaginalis DNA		V1095	Trichomonas vaginalis DNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

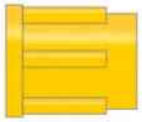
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Myosomal Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W515A
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Myositis, Inflammatory Myopathies inc Dermatomyositis, Juvenile Myositis, Polymyositis and Inclusion body myositis		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 SST  EDTA		
	Need 2ml serum in Gel tube or 2ml Plasma is EDTA or Li Hep tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Anti Nuclear Antibody-Hep2		W5055	ANA Hep2	
Anti-Jo-1 Ab :		W5507	Jo-1 Ab :	
Anti-Ku Ab :		W5508	Ku Ab :	
Anti-PL-12 Ab :		W5510	PL-12 Ab :	
Anti-PL-7 Ab :		W5511	PL-7 Ab :	
Anti-EJ Ab :		W5522	Anti-EJ Ab :	
Anti-OJ Ab :		W5523	Anti-OJ Ab :	
Anti-PM-SCL 100 Ab :		W5524	Anti-PM-SCL 100 Ab :	
Anti-PM-SCL-75 Ab :		W5525	Anti-PM-SCL-75 Ab :	
Anti-SRP Ab :		W5526	Anti-SRP Ab :	
MDA5 Ab :		W5540	MDA5 Ab :	
Mi-2-Alpha Ab :		W5541	Mi-2-Alpha Ab :	
Mi-2-Beta Ab :		W5542	Mi-2-Beta Ab :	
NXP-2 Ab :		W5543	NXP-2 Ab :	
Ro-52 Ab :		W5544	Ro-52 Ab :	
SAE-1 Ab :		W5545	SAE-1 Ab :	
TIF-Gamma Ab :		W5546	TIF-Gamma Ab :	
Centromere Antibody		W5547	Centromere Antibody	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

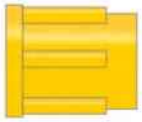
Test Panel	**Nerve Cell Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W416
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Autoimmune neuropathies		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Purkinji cell Ab,Anti-Yo :		W6244	Purkinji, Anti-Yo :	
Neuronal nuclei Ab,Anti-Hu/Ri :		W6245	Neuronal nuc Ab :	
Amphiphysin Ab :		W6246	Amphiphysin Ab :	
Anti-CV2/CRMP-5 Ab :		W6247	Anti-CV2/CRMP-5 :	
Anti-PNMA2 (Ma2/Ta) Ab :		W6248	Anti-PNMA2 :	
Anti-Tr Ab :		W6249	Anti-Tr Ab :	
Amphiphysin Ab Immunoblot		W6253	Amphiphysin Ab Immunoblot	
CV2/CRMP-5 Ab Immunoblot		W6254	CV2/CRMP-5 Ab Immunoblot	
Hu Ab Immunoblot		W6255	Hu Ab Immunoblot	
PNMA2/Ta Ab Immunoblot		W6256	PNMA2/Ta Ab Immunoblot	
RI Ab Immunoblot		W6257	RI Ab Immunoblot	
Yo Ab Immunoblot		W6258	Yo Ab Immunoblot	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Neutrophil Function - Di-Hydrorhodamine Test (DHR)		
Synonyms			
Abbreviation	DHR	*Lab Test Code*	W048
Department	Immunology		
Clinical Contact	Choose an item.		
Contact	Choose an item.	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Sample must be collected Mon-Thu. A control sample from a healthy individual MUST be collected at the same time as the patient's sample. Do not refrigerate the sample - it must remain at room temperature.		
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**NMDA Receptor Antibodies**		
Synonyms	N-methyl-D-aspartate receptor Antibodies		
Abbreviation		*Lab Test Code*	W329R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
NMDA Rec. abs.		W0329	NMDA Rec Abs	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

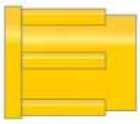
Test Panel	**Norovirus**		
Synonyms			
Abbreviation		*Lab Test Code*	M713
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	
Requirements	We will process Norovirus requests in the following circumstances; 1) Any sample received from a patient on an admission ward (whether requested or not).		
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

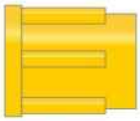
Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Norovirus:		M9971	NORO	
Kit Lot No. :		V0032	MYCO BATCH	
QC passed?		V0063	QC PASSED	
Test performed by:		V0262	TEST PERFORMED BY	

Site	

Test Panel	**NPM1/FLT3 Gene Analysis**				
Synonyms					
Abbreviation		*Lab Test Code*	W062		
Department	Haematology				
Clinical Contact	Consultant Haematologist				
Contact	01302 642870	*Turnaround Time*	2 Weeks		
Investigation Comments	By arrangement with Consultant Haematologist				
Availability	Routine hours only				
Specimen	Venous Blood	*Volume Required*	3ml		
Requirements					
Containers	 EDTA				
Request Forms	 Pathology Combined				
Transport	Sample referred to external source				
Storage notes					
Stability	12 - 28°C (Ambient Temperature)				
Long Term	4 - 10°C				
Comments					
Platform					
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

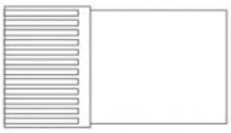
Test Panel	Neuron-Specific Enolase (NSE)		
Synonyms			
Abbreviation	NSE	*Lab Test Code*	W407
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Contact the laboratory if a result is required urgently as part of a neuro-prognostication pathway as information is required for the sample to be processed urgently. A result will then be provided same day		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	May require 2 samples to aid interpretation after resuscitation from cardiac arrest: 24h & 72h		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	NT-pro B-type Natriuretic Peptide (NT-proBNP)		
Synonyms			
Abbreviation	NT-proBNP	*Lab Test Code*	C274
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	A rule out test for heart failure. Levels below the reference range make heart failure an unlikely cause of symptoms.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Abbott Architect		
Tests in Panel			
Site	In-House Test (DRI)		

Reference Ranges

Test	NT Pro Beta Natriuretic Peptide
ISS Code	C274
ISS Test Name	NT- proBNP
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
NT- proBNP	Female	0 Years	115 Years	0	400	ng/L	22/10/2018
NT- proBNP	Male	0 Years	115 Years	0	400	ng/L	22/10/2018

Test Panel	**NTx (Bone Marker)**		
Synonyms			
Abbreviation		*Lab Test Code*	W540
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Should be the second morning urine sample (void first urine).		
Availability	Routine hours only (sent away)		
Specimen	Urine	*Volume Required*	5ml
Requirements	Should be the second morning urine sample (void first urine).		
Containers	 Universal (Plain Urine)		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Minus 20°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:			W0125	RESULTRETURNED
	Urine SMV NTX/Creat Ratio :		nM BCE/mmol Creat	W3115	NTX/CRE RATIO :
	Referred Test :			W4321	Referred Test

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Octaplas**		
Synonyms			
Abbreviation		*Lab Test Code*	J950
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Blood group must have been established, if not Group & Save must be sent.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 EDTA X-Match  EDTA		
	Issued as Group Specific so Group and Save will need to be provided if not had one previously.		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Vial / Batch Number :		J9512	VIAL/BATCH NUMBER	
Vial / Batch Number :		J9513	VIAL/BATCH NUMBER.	
Number of Vials Issued:		J9514	PCC VIALS ISSUED	
Expiry date		J9515	EXPIRY	
OCTAPLAS UNIT ISSUE		J9516	OCTAPLAS	
Number of Vials Issued:		J9517	OCTAPLAS UNITS ISSUED	

Site	

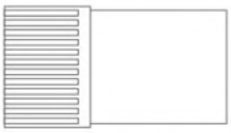
Test Panel	Oestradiol		
Synonyms			
Abbreviation	E2	*Lab Test Code*	C206
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used mainly in the evaluation of ovarian function for the investigation of precicious puberty in girls, gynaecomastia in males and amenorrhoea, abnormal		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.1ml
Requirements	Specimens should be sent to the laboratory without delay during normal hours.		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be refrigerated.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Oestradiol	pmol/L	C1277	ABBOTT Oestradiol	
Site					

Reference Ranges

Test	Oestradiol
ISS Code	C206
ISS Test Name	OESTRADIOL*
Ref Range Comments	

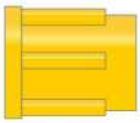
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Oestradiol	Female	0 Years	110 Years			pmol/L	01/10/2011
Oestradiol	Male	0 Years	110 Years	40	161	pmol/L	01/10/2011

Test Panel	**Organic Acids (urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	W390
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Included as part of the Metabolic Screen Part of the Metabolic Screen		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	10ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Organic Acids		W6021	NEWORG1	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Osmolality (serum)		
Synonyms			
Abbreviation		*Lab Test Code*	C630
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used in the differential diagnosis of hyponatraemia, diabetes insipidus and inappropriate secretion of ADH. Once pseudohyponatraemia has been ruled out, further assessment of a low serum osmolality is NOT required. A high serum osmolality may indicate the presence of a drug or toxin (osmotic gap also increased) or dehydration		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 12 hours, long term stability		
Long Term	4 - 10°C		
Comments			
Platform	Vitech Scientific Osmometer		

Tests in Panel

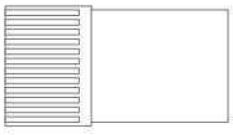
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
P.Osmolality	mOsm/kg H2O	C1160	P.OSMOLALITY	
Calculated Osmo.	mOsm/Kg	C1370	CALOSM	
Osmotic gap	mOsm/Kg	C1375	OSGAP	

Site	

Reference Ranges

Test	Osmolality (serum)
ISS Code	C630
ISS Test Name	Osmolality (serum)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Calculated Osmolality	Female	0 Years	100 Years	285	295	mOsm/Kg	14/03/1996
Calculated Osmolality	Male	0 Years	100 Years	285	295	mOsm/Kg	14/03/1996
Osmotic gap	Female	0 Years	100 Years	<15		mOsm/Kg	14/03/1996
Osmotic gap	Male	0 Years	100 Years	<15		mOsm/Kg	14/03/1996
Osmolality	Female	0 Years	100 Years	285	295	mOsm/kg H2O	01/02/1996
Osmolality	Male	0 Years	100 Years	285	295	mOsm/kg H2O	01/02/1996

Test Panel	Osmolality (urine)		
Synonyms			
Abbreviation		*Lab Test Code*	C635
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Useful aid to the interpretation of an abnormal serum osmolality to determine the renal concentrating ability.		
Availability	Routine hours & On Call		
Specimen	Random Urine	*Volume Required*	1ml
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 36 hours		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

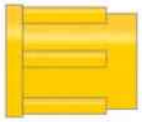
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
U.Osmolality	mOsm/kg H2O	C1165	U.OSMOLALITY	
Calculated U.Osmo.	mOsm/Kg	C1380	CALUOSM	

Site	

Reference Ranges

Test	Osmolality (urine)
ISS Code	C635
ISS Test Name	Osmolality (urine)
Ref Range Comments	

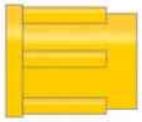
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Osmolality	Female	0 Years	100 Years	300	900	mOsm/kg H2O	01/02/1996
U.Osmolality	Male	0 Years	100 Years	300	900	mOsm/kg H2O	01/02/1996

Test Panel	**Otoblot**		
Synonyms	68kD Inner Ear Protein		
Abbreviation		*Lab Test Code*	W756C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
68kD Inner Ear Protein (OTOblot test) :		W7569	68kD Protein :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Ovarian Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	C958
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Autoimmune Premature Ovarian failure (40-60%)Polyglandular Autoimmunity		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Ovarian Antibody:		C6246	OVA	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Oxalate (plasma)		
Synonyms			
Abbreviation		*Lab Test Code*	W558R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Plasma	*Volume Required*	1ml
Requirements			
Containers	 Preferred Pink EDTA  EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Oxalate (plasma)	umol/L	W3575	Oxalate (Plasma)	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Oxalate (urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	W555
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Part of the urine stone screen to investigate cause of renal stones		
Availability	Routine hours only (sent away)		
Specimen	24 Hour Urine with Acid Preservative	*Volume Required*	1ml
Requirements	A 24h collection is most helpful. Collect 24h sample in acid preservative (red top bottle) On arrival in lab, acidify promptly with HCl to ph		
Containers	 24hr Urine with Acid Preservative		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

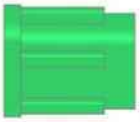
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:			W0125	RESULTRETURNED
Sample type :			W3566	Oxalate sample :
Oxalate/period (24h) :		mmol	W3567	Oxalate/24h :
Creatinine (Assayed at BCH) :		mmol/L	W3568	Oxalate Creatinine :
Oxalate / Creat Ratio :		mmol/mol creatinine	W3569	Oxalate / Creat Ratio :
Oxalate :		mmol/L	W3570	Oxalate :
Referred Test :			W4321	Referred Test

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Oxalate (urine)
ISS Code	W555
ISS Test Name	Oxalate (Urine) Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Oxalate / Creat Ratio :	Female	0 Days	365 Days	15	260	mmol/mol creatinine	01/06/2011
Oxalate / Creat Ratio :	Female	366 Days	1460 Days	11	120	mmol/mol creatinine	01/06/2011
Oxalate / Creat Ratio :	Female	1461 Days	4379 Days	6	150	mmol/mol creatinine	01/06/2011
Oxalate / Creat Ratio :	Female	12 Years	110 Years	2	83	mmol/mol creatinine	01/06/2011
Oxalate / Creat Ratio :	Male	0 Days	365 Days	15	260	mmol/mol creatinine	01/06/2011
Oxalate / Creat Ratio :	Male	366 Days	1460 Days	11	120	mmol/mol creatinine	01/06/2011
Oxalate / Creat Ratio :	Male	1461 Days	4379 Days	6	150	mmol/mol creatinine	01/06/2011
Oxalate / Creat Ratio :	Male	12 Years	110 Years	2	83	mmol/mol creatinine	01/06/2011

Test Panel	**P53 Gene**			
Synonyms				
Abbreviation		*Lab Test Code*	W061	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	2 Weeks	
Investigation Comments	By arrangement with Consultant Haematologist			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	5ml	
Requirements				
Containers	 Heparin			
	2 x bottles			
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**P111NP - Procollagen Peptides**		
Synonyms			
Abbreviation	P3NP	*Lab Test Code*	W420
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Serum P3NP concentrations is a strong predictive indicator of the development of hepatic fibrosis in patients treated with high dose methotrexate. Current guidelines on the use of methotrexate in psoriasis suggest P3NP measurements be carried out annually		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Plain		Choose an item.
	Do not use gel separator tubes		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

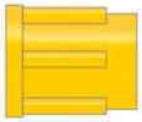
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Procoll 3 NP	ug/L	W1107	PC3NP1	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Procollagen Type III Peptide
ISS Code	W420
ISS Test Name	Procollagen Type III Peptide Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Procoll 3 NP	Female	0 Years	2 Years	10	50	ug/L	20/08/1998
Procoll 3 NP	Female	2 Years	4 Years	5	15	ug/L	20/08/1998
Procoll 3 NP	Female	4 Years	10 Years	5	10	ug/L	20/08/1998
Procoll 3 NP	Female	11 Years	14 Years	8	15	ug/L	20/08/1998
Procoll 3 NP	Female	15 Years	19 Years	2	8	ug/L	20/08/1998
Procoll 3 NP	Female	20 Years	100 Years	1.7	4.2	ug/L	20/08/1998
Procoll 3 NP	Male	0 Years	2 Years	10	50	ug/L	20/08/1998
Procoll 3 NP	Male	2 Years	4 Years	5	15	ug/L	20/08/1998
Procoll 3 NP	Male	4 Years	10 Years	5	10	ug/L	20/08/1998
Procoll 3 NP	Male	11 Years	14 Years	5	10	ug/L	20/08/1998
Procoll 3 NP	Male	15 Years	19 Years	8	20	ug/L	20/08/1998
Procoll 3 NP	Male	20 Years	100 Years	1.7	4.2	ug/L	20/08/1998

Test Panel	**Paediatric Split Bilirubin**		
Synonyms			
Abbreviation		*Lab Test Code*	C113
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Also known as conjugated bilirubin. Conjugated bilirubin performed on all total bilirubin results greater than 50µmol/L		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

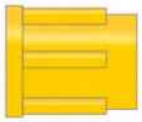
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	T.Bilirubin	umol/L	C1080	TBIL	
	C.Bilirubin	umol/L	C1086	DBIL	

Site	

Reference Ranges

Test	Paediatric Split Bilirubin
ISS Code	C113
ISS Test Name	Paediatric Split Bilirubin
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
C.Bilirubin	Female	0 Days	28 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Female	29 Days	365 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Female	1 Years	115 Years	0	9	umol/L	12/11/2012
C.Bilirubin	Male	0 Days	28 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Male	29 Days	365 Days	0	9	umol/L	12/11/2012
C.Bilirubin	Male	1 Years	115 Years	0	9	umol/L	12/11/2012
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
T.Bilirubin	Female	0 Days	2 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Female	2 Days	14 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Female	14 Days	365 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Female	1 Years	115 Years	0	21	umol/L	12/12/2011
T.Bilirubin	Male	0 Days	2 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Male	2 Days	14 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Male	14 Days	365 Days	0	21	umol/L	12/12/2011
T.Bilirubin	Male	1 Years	115 Years	0	21	umol/L	12/12/2011

Test Panel	**Paracetamol & Salicylate**		
Synonyms			
Abbreviation		*Lab Test Code*	C169
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Blood sample should be collected at least 4 hours after a single overdose, or as soon as possible if more than one overdose has been taken within the last one or two days. See BNF for guidance on treatment limits. (edition 64 onwards)		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements	Important to know time of drug ingestion. Take blood sample 4 hours after overdose		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Paracetamol	mg/L	C1151	PARA	
Salicylate	mg/L	C1156	SALICYLATE.	

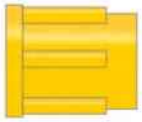
Site	

Test Panel	**Parasites**		
Synonyms			
Abbreviation		*Lab Test Code*	M820
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Send sellotape slide for investigation of Enterobius infestation		
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	3ml
Requirements	Faeces / Parasite for identification / Urine		
Containers	 Faeces		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes	If amoebic dysentery is suspected, ensure delivery to the laboratory within 2 hours of passage. If urinary schistosomiasis is suspected, send a sample of terminal urine preferably collected between 10.00 and 14.00.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		M7021	FAEC TH	
CONCENTRATED OCP		M7250	OCP	
CRYPTOSPORIDIUM CYSTS		M7260	CRYPTOCON	
OCP MEASUREMENT	um	M7270	OCP MEASUREMENT	

Site	

Test Panel	**Parathyroid Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	C960
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Autoimmune Hypoparathyroidism.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Parathyroid Antibody:		C6256	PTHA	
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Parathyroid Hormone**		
Synonyms			
Abbreviation	PTH	*Lab Test Code*	C270
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Used to investigate the cause of hyper and hypocalcaemia. Result should be interpreted with the serum calcium result.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements	Refrigerate samples as soon as received in laboratory (prior to analysis)		
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Refrigerate samples as soon as received in laboratory (prior to analysis)		
Storage notes	Refer to Short Term Stability		
Stability	2-8°C		
Long Term	Not Possible		
Comments			
Platform	Abbott Architect		

Tests in Panel

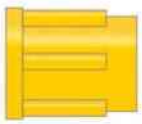
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Parathyroid Hormone	pmol/L	C1351	ABBOTT PTH	

Site	

Reference Ranges

Test	Parathyroid Hormone
ISS Code	C270
ISS Test Name	PTH
Ref Range Comments	

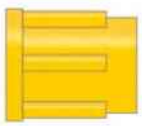
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Parathyroid Hormone	Male Female	7 Days	1 Year	0.68	9.39	pmol/L	05/10/2022
Parathyroid Hormone	Male Female	1 year	9 years	1.72	6.68	pmol/L	05/10/2022
Parathyroid Hormone	Male Female	9 Years	17 Years	2.32	9.28	pmol/L	05/10/2022
Parathyroid Hormone	Male Female	17 years	110 Years	1.6	7.2	pmol/L	05/10/2022

Test Panel	**Parvovirus Confirmation**		
Synonyms			
Abbreviation		*Lab Test Code*	V435
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Only used for serological confirmation of Parvovirus infection, following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Parvovirus Quantification No	IU/ml	V0253	PARVO QUANT NUM	
Parvovirus Quantification Log		V0254	PARVO QUANT LOG	
Parvovirus IgM Antibody		V4109	PARVMAB	
Parvovirus IgG Antibody		V4110	PARVGAB	
Parvovirus B19 Genome copy	IU/ml	V4111	PARVGEN	
Parvovirus B19 PCR		V4112	PARVPCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Parvovirus Serology (IgG/IgM)**		
Synonyms			
Abbreviation		*Lab Test Code*	V170
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Test for past exposure to (or immunity against) Parvovirus or acute infection. State date of onset and nature of symptoms. Indicate if patient is pregnant and gestation. If pregnant, test can be carried out on the booking sample if available. Please con		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	If contact in pregnancy please state gestation with date and nature of contact. Please include contact telephone number.		
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		V0250	VIR LAB NOTES	
Parvovirus IgG Antibody :		V0283	PARVO IGG	
Value		V0284	PARVO IGG NUM	
Parvovirus IgM Antibody :		V0285	PARVO IGM	
Value		V0286	PARVO IGM NUM	

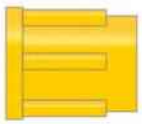
Site	

Test Panel	**Pharmacy Sterility Tests**		
Synonyms			
Abbreviation		*Lab Test Code*	M040
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Pharmacy Broth	*Volume Required*	
Requirements			
Containers	 Pharmacy Vials		Pharmacy Pouches
	Unique Pharmacy Vials/Syringes/Pouches		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Syringe One (2ml)		M1705	SY1	
Syringe Two (2ml)		M1710	SY2	
Syringe Three (2ml)		M1715	SY3	
Syringe Four (2ml)		M1720	SY4	
Syringe Five (2ml)		M1725	SY5	
Vial One (20ml)		M1730	Vial1	
Vial Two (20ml)		M1735	Vial 2	
Vial Three (12ml)		M1740	Vial 3	
Vial One (20ml)		M1741	VIAL 1 FERTILITY	
Vial Two (20ml)		M1742	VIAL 2 FERTILITY	
Vial Three (12ml)		M1743	VIAL 3 FERTILITY	
50ml Bag (40ml)		M1745	Bag1	
Identified as:		M7501	ORGID	

Site	

Test Panel	**Phenobarbitone**		
Synonyms			
Abbreviation		*Lab Test Code*	C054
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	An anti-convulsant drug. Sample taken immediately before a dose, at least 21 days after initiation of treatment.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Take blood sample just before dose (ie trough level)		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Phenobarbitone	umol/L	C2015	PHENOBARBITONE	
Phenobarbitone	mg/L	C3015	PHENOBARB.	

Site	

Reference Ranges

Test	Phenobarbitone
ISS Code	C054
ISS Test Name	PHENOBARBITONE
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Phenobarbitone	Female	0 Years	115 Years	10	40	mg/L	12/12/2011
Phenobarbitone	Male	0 Years	115 Years	10	40	mg/L	12/12/2011

Test Panel	**Phenytoin**		
Synonyms			
Abbreviation		*Lab Test Code*	C056
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870/642840	*Turnaround Time*	24 hours
Investigation Comments	An anti-convulsant drug. Sample taken immediately before a dose, at least 21 days after initiation of treatment.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements	Take blood sample just before dose (ie trough level)		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

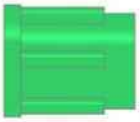
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Phenytoin	umol/L	C2000	PHENYTOIN	
	Phenytoin	mg/L	C3002	PHENYTOIN.	

Site	

Reference Ranges

Test	Phenytoin
ISS Code	C056
ISS Test Name	PHENYTOIN
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Phenytoin	Female	0 Years	115 Years	40	80	umol/L	12/12/2011
Phenytoin	Male	0 Years	115 Years	40	80	umol/L	12/12/2011
Phenytoin	Female	0 Years	115 Years	5	20	mg/L	12/12/2011
Phenytoin	Male	0 Years	115 Years	5	20	mg/L	12/12/2011

Test Panel	**Pipecholic Acid**		
Synonyms			
Abbreviation		*Lab Test Code*	W478R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Heparin  EDTA		
	Green Li Hep or Purple EDTA		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

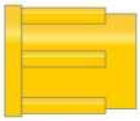
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Plasma Pipecolic Acid :	umol/L	W4265	Pipecolic Acid :	
CSF Pipecolic acid	umol/L	W4266	CSF Pipecolic Acid	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

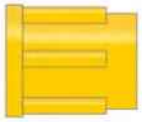
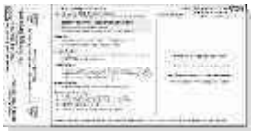
Test	Pipecholic Acid (CSF or Plasma)
ISS Code	W478R
ISS Test Name	Pipecolic Acid Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
CSF Pipecolic acid	Female	0 Years	110 Years	0.01	0.12	umol/L	01/10/2014
CSF Pipecolic acid	Male	0 Years	110 Years	0.01	0.12	umol/L	01/10/2014
Plasma Pipecolic Acid :	Female	0 Days	7 Days		<10.8	umol/L	01/06/2021
Plasma Pipecolic Acid :	Female	8 Days	366 Days		<2.46	umol/L	01/06/2021
Plasma Pipecolic Acid :	Female	1 Years	100 Years		<2.46	umol/L	01/06/2021
Plasma Pipecolic Acid :	Male	0 Days	7 Days		<10.8	umol/L	01/06/2021
Plasma Pipecolic Acid :	Male	8 Days	366 Days		<2.46	umol/L	01/06/2021
Plasma Pipecolic Acid :	Male	1 Years	100 Years		<2.46	umol/L	01/06/2021

Test Panel	Pituitary Antibodies		
Synonyms			
Abbreviation		*Lab Test Code*	W371
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Lymphocytic hypophysitis, Autoimmune pituitary disease, Empty cell syndrome and some pituitary tumours		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform			

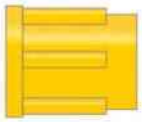
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Pituitary Antibody:		C6251	PIT	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Pituitary Function Tests**			
Synonyms				
Abbreviation		*Lab Test Code*	C233	
Department	Clinical Biochemistry			
Clinical Contact	Clinical Biochemist			
Contact	01302 642870	*Turnaround Time*	24 hours	
Investigation Comments				
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	2ml	
Requirements	Please contact the lab to notify lab staff of procedure, patient details and where the test is being performed prior to commencing procedure.			
Containers	 SST		Choose an item.	
Request Forms	 Pathology Combined			
Transport	Refer to Short Term Stability			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform	Choose an item.			
Tests in Panel	*Literal* *Unit* *Lab Code* *Lab Name* *Lab Comment*			
Site	Choose an item.			

Test Panel	**Placenta**		
Synonyms	Histology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.		
Availability	Monday – Friday (9am - 5pm), except bank holidays.		
Specimen	Tissue biopsy / resection	*Volume Required*	
Requirements			
Containers	 Histology Pot — Choose an item.		
	Histology pot containing 10% formalin Histology specimens should be placed in a suitable sized container to be fully immersed in formalin. Ideally the volume of formalin should be at least five times the volume of the specimen. The sample should be placed into formalin as soon as possible.		
Request Forms			
Request Forms	Sheffield Children's Hospital request for placental histology – indicating either section & store or Histology		
Transport			
Storage notes	Refer to Short Term Stability *Store at room temperature – do not refrigerate*		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A histology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Sample(s) received in a container of 10% formalin, labelled with patient identifiers. • Request form with corresponding patient identifiers, sample site and relevant clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. All high risk specimens should be clearly marked 'Danger of infection' on both form and pot. Unsuitable for frozen section or DIF		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	Choose an item.				

Test Panel	**Placental Alkaline Phosphatase**		
Synonyms			
Abbreviation		*Lab Test Code*	W861
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	For use as a marker in monitoring clinically proven cases of seminoma tumours. Tumour markers are not sufficiently sensitive or specific to use for screening.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

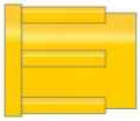
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Placental ALP	U/L	W6042	PLAP :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Placental Alkaline Phosphatase
ISS Code	W861
ISS Test Name	Placental Alkaline Phosphatase Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Placental ALP	Female	0 Years	115 Years	0	0.5	U/L	03/03/2011
Placental ALP	Male	0 Years	115 Years	0	0.5	U/L	03/03/2011

Test Panel	Plasma Metanephrines		
Synonyms			
Abbreviation		*Lab Test Code*	W240R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			
Tests in Panel	Plasma Metanephrine Pl.Normetanephrine 3-methoxytyramine (3-MT)		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Reference Ranges

Test	Plasma Metanephrines
ISS Code	W240R
ISS Test Name	Plasma.Metanephrines Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Pl.Normetanephrine	Male Female	0 Years	110 Years		<1180	pmol/L	01/01/2023
Plasma Metanephrine	Male Female	0 Years	110 Years		<510	pmol/L	01/01/2023
3-methoxytyramine (3-MT)	Male Female	0 Years	110 Years		<180	pmol/L	01/01/2023

Test Panel	**Plasma Viscosity**		
Synonyms			
Abbreviation	PV	*Lab Test Code*	W190
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Should only be requested if ESR and CRP are not appropriate		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

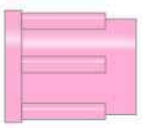
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Plasma Viscosity	mPa/s	H0050	PLASMA VISCOSITY	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Plasma Viscosity
ISS Code	W190
ISS Test Name	Plasma Viscosity
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Plasma Viscosity	Female	1 Days	365 Days	1.5	1.72	mPa/s	12/01/1996
Plasma Viscosity	Female	1 Years	115 Years	1.5	1.72	mPa/s	12/01/1996
Plasma Viscosity	Female (Pregnant)	1 Years	115 Years	1.5	1.72	mPa/s	12/01/1996
Plasma Viscosity	Male	1 Days	365 Days	1.5	1.72	mPa/s	12/01/1996
Plasma Viscosity	Male	1 Years	115 Years	1.5	1.72	mPa/s	12/01/1996

Test Panel	Platelets Issue		
Synonyms			
Abbreviation		*Lab Test Code*	J150
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Blood group must have been established, if not Group & Save must be sent. Consultant Haematologist approval only, unless massive haemorrhage protocol activated.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	
Requirements	Request must be authorised by Consultant Haematologist with the exception of massive haemorrhage protocol		
Containers	 EDTA X-Match		
	Issued as Group Specific so Group and Save will need to be provided if not had one previously.		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
COMPATIBILITY TEST		J0005	COMPATIBILITY	
UNIT NUMBER - PLATELETS		J1500	UNIT NUMBER P	
PRODUCT - PLATELETS		J1501	PRODUCT P	
UNIT GROUP - PLATELETS		J1502	UNIT GROUP P	
FRACTION NUMBER - PLATELETS		J1503	FRACTION NUMBER P	
PLATELET ISSUE		J1504	PLT ISSUE	

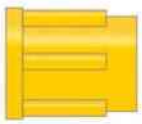
Site	

Test Panel	**Pneumococcal PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V452
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	A molecular assay for diagnosis of Pneumococcal infection. Please state date of onset and nature of symptoms.		
Availability	Routine hours only		
Specimen	Venous Blood/CSF	*Volume Required*	1ml
Requirements			
Containers	 EDTA  Sterile Universal		
	EDTA or CSF		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Streptococcus pneumoniae DNA		V4251	Pneumococcal PCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

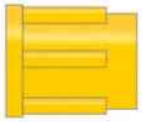
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Pneumococcal Serotype Specific Study**		
Synonyms			
Abbreviation		*Lab Test Code*	V467
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	This test is used for measuring immunity against Pneumococcus. Particually focused on serotypes used in the Pneumococcal vaccination.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Danish serotype 1(IgG)	ug/ml	V6774		Danish serotype 1 (IgG)
Danish serotype 4 (IgG)	ug/ml	V6775		Danish Serotype 4 (IgG)
Danish serotype 5(IgG)	ug/ml	V6776		Danish Serotype 5 (IgG)
Danish serotype 6B (IgG)	ug/ml	V6777		Danish Serotype 6B (IgG)
Danish serotype 9v (IgG)	ug/ml	V6778		Danish Serotype 9V (IgG)
Danish serotype 14 (IgG)	ug/ml	V6779		Danish Serotype 14 (IgG)
Danish serotype 18C (IgG)	ug/ml	V6780		Danish Serotype 18C (IgG)
Danish serotype 19F (IgG)	ug/ml	V6781		Danish Serotype 19F (IgG)
Danish serotype 23F (IgG)	ug/ml	V6782		Danish serotype 23F (IgG)
Danish serotype 3 (IgG)	ug/ml	V6783		Danish Serotype 3 (IgG)
Danish serotype 7F (IgG)	ug/ml	V6784		Danish Serotype 7F (IgG)
Danish serotype 19A (IgG)	ug/ml	V6785		Danish Serotype 19A (IgG)
Danish serotype 6A (IgG)	ug/ml	V6786		Danish Serotype 6A (IgG)
Date result received		V6814		DRR
Reference Lab No		V6816		RLN
REF LAB DATE REC		V6825		REF LAB DATE RECEIVED
REF LAB DATE REPORTED		V6835		REF LAB DATE REPORTED
Referred Test :		W4321		Referred Test

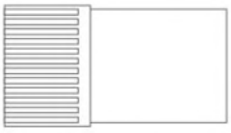
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Pneumococcal Vaccine Response**		
Synonyms			
Abbreviation		*Lab Test Code*	V444
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	This test is used for measuring immunity against Pneumococcus.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Pneumococcal antibody:	U/ml	V6772		PNEUAB
Danish serotype 1(IgG)	ug/ml	V6774		Danish serotype 1 (IgG)
Danish serotype 4 (IgG)	ug/ml	V6775		Danish Serotype 4 (IgG)
Danish serotype 5(IgG)	ug/ml	V6776		Danish Serotype 5 (IgG)
Danish serotype 6B (IgG)	ug/ml	V6777		Danish Serotype 6B (IgG)
Danish serotype 9v (IgG)	ug/ml	V6778		Danish Serotype 9V (IgG)
Danish serotype 14 (IgG)	ug/ml	V6779		Danish Serotype 14 (IgG)
Danish serotype 18C (IgG)	ug/ml	V6780		Danish Serotype 18C (IgG)
Danish serotype 19F (IgG)	ug/ml	V6781		Danish Serotype 19F (IgG)
Danish serotype 23F (IgG)	ug/ml	V6782		Danish serotype 23F (IgG)
Danish serotype 3 (IgG)	ug/ml	V6783		Danish Serotype 3 (IgG)
Danish serotype 7F (IgG)	ug/ml	V6784		Danish Serotype 7F (IgG)
Danish serotype 19A (IgG)	ug/ml	V6785		Danish Serotype 19A (IgG)
Danish serotype 6A (IgG)	ug/ml	V6786		Danish Serotype 6A (IgG)
Date result received		V6814		DRR
Reference Lab No		V6816		RLN
REF LAB DATE REC		V6825		REF LAB DATE RECEIVED
REF LAB DATE REPORTED		V6835		REF LAB DATE REPORTED
Referred Test :		W4321		Referred Test

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Pneumocystis**		
Synonyms			
Abbreviation		*Lab Test Code*	V455
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	For detection of Pneumocystis species in respiratory samples via molecular and microscopy methods.		
Availability	Routine hours only		
Specimen	Bronchoalveolar lavage sample or induced sputum	*Volume Required*	1ml
Requirements	Immunocompromised patients with typical symptoms and CXR appearances. Please discuss with Consultant Microbiologists.		
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Pneumocystis		V4200	Pneumocystis IF	
Pneumocystis PCR		V4201	Pneumocystis PCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

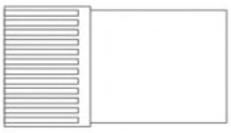
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**PNH Screen**		
Synonyms	Paroxysmal nocturnal haemoglobinuria		
Abbreviation	PNH	*Lab Test Code*	W013
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Diagnosis:		W0013	Diagnosis	
Referred Test :		W4321	Referred Test	

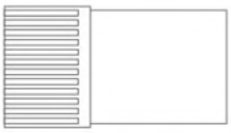
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Polyoma JC Virus PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V456
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	A molecular assay for diagnosis of Polyoma JC Virus infection. Please state date of onset and nature of symptoms.		
Availability	Routine hours only		
Specimen	Urine, CSF or EDTA	*Volume Required*	1ml
Requirements			
Containers	 Sterile Universal  EDTA		
	Urine, CSF or EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Polyoma JC virus DNA		V4202	Polyoma JC virus DNA	
JC virus haemagg inhibition		V4204	JC VIRUS AGG	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

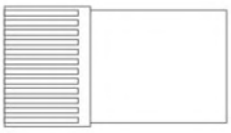
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Pool Water Analysis**		
Synonyms			
Abbreviation		*Lab Test Code*	M285A
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Pool Water	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Location			M2111	LOCATION
COUNT 1		cfu/100ml	M2112	COUNT1
Duplicate		cfu/100ml	M2113	DUPLICATE
Control		cfu/100ml	M2114	CONTROL
Mean TVC		cfu/ml	M2116	MEAN TVC
OX+ G-R			M2118	OX
API			M2122	API NO
			M2124	PSN
Pseudomonas aeruginosa isolated		cfu/100ml	M2128	PSP
E.coli isolated		cfu/100ml	M2129	ECOLI COUNT
Coliforms isolated		cfu/100ml	M2131	COLIFORM COUNT
Aerobic colony count		cfu/100ml	M2132	AEROBIC COLONY COUNT

Site	

Test Panel	**Porphobillinogen (PBG) Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	C732
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Test used to rule out an acute porphyria as the cause of acute neurovisceral symptoms.		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	5ml
Requirements			
Containers	 Universal		
	Protect sample from light.		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Sample should be sent to the laboratory immediately after collection.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

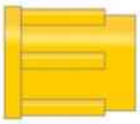
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Urine PBG Absorbance	AU	C5003	Urine PBG ABS	
Urine PBG	umol/L	C5024	Calculated PBG	
Urine PBG:creatinine ratio	umol/mmol creat	C5026	PBG:creatinine ratio	
U.Creat.Conc.	mmol/L	C5030	URINE CREATININE	

Site	

Reference Ranges

Test	Porphobilinogen Screen
ISS Code	C732
ISS Test Name	PBG Screen
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Urine PBG:creatinine ratio	Female	0 Years	115 Years		<1.5	umol/mmol creat	01/01/2019
Urine PBG:creatinine ratio	Male	0 Years	115 Years		<1.5	umol/mmol creat	01/01/2019
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011

Test Panel	**Pregnancy Test (serum)**		
Synonyms			
Abbreviation	BHCG	*Lab Test Code*	C245A
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Used for investigation of pregnancy states. Give LMP or gestational age on request form. Urine test recommended for standard pregnancy test		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.1ml
Requirements	Give LMP or gestational age on request form if possible.		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Beta HCG	IU/L	C1321	PBHCG (Abbott)	

Site	

Reference Ranges

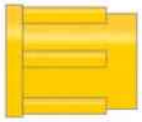
Test	Pregnancy Test (serum)
ISS Code	C245A
ISS Test Name	PBHCG (Abbott)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Beta HCG	Female	0 Years	100 Years			IU/L	23/04/2012
Beta HCG	Male	0 Years	100 Years		<5	IU/L	23/04/2012

Test Panel	**Pregnancy Test (urine)**			
Synonyms				
Abbreviation		*Lab Test Code*	C410	
Department	Clinical Biochemistry			
Clinical Contact	Clinical Biochemist			
Contact	01302 642870	*Turnaround Time*	24 hours	
Investigation Comments	This test has a cut off of urine hCG at 25 IU/L.			
Availability	Routine hours only			
Specimen	Random Urine	*Volume Required*	1ml	
Requirements	Urine samples should ideally be a fresh early morning specimen.			
Containers	 Universal			
Request Forms	 Pathology Combined			
Transport				
Storage notes	Refer to Short Term Stability			
Stability	12 - 28°C (Ambient Temperature)			
Long Term	2 - 8°C			
Comments	Samples should be sent to the laboratory on the day of collection.			
Platform	Abbott Architect			
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Urine Pregnancy		C3010	UPT	
Site					

Test Panel	**Prepared Slides - Cytology**		
Synonyms	Non Gynae Cytology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.		
Availability	Monday – Friday (9am - 5pm), except bank holidays. Specimen(s) should be received at DRI Histopathology before 3pm for same day processing.		
Specimen	Fluid	*Volume Required*	
Requirements	Slide(s) labelled with patient identifiers		
Containers	 Slide in appropriate Slide Mailer box		
	Labelled slides within a slide transport box Slides must be labelled with patients name, district number and DOB in pencil. Sample material should be spread quickly and evenly onto the glass slide to produce a cell mono-layer. Slides should be placed into a labelled slide mailer box. Cytology fixative (CytoFixx) may be applied if required.		
Request Forms	 Histology WPR2583		
Transport			
Storage notes	Refer to Short Term Stability Store at room temperature		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A Non gynae cytology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Slide(s) labelled with patient identifiers • Request form with corresponding patient identifiers, named clinician, sample site and relevant clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. All high risk specimens should be clearly marked ‘Danger of infection’ on both form and pot.		

	Unsuitable for frozen section or DIF				
Platform	Choose an item.				
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	Choose an item.				

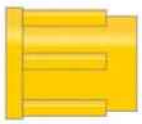
Test Panel	**Procalcitonin**		
Synonyms			
Abbreviation		*Lab Test Code*	V264
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Requests must be authorised by Microbiology Consultants.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Kit Lot No. :		V0032	MYCO BATCH	
QC passed?		V0063	QC PASSED	
TIME SAMPLE TAKEN:		V0260	TIME SAMPLE TAKEN	
PROCALCITONIN	ng/mL	V0261	PROCALCITONIN	
Test performed by:		V0262	TEST PERFORMED BY	
Procalcitonin test		V0263	PROCALCITONIN TEST	

Site	

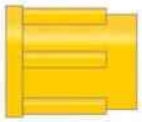
Test Panel	**Products of Conception – up to 14 weeks gestation**			
Synonyms	Histology			
Abbreviation		*Lab Test Code*	T030	
Department	Histology			
Clinical Contact	Consultant Histopathologist			
Contact	01302 642843	*Turnaround Time*	1 Week	
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.			
Availability	Monday – Friday (9am - 5pm), except bank holidays.			
Specimen	Tissue biopsy	*Volume Required*		
Requirements				
Containers	 Histology Pot		Choose an item.	
	Histology pot containing 10% formalin Histology specimens should be placed in a suitable sized container to be fully immersed in formalin. Ideally the volume of formalin should be at least five times the volume of the specimen. The sample should be placed into formalin as soon as possible.			
Request Forms	 Histology WPR2583			
	Supplementary consent for burial/ cremation for a pregnancy loss under 24 weeks gestation with no signs of life			
	Medical certificate confirming no signs of life under 24 weeks			
Transport				
Storage notes	Refer to Short Term Stability - *Store at room temperature – do not refrigerate*			
Stability	12 - 28°C (Ambient Temperature)			
Long Term	12 - 28°C (Ambient Temperature)			
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A histology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Sample(s) received in a container of 10% formalin, labelled with patient identifiers. • Request form with corresponding patient identifiers, sample site and relevant clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. All high risk specimens should be clearly marked 'Danger of infection' on both form and pot. Unsuitable for frozen section or DIF			
Platform	Choose an item.			
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	Choose an item.			

Test Panel	**Progesterone**		
Synonyms			
Abbreviation		*Lab Test Code*	C213
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Test used to assess the probability of ovulation.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.1ml
Requirements	Levels vary through menstrual cycle. Blood should be sampled between days 19 -25 of the menstrual cycle (mid-luteal phase) Blood should be sampled between days 19 -25 of the menstrual cycle (mid-luteal phase)		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Progesterone	nmol/L	C1279	ABBOTT Progesterone	
Day of cycle		C1284	Prog Day	

Site	

Test Panel	**Prolactin**		
Synonyms			
Abbreviation		*Lab Test Code*	C217
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Levels can be increased by stress, exercise and sleep. If result greater than 700 mU/L sample will be tested for the presence of macroprolactin interference		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

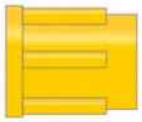
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Prolactin	mU/L	C1292	ABBOTT Prolactin	

Site	

ProlactinReference Ranges

Test	Prolactin
ISS Code	C217
ISS Test Name	PROLACTIN
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Prolactin	Female	0 Years	110 Years	109	557	mU/L	01/10/2011
Prolactin	Male	0 Years	110 Years	73	407	mU/L	01/10/2011

Test Panel	**Prostate Specific Antigen**		
Synonyms			
Abbreviation	PSA	*Lab Test Code*	C181
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	For use in the diagnosis and monitoring of prostatic cancer. This is not a screening test. Raised levels can occur in males with benign prostatic hypertrophy and with malignant prostate tissue.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Prost.Spec.Antigen	ng/ml	C1258	ABBOTT PSA	

Site	

Reference Ranges

Test	Prostate Specific Antigen
ISS Code	C181
ISS Test Name	PSA
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Prost.Spec.Antigen	Female	0 Years	115 Years			ng/ml	03/12/2018
Prost.Spec.Antigen	Male	0 Years	60 Years			ng/ml	03/12/2018
Prost.Spec.Antigen	Male	60 Years	70 Years			ng/ml	03/12/2018
Prost.Spec.Antigen	Male	70 Years	115 Years			ng/ml	03/12/2018
Follicle-stimulating hormone	Female	0 Years	110 Years			IU/L	01/10/2011
Follicle-stimulating hormone	Male	0 Years	110 Years	0.95	11.95	IU/L	01/10/2011

Test Panel	**Protein (24hr urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C500
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Estimates protein losses through the kidney and is used in the investigation of patients with renal failure, pre-eclampsia and nephrotic syndrome.		
Availability	Routine hours only		
Specimen	24hour Urine	*Volume Required*	
Requirements	For a 24 hour collection, all of the urine should be collected over the 24 hour period. It is important that the sample is refrigerated during this time period.		
Containers	 24hr Urine		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
24 Hr Urine Volume.	Litres	C5000	UVOL	
U.Protein Conc.	g/L	C5010	UPRO	
U.Protein Exc.	g/24hrs	C5020	UPROEX	

Site	

Reference Ranges

Test	Protein (24hr urine)
ISS Code	C500
ISS Test Name	24HR URINE PROTEIN
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Protein Conc.	Female	0 Years	110 Years	0.01	0.14	g/L	29/06/2018
U.Protein Conc.	Male	0 Years	110 Years	0.01	0.14	g/L	29/06/2018
U.Protein Exc.	Female	0 Years	115 Years	0	0.15	g/24hrs	12/12/2011
U.Protein Exc.	Male	0 Years	115 Years	0	0.15	g/24hrs	12/12/2011

Test Panel	**Protein (random urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C507
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Important for diagnosis and treatment of diseases associated with renal, cardiac and thyroid function		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	3ml
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

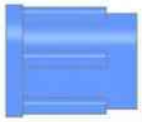
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
U.Protein Conc.	g/L	C5010	UPRO	
Urine protein/creatinine ratio	mg/mmol Cr	C5023	ABBOTT P/C Ratio URINE	
U.Creat.Conc.	mmol/L	C5030	CREATININE	

Site	

Reference Ranges

Test	Protein (random urine)
ISS Code	C507
ISS Test Name	RANDOM U.PROTEIN
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Urine protein/creatinine ratio	Female	0 Years	100 Years	0	15	mg/mmol Cr	09/12/2011
Urine protein/creatinine ratio	Male	0 Years	100 Years	0	15	mg/mmol Cr	09/12/2011
U.Protein Conc.	Female	0 Years	110 Years	0.01	0.14	g/L	29/06/2018
U.Protein Conc.	Male	0 Years	110 Years	0.01	0.14	g/L	29/06/2018
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011

Test Panel	**Protein C**		
Synonyms			
Abbreviation		*Lab Test Code*	W175
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Usually only available as part of a full Thrombophilia Screen		
Availability	By arrangement with Consultant Haematologist		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	24 months frozen at Minus 70°C		
Comments			
Platform			

Tests in Panel

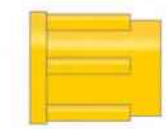
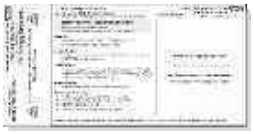
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Referred Test : Protein C		W4321	Referred Test	
Chromogenic	IU/ML	X0520	PROTEIN C CHROM	
Protein C Antigen	IU/ML	X0525	PROTEIN C AG	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Protein C
ISS Code	W175
ISS Test Name	PROTEIN C Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Protein C Antigen	Female	16 Years	115 Years	0.83	1.5	IU/ML	04/04/2014
Protein C Antigen	Male	16 Years	115 Years	0.83	1.5	IU/ML	04/04/2014
Protein C Chromogenic	Female	0 Years	110 Years	0.79	1.61	IU/ML	01/04/2009
Protein C Chromogenic	Male	0 Years	110 Years	0.79	1.61	IU/ML	01/04/2009

Test Panel	**Protein Electrophoresis (serum)**		
Synonyms			
Abbreviation		*Lab Test Code*	C148
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Note that immunotyping or immunofixation analysis will be reflexed as required.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	
Requirements	If requested as a myeloma screen, a random urine sample for protein electrophoresis is also required to complete the screen.		
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Total Protein	g/L	C8500		T PROTEIN
Albumin	g/L	C8505		ALBUMIN
Globulin	g/L	C8510		GLOBULIN
ProElectrophoresis		C8515		EP COMMENT
Monoclone Concentration	g/L	C8520		MONOCLONAL IG
Immunoglobulin G	g/L	C8525		IGG
Immunoglobulin A	g/L	C8530		IGA
Immunoglobulin M	g/L	C8535		IGM
Monoclone Isotype		C8540		MONOCLONE ISOTYPE

Site	

Reference Ranges

Test	Protein Electrophoresis (serum)
ISS Code	C148
ISS Test Name	Serum. Protein. Electrophoresis
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Albumin	Female	0 Years	115 Years	35	50	g/L	15/01/1996
Albumin	Male	0 Years	115 Years	35	50	g/L	15/01/1996
Globulin	Female	0 Years	115 Years	23	40	g/L	21/06/2012
Globulin	Male	0 Years	115 Years	23	40	g/L	21/06/2012
Immunoglobulin A	Female	0 Days	14 Days	0.01	0.08	g/L	04/09/2020
Immunoglobulin A	Female	14 Days	42 Days	0.02	0.15	g/L	04/09/2020
Immunoglobulin A	Female	42 Days	90 Days	0.05	0.4	g/L	04/09/2020
Immunoglobulin A	Female	3 Months	6 Months	0.1	0.5	g/L	04/09/2020
Immunoglobulin A	Female	6 Months	9 Months	0.15	0.7	g/L	04/09/2020
Immunoglobulin A	Female	9 Months	12 Months	0.2	0.7	g/L	04/09/2020
Immunoglobulin A	Female	1 Years	2 Years	0.3	1.2	g/L	04/09/2020
Immunoglobulin A	Female	2 Years	3 Years	0.3	1.3	g/L	04/09/2020
Immunoglobulin A	Female	3 Years	6 Years	0.4	2	g/L	04/09/2020
Immunoglobulin A	Female	6 Years	9 Years	0.5	2.4	g/L	04/09/2020
Immunoglobulin A	Female	9 Years	12 Years	0.7	2.5	g/L	04/09/2020
Immunoglobulin A	Female	12 Years	45 Years	0.8	2.8	g/L	04/09/2020
Immunoglobulin A	Female	45 Years	110 Years	0.8	4	g/L	04/09/2020
Immunoglobulin A	Male	0 Days	14 Days	0.01	0.08	g/L	04/09/2020
Immunoglobulin A	Male	14 Days	42 Days	0.02	0.15	g/L	04/09/2020
Immunoglobulin A	Male	42 Days	90 Days	0.05	0.4	g/L	04/09/2020
Immunoglobulin A	Male	3 Months	6 Months	0.1	0.5	g/L	04/09/2020
Immunoglobulin A	Male	6 Months	9 Months	0.15	0.7	g/L	04/09/2020
Immunoglobulin A	Male	9 Months	12 Months	0.2	0.7	g/L	04/09/2020
Immunoglobulin A	Male	1 Years	2 Years	0.3	1.2	g/L	04/09/2020
Immunoglobulin A	Male	2 Years	3 Years	0.3	1.3	g/L	04/09/2020
Immunoglobulin A	Male	3 Years	6 Years	0.4	2	g/L	04/09/2020
Immunoglobulin A	Male	6 Years	9 Years	0.5	2.4	g/L	04/09/2020
Immunoglobulin A	Male	9 Years	12 Years	0.7	2.5	g/L	04/09/2020
Immunoglobulin A	Male	12 Years	45 Years	0.8	2.8	g/L	04/09/2020
Immunoglobulin A	Male	45 Years	110 Years	0.8	4	g/L	04/09/2020
Immunoglobulin G	Female	0 Days	14 Days	5	17	g/L	01/07/2013
Immunoglobulin G	Female	15 Days	42 Days	3.9	13	g/L	01/07/2013
Immunoglobulin G	Female	43 Days	90 Days	2.1	7.7	g/L	01/07/2013
Immunoglobulin G	Female	3 Months	6 Months	2.4	8.8	g/L	01/07/2013
Immunoglobulin G	Female	6 Months	9 Months	3	9	g/L	01/07/2013
Immunoglobulin G	Female	9 Months	12 Months	3	10.9	g/L	01/07/2013
Immunoglobulin G	Female	1 Years	2 Years	3.1	13.8	g/L	01/07/2013
Immunoglobulin G	Female	2 Years	3 Years	3.7	15.8	g/L	01/07/2013
Immunoglobulin G	Female	3 Years	6 Years	4.9	16.1	g/L	01/07/2013
Immunoglobulin G	Female	6 Years	16 Years	5.4	16.1	g/L	01/07/2013
Immunoglobulin G	Female	16 Years	110 Years	6	16	g/L	01/07/2013
Immunoglobulin G	Male	0 Days	14 Days	5	17	g/L	01/07/2013

Immunoglobulin G	Male	15 Days	42 Days	3.9	13	g/L	01/07/2013
Immunoglobulin G	Male	43 Days	84 Days	2.1	7.7	g/L	01/07/2013
Immunoglobulin G	Male	3 Months	6 Months	2.4	8.8	g/L	01/07/2013
Immunoglobulin G	Male	6 Months	9 Months	3	9	g/L	01/07/2013
Immunoglobulin G	Male	9 Months	12 Months	3	10.9	g/L	01/07/2013
Immunoglobulin G	Male	1 Years	2 Years	3.1	13.8	g/L	01/07/2013
Immunoglobulin G	Male	2 Years	3 Years	3.7	15.8	g/L	01/07/2013
Immunoglobulin G	Male	3 Years	6 Years	4.9	16.1	g/L	01/07/2013
Immunoglobulin G	Male	6 Years	16 Years	5.4	16.1	g/L	01/07/2013
Immunoglobulin G	Male	16 Years	110 Years	6	16	g/L	01/07/2013
Immunoglobulin M	Female	3 Months	6 Months	0.2	1	g/L	01/07/2013
Immunoglobulin M	Female	6 Months	9 Months	0.4	1.6	g/L	01/07/2013
Immunoglobulin M	Female	9 Months	12 Months	0.6	2.1	g/L	01/07/2013
Immunoglobulin M	Female	1 Years	3 Years	0.5	2.2	g/L	01/07/2013
Immunoglobulin M	Female	3 Years	6 Years	0.5	2	g/L	01/07/2013
Immunoglobulin M	Female	6 Years	12 Years	0.5	1.8	g/L	01/07/2013
Immunoglobulin M	Female	12 Years	15 Years	0.5	1.9	g/L	01/07/2013
Immunoglobulin M	Female	15 Years	45 Years	0.5	1.9	g/L	01/07/2013
Immunoglobulin M	Female	45 Years	110 Years	0.5	2	g/L	01/07/2013
Immunoglobulin M	Male	3 Months	6 Months	0.2	1	g/L	01/07/2013
Immunoglobulin M	Male	6 Months	9 Months	0.4	1.6	g/L	01/07/2013
Immunoglobulin M	Male	9 Months	12 Months	0.6	2.1	g/L	01/07/2013
Immunoglobulin M	Male	1 Years	3 Years	0.5	2.2	g/L	01/07/2013
Immunoglobulin M	Male	3 Years	6 Years	0.5	2	g/L	01/07/2013
Immunoglobulin M	Male	6 Years	12 Years	0.5	1.8	g/L	01/07/2013
Immunoglobulin M	Male	12 Years	15 Years	0.5	1.9	g/L	01/07/2013
Immunoglobulin M	Male	15 Years	45 Years	0.5	1.9	g/L	01/07/2013
Immunoglobulin M	Male	45 Years	110 Years	0.5	2	g/L	01/07/2013
Total Protein	Female	0 Years	115 Years	60	80	g/L	15/01/1996
Total Protein	Male	0 Years	115 Years	60	80	g/L	15/01/1996

Test Panel	**Protein Electrophoresis (urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C749
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Also known as Bence Jones Protein analysis. Note that immunofixation analysis will be reflexed as required.		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Send sample to laboratory on day of collection.		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel

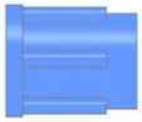
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
U.Protein Conc.	g/L	C5010	UPRO	
Protein Electrophoresis		C5011	U.EP	
Monoclone Concentration	g/L	C5012	U.MONOCLONE	
Monoclone Isotype		C5013	U ISOTYPE	

Site	

Reference Ranges

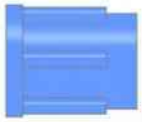
Test	Protein Electrophoresis (urine)
ISS Code	C749
ISS Test Name	Urine Protein Electrophoresis
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Monoclone Concentration	Female	0 Years	115 Years			g/L	14/10/2020
Monoclone Concentration	Male	0 Years	115 Years			g/L	14/10/2020
U.Protein Conc.	Female	0 Years	110 Years	0.01	0.14	g/L	29/06/2018
U.Protein Conc.	Male	0 Years	110 Years	0.01	0.14	g/L	29/06/2018

Test Panel	**Protein S**		
Synonyms	Protein S Free Antigen		
Abbreviation		*Lab Test Code*	W177
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	3ml
Requirements			
Containers	 Citrate		
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Protein S Free Antigen	IU/ML	X0535	PROTEIN S FREE AG	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Prothrombin Time**		
Synonyms			
Abbreviation	PT	*Lab Test Code*	X016
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

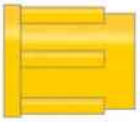
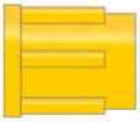
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Prothrombin Time	secs	X1000	Prothrombin Time	
INR	Unit	X5020	INR	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Prothrombin Time
ISS Code	X016
ISS Test Name	PROTHROMBIN TIME
Ref Range Comments	

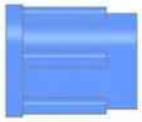
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Prothrombin Time	Female	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Female	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Female	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Female	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Female	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Female	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Female	17 Years	120 Years	9.4	12.5	secs	18/11/2019
Prothrombin Time	Male	0 Days	30 Days	9.5	12.6	secs	18/11/2019
Prothrombin Time	Male	30 Days	150 Days	9.7	12.8	secs	18/11/2019
Prothrombin Time	Male	150 Days	365 Days	9.8	13	secs	18/11/2019
Prothrombin Time	Male	1 Years	5 Years	9.9	13.4	secs	18/11/2019
Prothrombin Time	Male	6 Years	11 Years	10	14.6	secs	18/11/2019
Prothrombin Time	Male	11 Years	17 Years	10	14.1	secs	18/11/2019
Prothrombin Time	Male	17 Years	120 Years	9.4	12.5	secs	18/11/2019

Test Panel	**Pseudomonas aeruginosa Antibody Test**		
Synonyms			
Abbreviation		*Lab Test Code*	V430
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Must be approved by Consultant Microbiologist		
Containers	 SST	 Choose an item.	
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

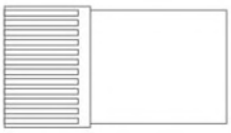
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
WHO SENT?		V2586	WHO SENT?	
Antigen AK1401 LPS ELISA Optical Density		V4300	Pseud Aer Ab test	
Pseudomonas antibody		V4301	PSEU AB	
Date sent		V6810	DS	
Reference lab:		V6812	RL	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**PT Allele**		
Synonyms	Prothrombin 20210A Allele		
Abbreviation		*Lab Test Code*	W552
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642843	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		Choose an item.
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Referred Test :		W4321	Referred Test	
	Prothrombin 20210A Allele		X0552	PT ALLELE	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Purines & Pyrimidines (Urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	W391B
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Please give Drug history		
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	10ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Urine Urate (HPLC)	mmol/L	W0266	UUAHPLC	
Urine Hypoxanthine	mmol/L	W0267	UHX	
Urine Xanthine	mmol/L	W0268	UX	
Urine UA/Creat ration		W0269	UUACR	
Urine UA/Creat ratio		W0269	UUACR	
Urine Pseudouridine	mmol/L	W0270	UPU	
Urine Uracil	mmol/L	W0271	UUL	
Urine Thymine	mmol/L	W0272	UTHY	
Urine Succinyl Adenosine	mmol/L	W0273	USA	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Purines and Pyrimidines
ISS Code	W391B
ISS Test Name	Urine Purine+Pyrimidines Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Urine UA/Creat ratio	Female	0 Years	115 Years	0.3	1.5		01/01/2012
Urine UA/Creat ratio	Male	0 Years	115 Years	0.3	1.5		01/01/2012

Test Panel	**Pyruvate Kinase Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	W333
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Refrigerate sample		
Comments			
Platform	Choose an item.		

Tests in Panel

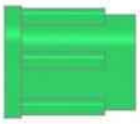
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
PYRUVATE KINASE:		W0127	PYRUVATE KINASE	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Pyruvate Kinase Screen
ISS Code	W333
ISS Test Name	PYRUVATE KINASE SCREEN Result
Ref Range Comments	

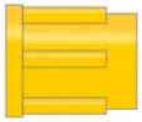
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
PYRUVATE KINASE:	Female	0 Years	115 Years	4.5	10		03/03/2011
PYRUVATE KINASE:	Male	0 Years	115 Years	4.5	10		03/03/2011

Test Panel	**Quantiferon TB**		
Synonyms			
Abbreviation		*Lab Test Code*	M570
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	4 Days
Investigation Comments	Samples should be received in routine hours to ensure pre analytics can be performed.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements	Samples must be received within 16 hours from venepuncture and we require 5ml minimum of blood. Samples not meeting these criteria will be rejected.		
Containers	 Heparin		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Nil tube	IU/ml	M5241	NIL TUBE	
Tb1 Ag tube	IU/ml	M5242	Tb Ag Tube	
Mitogen tube	IU/ml	M5243	MITOGEN TUBE	
Tb1 Ag - Nil		M5246	TBAG- NIL	
Mitogen - Nil		M5247	MITOGEN - NIL	
Result		M5248	TB RESULT	
Tb2 Ag tube	IU/ml	M5249	TB2 AG TUBE	
Tb2 Ag - Nil		M5251	TB2 AG NIL	
SAMPLE ALIQUOTTED BY		M5252	ALIQUOT BY	
Kit Lot No. :		V0032	MYCO BATCH	
QC passed?		V0063	QC PASSED	
Test performed by:		V0262	TEST PERFORMED BY	

Site	

Test Panel	**Rabies**		
Synonyms			
Abbreviation		*Lab Test Code*	V486
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Serological testing of vaccination status against Rabies infection.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Rabies FAVN Ab for human bite		V4193	Rabies FAVN	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

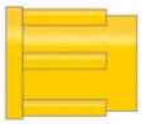
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Radiopharmacy Sterility Tests**		
Synonyms			
Abbreviation		*Lab Test Code*	M041
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Pharmacy Broth	*Volume Required*	Pharmacy Vials
Requirements			
Containers	 Pharmacy Vials		Pharmacy Pouches
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Vial One		M1790	VIAL 1	
Vial Two		M1791	VIAL2	
Vial Three		M1792	VIAL3	
Identified as:		M7501	ORGID	

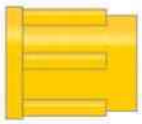
Site	

Test Panel	**Rare Imported Pathogen Screening**		
Synonyms			
Abbreviation		*Lab Test Code*	V489
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Include clinical symptoms and any history of travel or occupational exposure. Discuss with Microbiologist. Panel includes; Alphavirus, CCHF Virus, Chikunguna, Dengue Fever, Ebola Virus, Filovirus, Flavivirus, Japanese Encephalitis, Lassavirus, Marburg Vi		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Must include clinical symptoms and any history of travel or occupational exposure. Discuss with Microbiologist.		
Containers	 SST  EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
St Louis encephalitis virus IgG (IF)		V4541	ST LOUIS ENCEPH IGG	
E. equine encephalo. virus IgG (IF)		V4542	E. EQUINE IGG	
W. equine encephalo. virus IgG (IF)		V4543	W. EQUINE IGG	
V. equine encephalo. virus IgG (IF)		V4544	V EQUINE IGG	
Puumala virus IgG (IF)		V4545	PUUMALA VIRUS IGG	
Dobrava virus IgG (IF)		V4546	DOBRAVA VIRUS IGG	
Sin Nombre virus IgG (IF)		V4547	SIN NOMBRE VIRUS IGG	
Saaremaa virus IgG (IF)		V4548	SAAREMAA VIRUS IGG	
Seoul virus IgG (IF)		V4549	SEOUL VIRUS IGG	
Hantaan virus IgG (IF)		V4550	HANTAAN VIRUS IGG	
Seoul/ Hantaan PCR		V4552	SEOUL HANTAAN PCR	
Zika virus IgG (EIA)		V4553	ZIKA IGG	
Zika virus IgM (EIA)		V4554	ZIKA IGM	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

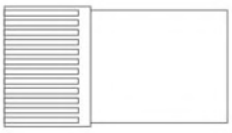
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Rare Imported Pathogen Screening**		
Synonyms			
Abbreviation		*Lab Test Code*	V425
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Include clinical symptoms and any history of travel or occupational exposure. Discuss with Microbiologist. Panel includes; Alphavirus, CCHF Virus, Chikunguna, Dengue Fever, Ebola Virus, Filovirus, Flavivirus, Japanese Encephalitis, Lassavirus, Marburg Virus		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Must include clinical symptoms and any history of travel or occupational exposure. Discuss with Microbiologist.		
Containers	 SST  EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Alphavirus IgG antibody		V4500	Alpha virus IgG	
Spotted fever Group IgG		V4501	Spotted fever Group	
Spotted fever Group IgM		V4502	Spotted Fever Group IgM	
Dengue IgG		V4503	Dengue IgG	
Dengue IgM		V4504	Dengue IgM	
Dengue virus RNA		V4505	Dengue virus RNA	
Flavivirus (West nile) IgG antibody		V4506	Flaivirus (West Nile) IgG	
West Nile virus RNA		V4507	West NIle virus RNA	
Phlebovirus virus IgG Antibody		V4508	PHLEBOVIRUS IgG	
Epidemic Typhus Group IgG antibody		V4509	EP Typhus Grp	
Epidemic Typhus Group IgM antibody		V4510	EP Typhus GRP IgM	
RIFT VALLEY		V4511	RIFT VALLEY	
Rickettsia		V4512	Rickettsia	
West Nile virus IgG		V4514	West Nile virus IgG	
West Nile virus IgM		V4515	West Nile virus IgM	
Tick borne encephalitis virus IgG (IF)		V4516	Tick borne encephalitis	
Sindbis virus IgG (IF)		V4517	Sindbis virus IgG (IF)	

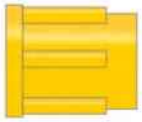
	Sandfly virus IgG (IF)	V4518	Sandfly virus IgG (IF)
	Chikungunya virus IgG (EIA)	V4519	CHIKUNGUNYA VIRUS IGG
	Chikungunya virus IgM (EIA)	V4520	CHIKUNGUNYA IGM
	Ross river virus IgG (IF)	V4521	ROSS RIVER IGG
	Murray valley fever virus IgG (IF)	V4522	Murray Valley fever IGG
	Japanese encephalitis virus IgG (IF)	V4523	JAP ENCEPH IGG
	O.tsutsugamushi IgG (EIA)	V4524	O.TSU IGG
	O.tsutsugamushi IgM (EIA)	V4525	O.TSU IGM
	Sandfly fever Cyprus virus IgG	V4526	SANDFLYCYPRUS
	Sandfly fever Sicilian virus IgG	V4527	SANDFLY SICILIAN
	Sandfly fever Naples virus IgG	V4528	SANDFLY NAPLES
	Sandfly fever Toscana virus IgG	V4529	SANDFLY TOSCANA
	Yellow fever virus IgG (IF)	V4530	YELLOW FEVER IGG
	Plasmodium spp. DNA (Malaria PCR):	V4531	Plasmodium spp.
	Chikungunya virus RNA	V4532	Chikungunya virus RNA
	Rift valley fever virus RNA	V4533	RIFT VALLEY RNA
	Lassa virus RNA	V4534	LASSA VIRUS RNA
	Filovirus RNA	V4535	FILOVIRUS RNA
	Ebola virus RNA	V4536	EBOLA VIRUS RNA
	Marburg virus RNA	V4537	MARBURG VIRUS RNA
	CCHF virus RNA	V4538	CCHF VIRUS RNA
	Malaria Elisa	V4551	Malaria ELISA
	Date result received	V6814	DRR
	Reference Lab No	V6816	RLN
	REF LAB DATE REC	V6825	REF LAB DATE RECEIVED
	REF LAB DATE REPORTED	V6835	REF LAB DATE REPORTED
	Referred Test :	W4321	Referred Test
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Reducing Substances /Sugars (Urine or Faeces)**		
Synonyms			
Abbreviation		*Lab Test Code*	C713
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Sugar chromatography will be performed on all requests. Ideintifiable sugars include: glucose, galactose, fructose, surcrose, lactose and lactulose.		
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	5g or 5ml
Requirements	Faeces or Random Urine		
Containers	 Faeces  Universal		
	Fresh sample required. Send to laboratory immediately after collection.		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to the laboratory immediately following collection to reduce bacterial degradiation.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Sugar Chromatography		C1952	SUGAR TLC	
Specimen type		C1953	SAMPLE TYPE.	

Site	

Test Panel	**Referred Porphyria - Full Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	W749C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

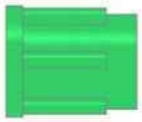
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	Porphyrin Result :		W8035	Porphyrin Result :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Renal NBS Investigation**		
Synonyms			
Abbreviation		*Lab Test Code*	J958
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Sent to NHSBT		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2 x 2ml
Requirements			
Containers	 EDTA X-Match  EDTA		
	2x 2ml required		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Sent to BTS:		J9586	SENT TO BTS	

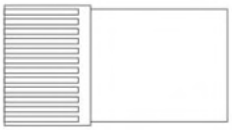
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Renin**		
Synonyms			
Abbreviation		*Lab Test Code*	W876
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Normally requested as aldosterone and renin to investigate secondary causes of hypertension. Reference ranges are only reported for Random levels.		
Availability	Routine hours only (sent away)		
Specimen	Serum	*Volume Required*	2ml
Requirements	Stable as whole blood for 4 hours at room temperature. Samples should be received in the laboratory within 3 hours		
Containers	 Heparin		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Testing Laboratory:		W0260	TESTINGLAB	
Enquiry Line:		W0265	ENQUIRIES	
Posture		W6078	POSTURE.	
Comment		W6079	RENIN / ALDO COMMENT	
Plasma Renin Activity (PRA) :	nmol/L/ Hr.	W6080	P.R.A.	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Respiratory PCR Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	V402
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Referred test for an extended range of Respiratory viruses. Includes PCR screen for adenovirus, influenza A, swine H1 and B, parainfluenza, RSV, Human metapneumoniae, coronavirus and Rhinovirus.		
Availability	Routine hours only		
Specimen	Viral Swab or NPA	*Volume Required*	
Requirements	Please send a Viral swab of the throat or NPA (Nasopharyngeal Aspirate).		
Containers	 Viral Swab  Universal		
	Swab must be Viral Throat Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date result received		V2725	DATR	
Reference Lab No		V2730	REFNO	
Influenza A PCR		V2735	INFA	
Influenza H1 (Swine) PCR		V2740	INFH1	
Influenza B PCR		V2745	INFB	
RSV PCR		V2750	RSVP	
Adenovirus PCR		V2755	ADEN PCR.	
Human metapneumovirus PCR		V2760	HMP	
Parainfluenza 1 PCR		V2765	PAR1	
Parainfluenza 2 PCR		V2770	PAR2	
Parainfluenza 3 PCR		V2775	PAR3	
Parainfluenza 4 PCR		V2780	PAR4	
Corona virus PCR		V2785	COR	
2019 Novel Coronavirus		V2786	NOV CORONA	
Rhinovirus PCR		V2790	RHINO	
Respiratory virus PCRs		V4005	RESPVIRPCR	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

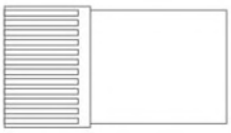
Test Panel	**Respiratory Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M660
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	48 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Respiratory Samples (pleural fluids, sputum, Bronchial washings, biopsies)	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Patient located on:		M0013	WARD	
MALDI ID		M0071	MALDI ID	
MALDI VALUE		M0072	MALDI VALUE	
Specimen Type:		M6001	ST	
Culture Result:		M6022	SP CULT	
GROWTH		M6026	G1	
GROWTH		M6031	G2	
SUBCULTURE INFO:		M6085	SUB INFO1	
PLATES FOR RE-INCUBATION		M6086	PLATE RI	
SUB ISOL 2		M6090	SUB INFO2	
SUB ISOL3		M6095	SUB INFO3	
SUB ISOL 4		M6098	SUB INFO4	
Site:		M6101	SS	
		M6102	SP COMM	
Y for complete S for extra sens :		M6200	REPCOM1	
Not isolated:		M6205	REPCOMM2	
To follow:		M6210	REPCOM3	

	Isolate 1	M8100	MISOLATE1
	Isolate 2	M8120	ISOLATE2
	Isolate 3	M8140	MISOLATE3
	Isolate 4	M8144	ISOLATE4
	FOR CON AUTH	M8155	CON Q
	Non.sig.isolate 1:	M9300	SPT NSG1
	Non.sig.isolate 2:	M9310	SPT NSG2
Site			

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Respiratory Syncytial Virus**		
Synonyms			
Abbreviation		*Lab Test Code*	V550
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	24 hours
Investigation Comments	Screening test for RSV infection.		
Availability	Routine hours only		
Specimen	Nasopharyngeal aspirate	*Volume Required*	1ml
Requirements			
Containers	 Universal		
	Naso-pharyngeal aspirate (NPA)		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Kit Lot No. :		V0032	MYCO BATCH	
QC passed?		V0063	QC PASSED	
Test performed by:		V0262	TEST PERFORMED BY	
Respiratory Syncytial Virus		V0500	RSV IF	

Site	

Test Panel	**Reticulocytes**		
Synonyms			
Abbreviation		*Lab Test Code*	H175
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Reticulocytes continue to mature 'In Vitro' therefore samples should be used for same day analysis only. Performed in conjunction with FBC.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	4 - 10°C		
Comments			
Platform	Sysmex		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
RBC	x 10*12/L	H0010	RED CELL COUNT	
Reticulocyte Count	x 10*9/L	H0055	RETICULOCYTE COUNT	
Retic Percent	%	H0180	RETIC PERCENT	

Site	

Reference Ranges

Test	Reticulocytes
ISS Code	H175
ISS Test Name	RETICULOCYTES
Ref Range Comments	

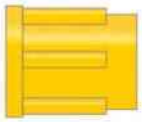
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
RBC	Female	0 Days	7 Days	4.1	6.1	x 10*12/L	10/01/1996
RBC	Female	7 Days	90 Days	4.1	6.1	x 10*12/L	10/01/1996
RBC	Female	90 Days	366 Days	3.9	5.2	x 10*12/L	10/01/1996
RBC	Female	1 Years	3 Years	3.9	5.4	x 10*12/L	10/01/1996
RBC	Female	3 Years	6 Years	3.9	5.4	x 10*12/L	10/01/1996
RBC	Female	6 Years	10 Years	4	5.3	x 10*12/L	10/01/1996
RBC	Female	10 Years	12 Years	4.1	5.3	x 10*12/L	10/01/1996
RBC	Female	12 Years	115 Years	4.2	5.4	x 10*12/L	10/01/1996
RBC	Male	0 Days	7 Days	4.1	6.1	x 10*12/L	10/01/1996
RBC	Male	7 Days	90 Days	4.1	6.1	x 10*12/L	10/01/1996
RBC	Male	90 Days	366 Days	3.9	5.2	x 10*12/L	10/01/1996
RBC	Male	1 Years	3 Years	3.9	5.3	x 10*12/L	10/01/1996
RBC	Male	3 Years	6 Years	3.9	5.4	x 10*12/L	10/01/1996
RBC	Male	6 Years	10 Years	4	5.3	x 10*12/L	10/01/1996
RBC	Male	10 Years	12 Years	4.1	5.3	x 10*12/L	10/01/1996
RBC	Male	12 Years	115 Years	4.4	6	x 10*12/L	10/01/1996
Reticulocyte Count	Female	200 Years	201 Years	10	100	x 10*9/L	19/07/2018
Reticulocyte Count	Male	200 Years	201 Years	10	100	x 10*9/L	19/07/2018

Test Panel	**Rhesus and K Phenotype**		
Synonyms			
Abbreviation		*Lab Test Code*	J235
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Requested by Blood Bank before provision of blood to certain patient groups and/or establishing presence of all antibodies		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 EDTA X-Match		
Request Forms	 Blood Bank		
	Not requested by users		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Diamed		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Anti-C		J2345	ANTI-C	
Anti- c		J3345	Anti-little c	
Anti-E		J5345	ANTI-E	
Anti- e		J6345	ANTI-e.	
Anti-K		J6350	ANTI-K	
Probable Phenotype		J7345	PHENO	

Site	

Test Panel	**Rheumatoid Factor**		
Synonyms			
Abbreviation		*Lab Test Code*	C422
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Rheumatoid factor (RF) is sensitive but not specific for rheumatoid arthritis since this autoantibody can be associated with other autoimmune disorders.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Rheumatoid Factor :	IU/mL	C3023	ABBOTT RF	

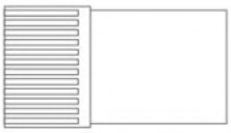
Site	

Reference Ranges

Test	Rheumatoid Factor
ISS Code	C422
ISS Test Name	Rheumatoid Factor
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Rheumatoid Factor :	Female	0 Years	110 Years	0	30	IU/mL	01/11/2011
Rheumatoid Factor :	Male	0 Years	110 Years	0	30	IU/mL	01/11/2011

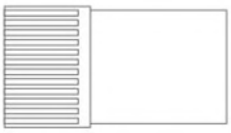
Test Panel	Risperidone		
Synonyms			
Abbreviation		*Lab Test Code*	W382
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Rotavirus**		
Synonyms			
Abbreviation		*Lab Test Code*	M719
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	
Requirements	We will only process Rotavirus requests on patients under the age of 5.		
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Rotavirus		M3830	ROTA	
Adenovirus		M3831	ADENOVIRUS	
BATCH LOT NO.		M3835	ROTA BATCH INFO@1	
QC passed?		V0063	QC PASSED	
Test performed by:		V0262	TEST PERFORMED BY	

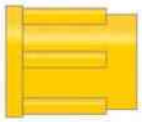
Site	

Test Panel	**Rotavirus**		
Synonyms			
Abbreviation		*Lab Test Code*	M705
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Faeces	*Volume Required*	
Requirements	We will only process Rotavirus requests on patients under the age of 5.		
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Rotavirus		M3830	ROTA	
BATCH LOT NO.		M3835	ROTA BATCH INFO@1	
QC passed?		V0063	QC PASSED	
Test performed by:		V0262	TEST PERFORMED BY	

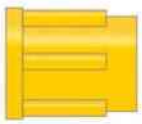
Site	

Test Panel	**Rubella Confirmation IgM, IgG,PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V413
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Only used for serological confirmation of Rubella infection, following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Rubella IgG Antibody			V4156	RUBGAB
Rubella IgM EIA (Microimmune)			V4170	RUB IgM EIA (Microimmune)
Rubella IgM EIA (Siemens Enzygnost) Optical density	Cut off > 0.200		V4171	RUB IGM EIA (SIEMENS)
Rubella IgM EIA (siemens Enzygnost) Qualitative result			V4172	RUB IGM QUALITATIVE
Rubella Avidity Index	%		V4173	RUB AV INDEX
Rubella Avidity Qualitative			V4174	RUB AV QUALITATIVE
Rubella IgG EIA (Siemens Enzygnost Optical density			V4175	RUB IGG OP DEN
Rubella IgG EIA Qualitative			V4177	RUB IGG QUAL
Rubella IgG Quantitative	IU/mL		V4178	RUB IGG QUANT
Rubella RT-PCR			V4179	RUB RT-PCR
B-2 Microglobin (Internal Control Gene)			V4180	B-2 MICROGLOBIN
Rubella virus RNA			V4281	Rubella virus RNA
Rubella IgM antibody :			V6660	RUBELLA IgM.
Date result received			V6814	DRR
Reference Lab No			V6816	RLN
REF LAB DATE REC			V6825	REF LAB DATE RECEIVED

	REF LAB DATE REPORTED Referred Test :	V6835 W4321	REF LAB DATE REPORTED Referred Test
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Rubella IgM**		
Synonyms			
Abbreviation		*Lab Test Code*	V055A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	IgM to detect infection. Please provide details of any rash, exposure and pregnancy if applicable. Test included in TORCH screen.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements	Please indicate if patient is pregnant and gestation with contact history.		
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		V0250	VIR LAB NOTES	
Rubella IgM antibody :		V6660	RUBELLA IgM.	
Vidas Test Value		V6661	RUBM VALUE	
Lot No.		V6662	RUBM LOT	

Site	

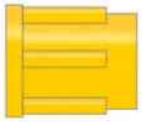
Test Panel	**Rubella**		
Synonyms			
Abbreviation		*Lab Test Code*	V050C
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Rubella IgG performed as screen to detect immunity. Please indicate if patient is pregnant and gestation with contact history.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements	Please indicate if patient is pregnant and gestation with contact history.		
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
O.D.		V0041	RUBELLA IGG OD	
			RUBELLA IGG	
C/O		V0042	CUTOFF	
Result:		V0049	RUB IGG	

Site	

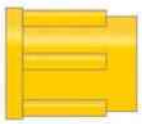
Test Panel	Salivary Cortisol		
Synonyms	Late Night Salivary Cortisol		
Abbreviation		*Lab Test Code*	W419
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Contact the laboratory to obtain the required saliva collection device.		
Availability	Routine hours only		
Specimen	Saliva Swab	*Volume Required*	0.5ml
Requirements	Late night sample collected into special container (Salivette tube from Pathology)		
Containers	Special Container		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Salivary Gland and Salivary Duct Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W326R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Normal Result= Negative		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Salivary Duct Ab :		W6261	SD Ab :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Schistosoma Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V422
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	Travel history essential. Test 2-3 months after exposure. Urine or faeces for microscopy may also be indicated.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Schistosomal ELISA (Serum)		V4185	Schistosomal ELISA	
Schistosoma ELISA O.D.		V4210	Schistosoma ELISA O.D.	
Schistosoma ELISA Cut-off		V4211	Schistosoma ELISA Cut-off	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Selenium**		
Synonyms			
Abbreviation		*Lab Test Code*	W300
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Interpreting selenium concentration in 'sick' individuals is very problematic. Studies show selenium and zinc concentrations decrease as CRP increases. Recommend only assess selenium in individuals with CRP less than 15ng/L. Please refer to nutrition guidelines		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Trace Element		
	Trace Element – Dark Blue with RED stripe		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C (In plastic tube)		
Comments			
Platform			

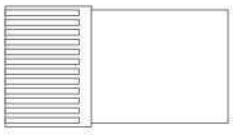
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W1414	Selenium Returned :	
	Selenium (by ICP)	umol/L	W6028	Selenium :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

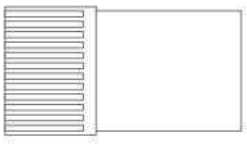
Test	Selenium
ISS Code	W300
ISS Test Name	Selenium Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Selenium (by ICP)	Female	0 Years	2 Years	0.22	1.22	umol/L	01/07/2016
Selenium (by ICP)	Female	2 Years	5 Years	0.33	1.44	umol/L	01/07/2016
Selenium (by ICP)	Female	5 Years	16 Years	0.52	1.52	umol/L	01/07/2016
Selenium (by ICP)	Female	16 Years	110 Years	0.61	1.24	umol/L	01/07/2016
Selenium (by ICP)	Male	0 Years	2 Years	0.22	1.22	umol/L	01/07/2016
Selenium (by ICP)	Male	2 Years	5 Years	0.33	1.44	umol/L	01/07/2016
Selenium (by ICP)	Male	5 Years	16 Years	0.52	1.52	umol/L	01/07/2016
Selenium (by ICP)	Male	16 Years	110 Years	0.61	1.24	umol/L	01/07/2016

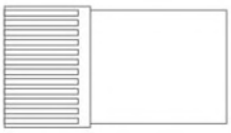
Test Panel	Semen Analysis - Fertility		
Synonyms			
Abbreviation		*Lab Test Code*	P100
Department	Histology		
Clinical Contact	01302 642860		
Contact	01302 642860	*Turnaround Time*	24 hours
Investigation Comments	Patients are advised to produce their semen sample at home and deliver it directly to the Histopathology department at DRI within 50 minutes of production. BDGH/ MMH patients may use the shuttle bus between sites to enable delivery direct to DRI (booking of shuttle may be required at peak times).		
Availability	Analysis is carried out by appointment only. Please contact 01302 642860 to arrange an appointment.		
Specimen	Semen - Single, complete ejaculate	*Volume Required*	
Requirements	Patient should be provided with a patient information leaflet.		
Containers	 Toxicity tested semen container		
	Some plastics are toxic to sperm and can affect sperm motility. Histopathology can provide patients with specimen containers that are toxicity tested and which are suitable for semen specimens.		
Request Forms	 Histology WPR2580	WPR2583- sample will not be processed without this form Also available to request via ICE	
	Quality form –This will be posted to the patient when they contact the department as part of the patient pack and provides information essential to the processing of the sample. Samples will not be processed without this information. The quality form should have the highlighted sections completed by the patient prior to attending for the appointment.		
~~*Transport*~~	The following acceptance criteria must be met for a semen sample to be processed: • A single complete semen sample collected in an appropriate container, labelled with at least 3 unique identifiers which are as follows: • • Surname & forename • Forename • Date of birth • Hospital number/NHS Number • • A request form, signed by clinician and labelled with corresponding patient and clinical details • A quality form completed fully by patient/ representative on delivery of sample • An ejaculation interval (time of production to time of analysis) of 1 hour or less Rejection of semen samples; since the sample is repeatable, no analysis will be performed and the sample will be disposed of if all of the above acceptance criteria are not met, i.e. • A leaking/ incomplete sample • No request form and/ or no quality form • Ejaculation interval (time of production to time of analysis) over 1 hours • No date/ time of production given		

Storage notes	Refer to Short Term Stability
Stability	Body Temperature - sample must reach laboratory within 50 minutes of production
Long Term	Not Possible
Comments	Ensure that the specimen container has the top screwed on tightly to prevent the specimen from leaking and place the container into the biohazard bag provided. During transportation the sample should be kept as close to body temperature as possible. Avoid extremes of temperature. A completed quality form is required, samples will not be analysed without this additional information. All high risk specimens should be clearly marked 'danger of infection' on both form and pot. There is an information leaflet for patients: Infertility Semen Analysis WPR 12687 The sample will be analysed according to the World Health Organisation (WHO) standards for volume, pH, concentration, motility, vitality and morphology. Initial examination of the sample should be performed by the lab within 1 hour of production When a sample is processed outside of the WHO laboratory guidelines for the examination and processing of human semen (6th edition) 2021, a disclaimer will be included in report. Clinical decision values (WHO. 2021).
Platform	Choose an item.
Tests in Panel	
Site	Choose an item.

		Centiles									
	N	2.5th	5th	(95% CI)	10th	25th	50th	75th	90th	95th	97.5th
Semen volume (ml)	3586	1.0	1.4	(1.3–1.5)	1.8	2.3	3.0	4.2	5.5	6.2	6.9
Sperm concentration (10^6 per ml)	3587	11	16	(15–18)	22	36	66	110	166	208	254
Total sperm number (10^6 per ejaculate)	3584	29	39	(35–40)	58	108	210	363	561	701	865
Total motility (PR + NP, %)	3488	35	42	(40–43)	47	55	64	73	83	90	92
Progressive motility (PR, %)	3389	24	30	(29–31)	36	45	55	63	71	77	81
Non-progressive motility (NP, %)	3387	1	1	(1–1)	2	4	8	15	26	32	38
Immotile spermatozoa (IM, %)	2800	15	20	(19–20)	23	30	37	45	53	58	65
Vitality (%)	1337	45	54	(50–56)	60	69	78	88	95	97	98
Normal forms (%)	3335	3	4	(3.9–4.0)	5	8	14	23	32	39	45

Test Panel	Semen Analysis - Post Vasectomy		
Synonyms			
Abbreviation		*Lab Test Code*	P150
Department	Histology		
Clinical Contact	01302 642860		
Contact	01302 642860	*Turnaround Time*	24 hours
Investigation Comments	Patients are advised to produce their semen sample at home and deliver to the Histopathology lab at DRI within 2 hours of production/ 50 minutes for special clearance BDGH/ MMH patients may use the shuttle bus between sites to enable delivery direct to DRI (booking of shuttle may be required at peak times).		
Availability	Analysis is carried out by appointment only. Please contact 01302 642860 to arrange an appointment.		
Specimen	Semen - Single, complete ejaculate	*Volume Required*	
Requirements			
Containers	 Toxicity tested semen container		
	Some plastics are toxic to sperm and can affect sperm motility. Histology will provide patients with a patient pack containing specimen containers that are toxicity tested and which are suitable for semen specimens.		
Request Forms	 Histology WPR2580		WPR2583 Also available to request via ICE
	Completed quality form received within the patient pack - the patient will be asked to complete additional paperwork relating to the sample. Samples will not be processed without this information.		
Transport	The following acceptance criteria must be met for a semen sample to be processed: • A complete semen sample collected in an appropriate container, labelled with at least 3 unique identifiers which are as follows: • Surname & Forename • Date of birth • Hospital number • NHS number • A request form, signed by clinician and labelled with corresponding patient and clinical details • A quality form completed fully by patient/ representative on delivery of sample • An ejaculation interval (time of production to time of analysis) of 2 hours or less Rejection of semen samples : Since the sample is repeatable, no analysis will be performed and the sample will be disposed of if all of the above acceptance criteria are not met, i.e.: • A leaking/ incomplete sample • No request form and/ or no quality form • Ejaculation interval (time of production to time of analysis) over 2 hours • No date/ time of production given		
Storage notes	Refer to Short Term Stability		

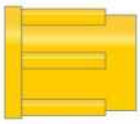
Stability	Body Temperature - sample must reach the laboratory within 2 hours of production/ 50 minutes for special clearance				
Long Term	Not possible				
Comments	There is an information leaflet for patients: Post vasectomy (WPR16145) Ensure that the specimen container has the top screwed on tightly to prevent the specimen from leaking and place the container into the biohazard bag provided. During transportation the sample should be kept as close to body temperature as possible. Avoid extremes of temperature. A completed quality form is required, samples will not be analysed without this additional information. All high risk specimens should be clearly marked 'danger of infection' on both form and pot. Presence of patient or representative is required to ensure additional paperwork is provided, samples will not be analysed without this additional information. All high risk specimens should be clearly marked 'danger of infection' on both form and pot.				
Platform					
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site					

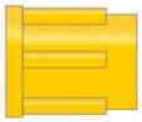
Test Panel	**Settle Plates**		
Synonyms			
Abbreviation		*Lab Test Code*	M060
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Pool Water	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
HOSPITAL AREA		M1103	AREA	
Date of sampling		M1105	HSDU DATE	
Signatory:		M1160	SIG	
PLATE 1		M1210	PL1	
PLATE 2		M1215	PL2	
PLATE 3		M1220	PL3	

Site	

Test Panel	sFlt-1:PlGF Ratio		
Synonyms			
Abbreviation		*Lab Test Code*	C415
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	For assessment of women with suspected pre-eclampsia Samples received in the lab at BH or DRI before 6pm are analysed the same day within 4hrs.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Please send a separate sample for this test alone.		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Roche e411		
Tests in Panel	*sFlt-1* *PlGF* *SFlt-1:PlGF Ratio*		
Site	In-House Test (DRI)		

Test Panel	**Sex Hormone Binding Globulin (Female)**		
Synonyms			
Abbreviation		*Lab Test Code*	C277F
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Measurement of SHBG is only necessary to estimate the amount of bioavailable testosterone available to the body's tissues.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Request for testosterone.		
Platform	Abbott Architect		

Tests in Panel

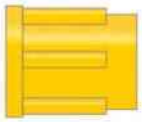
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
SHBG	nmol/L	C1358	ABBOTT SHBG	
Free Androgen Index	%	C1362	ABBOTT FAI	
Testosterone	nmol/L	C2058	Testo (2g) Female	

Site	

Reference Ranges

Test	Sex Hormone Binding Globulin
ISS Code	C277F
ISS Test Name	SHBG .
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Free Androgen Index	Female	0 Years	110 Years	0.6	8	%	01/10/2011
SHBG	Female	0 Years	110 Years	19.8	155.2	nmol/L	01/10/2011
SHBG	Male	0 Years	110 Years	13.5	71.4	nmol/L	01/10/2011
Testosterone	Female	0 Days	3 Days			nmol/L	01/03/2022
Testosterone	Female	4 Days	366 Days	0.04	2.15	nmol/L	01/03/2022
Testosterone	Female	1 Years	9 Years	0.04	2.15	nmol/L	01/03/2022
Testosterone	Female	9 Years	13 Years	0	0.98	nmol/L	01/03/2022
Testosterone	Female	13 Years	15 Years	0.36	1.54	nmol/L	01/03/2022
Testosterone	Female	15 Years	19 Years	0.49	1.7	nmol/L	01/03/2022
Testosterone	Female	19 Years	50 Years	0.52	1.72	nmol/L	01/03/2022
Testosterone	Female	50 Years	110 Years	0.46	1.18	nmol/L	01/03/2022
Testosterone	Male	0 Years	110 Years			nmol/L	01/03/2022

Test Panel	**Sex Hormone Binding Globulin (Male)**		
Synonyms			
Abbreviation		*Lab Test Code*	C278M
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Measurement of SHBG is only necessary to estimate the amount of bioavailable testosterone available to the body's tissues.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Request for testosterone.		
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
SHBG	nmol/L	C1358	ABBOTT SHBG	
Testosterone :	nmol/L	C2057	Testo (2g) Male	

Site	

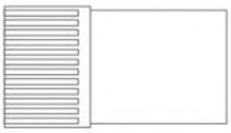
Reference Ranges

Test	Sex Hormone Binding Globulin
ISS Code	C278M
ISS Test Name	SHBG .
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
SHBG	Female	0 Years	110 Years	19.8	155.2	nmol/L	01/10/2011
SHBG	Male	0 Years	110 Years	13.5	71.4	nmol/L	01/10/2011
Testosterone :	Female	0 Years	110 Years			nmol/L	01/03/2022
Testosterone :	Male	0 Days	3 Days			nmol/L	01/03/2022
Testosterone :	Male	4 Days	183 Days	0.3	10.4	nmol/L	01/03/2022
Testosterone :	Male	184 Days	365 Days	0	1.24	nmol/L	01/03/2022
Testosterone :	Male	1 Years	9 Years	0	1.24	nmol/L	01/03/2022
Testosterone :	Male	9 Years	11 Years	0	0.81	nmol/L	01/03/2022
Testosterone :	Male	11 Years	14 Years	0	15.4	nmol/L	01/03/2022
Testosterone :	Male	14 Years	16 Years	1.25	21.9	nmol/L	01/03/2022
Testosterone :	Male	16 Years	19 Years	2.13	27.6	nmol/L	01/03/2022
Testosterone :	Male	19 Years	50 Years	8.76	27.85	nmol/L	01/03/2022
Testosterone :	Male	50 Years	110 Years	8.58	23.37	nmol/L	01/03/2022

Test Panel	**Sickle Cell Test**		
Synonyms			
Abbreviation		*Lab Test Code*	H060
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Request to detect HbS in blood samples prior to URGENT surgery only. Full haemoglobinopathy screen should be requested for routine investigation		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Please advise the laboratory of impending anathaesia/surgery		
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	HbS screen result:		H0060	SICKLE	
Site					

Test Panel	**Sink Culture**		
Synonyms	Sink Water Culture		
Abbreviation		*Lab Test Code*	M793
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	This method is a screening test for Pseudomonas aeruginosa.		
Availability	Routine hours only		
Specimen	Tap water	*Volume Required*	5ml
Requirements	Please discuss all requests with the Infection Prevention and Control Team.		
Containers	 Specialist Container		
	Please contact Microbiology for sample container.		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
SLOPE		M3029	SLOPE	
Pseudomonas aeruginosa	cfu in 100 ml	M7901	SINK WATER PSEUD COUNT	
		M7905	SINK WATER GROWTH	
SINK SWAB :		M7910	SINK SWAB GROWTH	

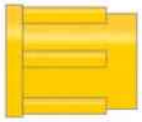
Site	

Test Panel	**Sirolimus**		
Synonyms			
Abbreviation		*Lab Test Code*	W408R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

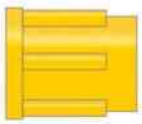
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Sirolimus :	ng/ml	W8584	Sirolimus :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Skeletal Muscle Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W554R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Myasthenia Gravis, Thymoma		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal Result= Negative		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Date Result Returned:		W0125	RESULTRETURNED	
	Referred Test :		W4321	Referred Test	
	Skeletal Muscle Ab:		W6271	SKM Ab :	

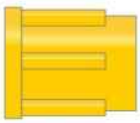
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

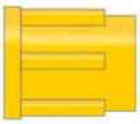
Test Panel	**Skin Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	C962
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Intra-epidermal / desmosome antibodies in Pemphigus. Basement membrane antibodies in Pemphigoid. 70-90% of affected individuals.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to the laboratory on day of collection		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments	Normal Result= Negative		
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Basement Membrane Ab:		C6266	BMA	
Desmosome Ab:		C6267	DESA	
Skin-Ab		C6268	Skin Antibody	

Site	

Test Panel	Split Skin Antibodies		
Synonyms			
Abbreviation		*Lab Test Code*	W119
Department	Immunology		
Clinical Contact	Choose an item.		
Contact	Choose an item.	*Turnaround Time*	2 Weeks
Investigation Comments	This test will be reflexed by the laboratory following a positive Skin Antibody, if required.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*Anti BP180 Ab* *Anti BP230 Ab* *Dermal BM Ab* *Desmoglein-1 Ab* *Desmoglein-3 Ab* *Epidermal BM Ab*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Sputum Cytology**		
Synonyms	Histology / Non Gynae Cytology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required. Please ensure that details on the request form are not obscured by labels		
Availability	Monday – Friday (9am - 5pm), except bank holidays. Specimen(s) should be received at DRI Histopathology before 4pm for same day processing.		
Specimen	Fluid	*Volume Required*	
Requirements	• Sample(s) received in a sterile, universal labelled with patient identifiers.		
Containers	 Sterile Universal  Choose an item.		
	Labelled slides within a slide transport box Slides must be labelled with patients name, district number and DOB in pencil. Sample material should be spread quickly and evenly onto the glass slide. Slides should be placed into a labelled slide mailer box.		
Request Forms	 Histology WPR2580		
	A Non gynae cytology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Patient's first name o Patients' surname o DOB o Address o NHS/ District number • Sample(s) received in a container of 10% formalin, labelled with patient identifiers. • Request form with corresponding patient identifiers, sample site and relevant clinical details. • For a multi-part case: o each pot must also be distinguishable (sample site/ suffix) o all samples/ pots must be listed on request form with corresponding details to pots A lack of patient or sample information may result in the laboratory not conducting the analysis / examination.		
Transport	Unsuitable for frozen section or DIF		
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	If a number of samples are removed from the same patient during a		

	single procedure they should be placed in separate containers and labelled as to their site of origin. Only one request form is required, listing specimens clearly. Ensure left and right Less than 20mlIf a larger volume has been collected, please decant a 20ml sample for cytology investigations. Unsuitable for frozen section or DIF				
Platform	Choose an item.				
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	Choose an item.				

Test Panel	**Staph aureus Additional Testing**		
Synonyms			
Abbreviation		*Lab Test Code*	M988
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Referred test for detection of staphylococcal toxin.		
Availability	Routine hours only		
Specimen	Cultured Organism	*Volume Required*	
Requirements	Please discuss with Consultant Microbiologists before requesting.		
Containers	 Cultured Organism		Choose an item.
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Choose an item.		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Panton Valentine leukocidin		M1114	PVL	
spa type		M1191	spa type	
spa repeat succcession		M1192	SPA SUCCESSION	
mecA:		M1193	mecA	
mecC		M1194	mecC	
Date sent:		M3678	DATER	
Date result received:		M3679	DATERET	
Reference lab:		M3681	RLAB	
Reference lab no:		M3682	RL NO	
REF LAB DATE REC		M3686	MIC REFLAB DR	
REF LAB DATE REPORTED		M3687	MIC REF LAB DREP	
WHO SENT?		M3688	MICWHOSENT	
Identified as:		M7501	ORGID	

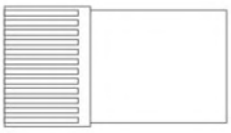
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Stone Analysis Urine**		
Synonyms			
Abbreviation		*Lab Test Code*	W911
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Urinary screen to investigate cause of renal stones. Includes calcium, phosphate, oxalate, creatinine, urate and electrolytes.		
Availability	Routine hours only		
Specimen	24hour Urine	*Volume Required*	Stone must be greater than 250mg in weight
Requirements			
Containers	 24hr Urine with Acid Preservative		Choose an item.
	Two 24h collections are required; one in acid (red top) and one plain collection (blue or white top).		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Stone Composition		W3549	Stone Composition	
Referred Test :		W4321	Referred Test	

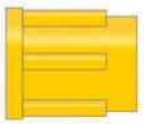
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Stone Analysis**		
Synonyms			
Abbreviation		*Lab Test Code*	W911
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Biochemical analysis of renal stone composition is useful in determining the factors which predispose to stone formation.		
Availability	Routine hours only		
Specimen	Stone	*Volume Required*	
Requirements	Stone must be greater than 250mg in weight		
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Stone Composition		W3549	Stone Composition	
Referred Test :		W4321	Referred Test	

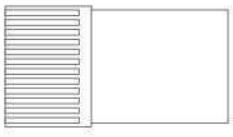
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Strongyloides Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V421
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Travel history essential. Test 2-3 months after exposure. Faeces for microscopy may also be indicated.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Strongyloides ELISA		V4182	Strongyloides ELISA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	Streptococcus Pneumoniae Urine Antigen			
Synonyms				
Abbreviation		*Lab Test Code*	V926	
Department	Virology			
Clinical Contact	01142 266477			
Contact	01302 642840	*Turnaround Time*	1 Week	
Investigation Comments	Method for detection of Streptococcus Pneumoniae Urine Antigen in urine.			
Availability	Routine hours only			
Specimen	Urine	*Volume Required*	5ml	
Requirements	Screening test. Provide clinical details, travel history. Consultant Microbiologists will approve all requests outside of DCC or ITU			
Containers	 Sterile Universal			
Request Forms	 Pathology Combined			
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.			
Transport				
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.			
Stability	12 - 28°C (Ambient Temperature)			
Long Term	2 - 8°C			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	S. PNEUMONIAE RESULT		V1926		
Site					

Test Panel	**Swab Microscopy**		
Synonyms			
Abbreviation		*Lab Test Code*	M605
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Swab	*Volume Required*	
Requirements			
Containers	 Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Specimen Type:		M6001	ST	
		M6010	WCD	
Other:		M6017	MIC OTHER	
		M6018	OTHER MIC	
Leucocyte esterase		M6019	Leucocyte esterase	
Site:		M6101	SS	
		M6102	SP COMM	
Pus cells:		M6105	PUS CELLS	
WBC:		M6111	WBC (SW)	
Gram:		M6115	GRAM FILM	

Site	

Test Panel	**Sweat Test (Sweat Chloride)**		
Synonyms	Sweat Chloride		
Abbreviation		*Lab Test Code*	C912
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	This test is performed to rule out cystic fibrosis as a cause of the patient's symptoms		
Availability	Routine hours & On Call		
Specimen	Sweat	*Volume Required*	
Requirements	Sweat tests should be deferred in babies less than 14 days old and/or less than 2kg in weight. The test should not be performed on children who are dehydrated, systemically unwell or who have marked eczema or oedema. Please contact the lab on ext 642823 to book an appointment.		
Containers			
	Samples are collected by laboratory staff at a clinic appointment. Contact laboratory on 642823.		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Sweat Chloride	mmol/L	C1921	SWCL.	
Rate of Sweat prod.	ml/sqM/min	C1923	SWEAT/MIN	

Site	

Reference Ranges

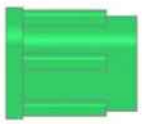
Test	Sweat Test
ISS Code	C912
ISS Test Name	SWCL
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Sweat Chloride	Female	0 Months	6 Months		<30	mmol/L	01/07/2017
Sweat Chloride	Female	6 Months	12 Months		<40	mmol/L	01/07/2017
Sweat Chloride	Female	1 Years	110 Years		<40	mmol/L	01/07/2017
Sweat Chloride	Male	0 Months	6 Months		<30	mmol/L	01/07/2017
Sweat Chloride	Male	6 Months	12 Months		<40	mmol/L	01/07/2017
Sweat Chloride	Male	1 Years	110 Years		<40	mmol/L	01/07/2017

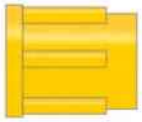
Test Panel	**Synovial fluid – Non gynae cytology**		
Synonyms	~~Histology /~~ Non Gynae Cytology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.		
Availability	Monday – Friday (9am - 5pm), except bank holidays. For same day processing samples should arrive at histopathology before 3pm.		
Specimen	Synovial fluid	*Volume Required*	1ml
Requirements	Sample(s) received in a ~~sterile, universal~~ heparin tube and labelled with patient identifiers.		
Containers	 Heparin		
Request Forms	 WPR2583 Histology WPR2580		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A Non gynae cytology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Sample(s) received in a Lithium Heparin tube, labelled with patient identifiers. • Request form with corresponding patient identifiers, sample site and relevant clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. Ensure left and right are clearly indicated All high risk specimens should be clearly marked 'Danger of infection' on both form and pot. Unsuitable for frozen section or DIF		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*

Site	Choose an item.

Test Panel	**Synovial fluid analysis**			
Synonyms				
Abbreviation		*Lab Test Code*	T030 - W-1405	
Department	Histology			
Clinical Contact	01302 642870			
Contact	01302 642870	*Turnaround Time*	1 Week	
Investigation Comments	Not suitable for frozen section or DIF. Refer to relevant sections of handbook			
Availability	Routine hours only			
Specimen	Fluid	*Volume Required*	1ml	
Requirements	If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and labelled as to their site of origin. Only one request form is required, listing specimens clearly. Ensure left and right are indicated			
Containers	 Heparin			
Request Forms	 Histology WPR2580			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	12 - 28°C (Ambient Temperature)			
Comments				
Platform				

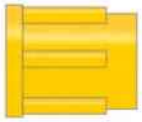
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Syphilis Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	V064E
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	72 Hours
Investigation Comments	Screening test for evidence of Syphilis infection. Please include clinical details.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
		V0250	VIR LAB NOTES	
Result:		V0641	SYPH	
O.D. :		V3065	SYPHILIS OD	
C/O :		V3066	SYPHILIS C/O	

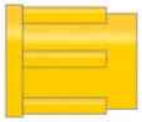
Site	

Test Panel	**Syphilis Confirmation**		
Synonyms			
Abbreviation		*Lab Test Code*	V066
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Test for confirmation of positive results from initial Syphilis Antibody screen.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Treponemal Antibody		V0016	TPAB	
Treponemal Antibody (3)		V0018	TPAB3	
VDRL :		V0060	VDRL SCREEN	
Treponemal PCR		V2477	Treponemal PCR Treponema pallidum	
Treponema pallidum DNA		V2478	DNA	
Date result received		V2583	DR1	
Reference Lab No		V2584	RN1	
Treponemal Antibody EIA		V2591	TAB	
TPPA		V2592	TPPA	
Treponemal Antibody EIA2		V2593	TPPA2	
VDRL Titre:		V2594	VDRLT	
Treponemal IgM antibody		V2596	TREPM	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Syphilis Monitoring**		
Synonyms			
Abbreviation	VDRL	*Lab Test Code*	V070
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Test for monitoring of known positive Syphilis infection.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Kit Lot No. :		V0032	MYCO BATCH	
QC passed?		V0063	QC PASSED	
Result:		V0071	VDRL RES	
BATCH LOT NO.		V0072	VDRL LOT NO	
Test performed by:		V0262	TEST PERFORMED BY	

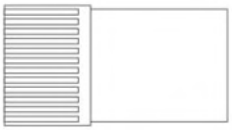
Site	

Test Panel	**Tacrolimus**		
Synonyms	FK506		
Abbreviation		*Lab Test Code*	C856
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Also known as FK506. A potent immunosuppressant used in transplant medicine.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	3ml
Requirements	Blood should be collected 12h post dose or prior to next dose.		
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Not Possible		
Comments	Ask: Time and date of last dose; Dose; Frequency of dosing; List all other medications		
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Tacrolimulus	ug/L	C6059	TACROLIMUS	

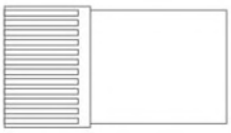
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Tau Protein**		
Synonyms	B-2-Transferrin		
Abbreviation		*Lab Test Code*	W565
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Freeze as soon as possible after collection. Used to differentiate nasal fluid from CSF. Serum sample must always be sent with the fluid.		
Availability	Routine hours only		
Specimen	Nasal Fluid & Serum	*Volume Required*	1ml
Requirements	Freeze as soon as possible after collection. Used to differentiate nasal fluid from CSF. Serum sample must always be sent with the fluid.		
Containers	 SST  Universal		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Minus 20°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

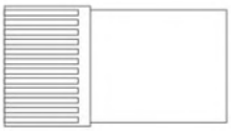
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
B-2-Transferrin (Tau) :		W6525	Tau Protein :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**TB Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M585
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Sputum	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Culture Result:		M0565	CULTURE	
			M5371	IDENT	

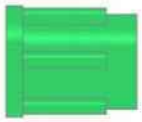
Site	

Test Panel	**TB Microscopy & Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M580
Department	Microbiology		
Clinical Contact	Consultant Microbiologist or Infection Control		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	This method is used as an initial Microscopical screen for Acid fast bacilli		
Availability	Routine hours only		
Specimen	Respiratory Samples (pleural fluids, sputum, Bronchial washings, biopsies), Liquid Culture, Tissue, Fluids, CSF	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Auramine Pos QC		M0393	AURAMINE POS QC	
Auramine Neg QC		M0394	AURAMINE NEG QC	
ZN Pos QC		M0395	ZN POS QC	
ZN Neg QC		M0396	ZN NEG QC	
SAMPLE PROCESSED BY		M0399	PROCESSED BY	
AAFB		M0550	AAFB	
ZN STAIN		M0560	ZN	

Site	

Test Panel	**TB T-Spot**		
Synonyms			
Abbreviation		*Lab Test Code*	M597
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Please note this test is only available in specialist circumstances and must be discussed with consultant Microbiologists. The standard screening test of choice at DRI is Quantiferon.		
Availability	Routine hours only (Can only be received Monday to Thursday during normal laboratory hours)		
Specimen	Venous Blood	*Volume Required*	
Requirements	Must be with virology by 12:00 Mon-Thurs only. Sample must be taken and sent on same day.		
Containers	 Heparin		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Transport to laboratory without delay, sample must be received by 12:00 on the day of venepuncture.		
Storage notes	Transport to laboratory without delay, sample must be received by 12:00 on the day of venepuncture.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

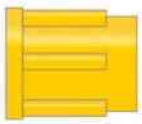
Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Negative Control		M0140	NEG CON	
Panel A		M0141	PANEL A	
Panel B		M0142	PANEL B	
Positive Control		M0143	POS CON	
Results		M0144	TBRESULTS	
Who Sent		M0145	WHO S	
Date sent:		M3678	DATER	
Date result received:		M3679	DATERET	
Reference lab:		M3681	RLAB	
Reference lab no:		M3682	RL NO	
REF LAB DATE REC		M3686	MIC REFLAB DR	
REF LAB DATE REPORTED		M3687	MIC REF LAB DREP	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**T-Cell Gene Rearrangement**			
Synonyms				
Abbreviation		*Lab Test Code*	W017	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	2 Weeks	
Investigation Comments	By arrangement with Consultant Haematologist			
Availability	By arrangement with Consultant Haematologist			
Specimen	Venous Blood	*Volume Required*	2ml	
Requirements				
Containers	 EDTA			
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform				

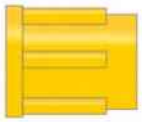
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	**Teicoplanin Assay**		
Synonyms			
Abbreviation		*Lab Test Code*	M836
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Please provide dosing information. Assays with incomplete dosing and specimen details may be rejected.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Dosing Regime:		M0060	Dosing Regime	
Dose (Pre or Post):		M0062	Dose.	
Teicoplanin level	mg/l	M0074	TEICO	
Date sent:		M3678	DATER	
Date result received:		M3679	DATERET	
Reference lab no:		M3682	RL NO	
WHO SENT?		M3683	WHO SENT	
Reference lab:		M3691	TOB REF	
Time of sample collection:		M8572	SAMPLE G	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Testosterone - Female**		
Synonyms			
Abbreviation		*Lab Test Code*	C222F
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Useful test for assessing androgen function in men and women. Sex hormone binding globulin will be measured on all female testosterone requests with results above the reference range.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

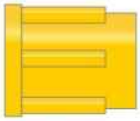
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Testosterone	nmol/L	C2058	Testo (2g) Female	

Site	

Reference Ranges

Test	Testosterone - Female
ISS Code	C222F
ISS Test Name	TESTOSTERONE .
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Testosterone	Female	0 Days	3 Days			nmol/L	01/03/2022
Testosterone	Female	4 Days	366 Days	0.04	2.15	nmol/L	01/03/2022
Testosterone	Female	1 Years	9 Years	0.04	2.15	nmol/L	01/03/2022
Testosterone	Female	9 Years	13 Years	0	0.98	nmol/L	01/03/2022
Testosterone	Female	13 Years	15 Years	0.36	1.54	nmol/L	01/03/2022
Testosterone	Female	15 Years	19 Years	0.49	1.7	nmol/L	01/03/2022
Testosterone	Female	19 Years	50 Years	0.52	1.72	nmol/L	01/03/2022
Testosterone	Female	50 Years	110 Years	0.46	1.18	nmol/L	01/03/2022
Testosterone	Male	0 Years	110 Years			nmol/L	01/03/2022

Test Panel	Testosterone - Male		
Synonyms			
Abbreviation		*Lab Test Code*	C222M
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Useful test for assessing androgen function in men.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements	In male patients, samples should be collected before 10 am as levels are highest in the early morning and fall throughout the day.		
Containers	 SST 		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

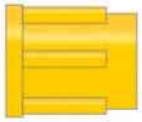
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Testosterone :	nmol/L	C2057	Testo (2g) Male	

Site	

Reference Ranges

Test	Testosterone - Male
ISS Code	C222M
ISS Test Name	TESTOSTERONE .
Ref Range Comments	

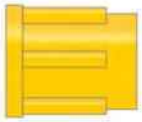
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Testosterone :	Female	0 Years	110 Years			nmol/L	01/03/2022
Testosterone :	Male	0 Days	3 Days			nmol/L	01/03/2022
Testosterone :	Male	4 Days	183 Days	0.3	10.4	nmol/L	01/03/2022
Testosterone :	Male	184 Days	365 Days	0	1.24	nmol/L	01/03/2022
Testosterone :	Male	1 Years	9 Years	0	1.24	nmol/L	01/03/2022
Testosterone :	Male	9 Years	11 Years	0	0.81	nmol/L	01/03/2022
Testosterone :	Male	11 Years	14 Years	0	15.4	nmol/L	01/03/2022
Testosterone :	Male	14 Years	16 Years	1.25	21.9	nmol/L	01/03/2022
Testosterone :	Male	16 Years	19 Years	2.13	27.6	nmol/L	01/03/2022
Testosterone :	Male	19 Years	50 Years	8.76	27.85	nmol/L	01/03/2022
Testosterone :	Male	50 Years	110 Years	8.58	23.37	nmol/L	01/03/2022

Test Panel	**Tetanus Vaccine Response**		
Synonyms			
Abbreviation		*Lab Test Code*	V442
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	This test is used for measuring immunity against Tetanus.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Tetanus antibody:	IU/ml	V6770	TETAB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Theophylline**		
Synonyms			
Abbreviation		*Lab Test Code*	C058
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Drug with bronchial smooth muscle relaxing effects, used in the treatment of chronic asthma and bronchospasm.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.4ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Theophylline	umol/L	C2030	THEOPHYLLINE	
	Theophylline	mg/L	C3032	THEOPHYLLINE.	

Site	

Reference Ranges

Test	Theophylline
ISS Code	C058
ISS Test Name	THEOPHYLLINE
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Theophylline	Female	0 Days	60 Days	6	11	mg/L	12/12/2011
Theophylline	Female	61 Days	365 Days	10	20	mg/L	12/12/2011
Theophylline	Female	1 Years	115 Years	10	20	mg/L	12/12/2011
Theophylline	Male	0 Days	60 Days	6	11	mg/L	12/12/2011
Theophylline	Male	61 Days	365 Days	10	20	mg/L	12/12/2011
Theophylline	Male	1 Years	115 Years	10	20	mg/L	12/12/2011

Test Panel	**Thiopurine Methyltransferase**		
Synonyms			
Abbreviation	TPMT	*Lab Test Code*	W525
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 EDTA		Choose an item.
	The sample must not be frozen and should be stored at room temperature before dispatch		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments			
Platform	Choose an item.		

Tests in Panel

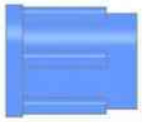
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
TPMT :	pmol/h/mgHb	W2222	TPMT :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

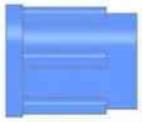
Reference Ranges

Test	Thiopurine Methyltransferase
ISS Code	W525
ISS Test Name	Thiopurine s-methyltransferase Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
TPMT :	Female	0 Years	110 Years	26	50	pmol/h/mgHb	03/03/2011
TPMT :	Male	0 Years	110 Years	26	50	pmol/h/mgHb	03/03/2011

Test Panel	**Thrombin Time**		
Synonyms			
Abbreviation		*Lab Test Code*	X125
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate		
	Must be filled to the blue line on the side of the tube		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Thrombin Time	secs	X1050	Thromb	
Site					

Test Panel	**Thrombophilia Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	W180
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Citrate  EDTA		
	Citrate x 4,EDTA, SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Antithrombin III Chromogenic	IU/ML	X0500	ATIII CHROMO	
Antithrombin III Antigen	IU/ML	X0505	ATIII AG	
Protein C Chromogenic	IU/ML	X0520	PROTEIN C CHROM	
Protein C Antigen	IU/ML	X0525	PROTEIN C AG	
Protein S Total Antigen	IU/ML	X0530	PROTEIN S TOTAL AG	
Protein S Free Antigen	IU/ML	X0535	PROTEIN S FREE AG	
APC-R ratio (V-Corrected)		X0550	APC RATIO(V-CORR.)	
Prothrombin 20210A Allele		X0552	PT ALLELE	

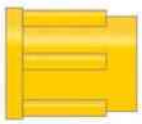
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	THROMB.SCREEN (A/C)
ISS Code	X520
ISS Test Name	THROMB.SCREEN (A/C)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
APC-R ratio (V-Corrected)	Female	0 Years	120 Years	2.32	5.07		01/11/2018
APC-R ratio (V-Corrected)	Male	0 Years	120 Years	2.32	5.07		01/11/2018
Antithrombin III Antigen	Female	16 Years	115 Years	0.83	1.24	IU/ML	04/04/2014
Antithrombin III Antigen	Male	16 Years	115 Years	0.83	1.24	IU/ML	04/04/2014
Antithrombin III Chromogenic	Female	0 Years	110 Years	0.85	1.31	IU/ML	01/04/2009
Antithrombin III Chromogenic	Male	0 Years	110 Years	0.85	1.31	IU/ML	01/04/2009
Plasminogen Antigen	Female	1 Years	115 Years	0.76	1.36	U/ML	15/04/1996
Plasminogen Antigen	Male	1 Years	115 Years	0.76	1.36	U/ML	15/04/1996
Plasminogen Chromogenic	Female	1 Years	115 Years	0.75	1.31	U/ML	15/04/1996
Plasminogen Chromogenic	Male	1 Years	115 Years	0.75	1.31	U/ML	15/04/1996
Protein S Free Ag (on A/C)	Female	1 Years	115 Years	0.27	0.79	IU/ML	31/10/1996
Protein S Free Ag (on A/C)	Male	1 Years	115 Years	0.27	0.79	IU/ML	31/10/1996
Protein S Total Ag (on A/C)	Female	1 Years	115 Years	0.49	0.87	IU/ML	31/10/1996
Protein S Total Ag (on A/C)	Male	1 Years	115 Years	0.49	0.87	IU/ML	31/10/1996
Ratio Protein C Chromo/Ag.	Female	1 Years	115 Years	0.59	1.47		31/10/1996
Ratio Protein C Chromo/Ag.	Male	1 Years	115 Years	0.59	1.47		31/10/1996
Ratio Protein C/VII Ag.	Female	1 Years	115 Years	0.67	1.73		31/10/1996
Ratio Protein C/VII Ag.	Male	1 Years	115 Years	0.67	1.73		31/10/1996
Ratio Protein C/X Ag.	Female	1 Years	115 Years	0.8	1.58		31/10/1996
Ratio Protein C/X Ag.	Male	1 Years	115 Years	0.8	1.58		31/10/1996

Test Panel	Thrombospondin Type-1 Domain Containing 7A		
Synonyms			
Abbreviation		*Lab Test Code*	W471
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel			
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Thyroglobulin**		
Synonyms			
Abbreviation		*Lab Test Code*	W370
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Thyroglobulin is useful for monitoring follicular thyroid cancers, not for screening or diagnosis. Test includes anti-thyroglobulin antibodies.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

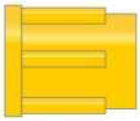
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Anti - TG	IU/ml	W1753	NEWTHYRO1	
Thyroglobulin	ug/L	W1754	NEWTHYRO2	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Thyroglobulin
ISS Code	W370
ISS Test Name	Thyroglobulin Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Anti - TG	Female	0 Years	115 Years	0	115	IU/ml	03/03/2011
Anti - TG	Male	0 Years	115 Years	0	115	IU/ml	03/03/2011
Thyroglobulin	Female	0 Years	115 Years	1.4	78	ug/L	03/03/2011
Thyroglobulin	Male	0 Years	115 Years	1.4	78	ug/L	03/03/2011

Test Panel	Thyroid Peroxidase (TPO) Antibodies		
Synonyms			
Abbreviation		*Lab Test Code*	C461
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Found in patients with Grave's disease (60%), Hashimoto's (90%) and primary myxoedema		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

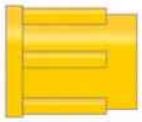
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Anti- Thyroid Peroxidase	IU/mL	C3145	ANTI-TPO	

Site	

Reference Ranges

Test	Thyroid Peroxidase (TPO) Antibodies
ISS Code	C461
ISS Test Name	TAB
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Anti- Thyroid Peroxidase	Female	0 Years	115 Years		<5.61	IU/mL	01/05/2012
Anti- Thyroid Peroxidase	Male	0 Years	115 Years		<5.61	IU/mL	01/05/2012

Test Panel	**Thyroid Function Test**		
Synonyms			
Abbreviation	TFT	*Lab Test Code*	C151
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Thyroid function test includes measurement of TSH and free T4. Assessment of thyroid function is not indicated in unwell patients unless there is good clinical evidence that thyroid disease is contributing to their clinical picture.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

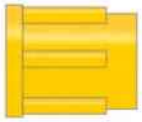
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Thyroid Stimulating Hormone	mU/L	C1242	ABBOTT TSH	
Free T4	pmol/L	C1247	ABBOTT FT4	
Thyroid Therapy		C1249	Thyroid Therapy	

Site	

Reference Ranges

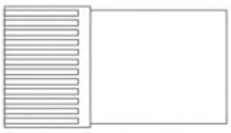
Test	Thyroid Function Tests
ISS Code	C151
ISS Test Name	TFT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Free T4	Female	0 Days	5 Days			pmol/L	07/10/2021
Free T4	Female	5 Days	14 Days	13.5	41.3	pmol/L	07/10/2021
Free T4	Female	15 Days	29 Days	8.7	32.5	pmol/L	07/10/2021
Free T4	Female	30 Days	365 Days	11.4	21.9	pmol/L	07/10/2021
Free T4	Female	1 Years	110 Years	9	19	pmol/L	07/10/2021
Free T4	Male	0 Days	5 Days			pmol/L	07/10/2021
Free T4	Male	5 Days	14 Days	13.5	41.3	pmol/L	07/10/2021
Free T4	Male	15 Days	29 Days	8.7	32.5	pmol/L	07/10/2021
Free T4	Male	30 Days	365 Days	11.4	21.9	pmol/L	07/10/2021
Free T4	Male	1 Years	110 Years	9	19	pmol/L	07/10/2021
Thyroid Stimulating Hormone	Female	0 Days	4 Days			mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	4 Days	6 Months	0.73	4.77	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	6 Months	14 Years	0.7	4.17	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	14 Years	19 Years	0.47	3.41	mU/L	07/10/2021
Thyroid Stimulating Hormone	Female	19 Years	110 Years	0.35	4.94	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	0 Days	4 Days			mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	4 Days	6 Months	0.73	4.77	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	6 Months	14 Years	0.7	4.17	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	14 Years	19 Years	0.47	3.41	mU/L	07/10/2021
Thyroid Stimulating Hormone	Male	19 Years	110 Years	0.35	4.94	mU/L	07/10/2021

Test Panel	**Thyroid Receptor Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W315
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	Normal Result= Negative		
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	TSH receptor Ab :	IU/L	W0300	TSHAB	
Site					

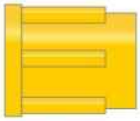
Test Panel	**Tissue biopsy or resection**		
Synonyms	Histology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.		
Availability	Monday – Friday (9am - 5pm), except bank holidays.		
Specimen	Tissue biopsy / resection	*Volume Required*	
Requirements			
Containers	 Histology Pot — Choose an item.		
	Histology pot containing 10% formalin Histology specimens should be placed in a suitable sized container to be fully immersed in formalin. Ideally the volume of formalin should be at least five times the volume of the specimen. The sample should be placed into formalin as soon as possible.		
Request Forms	 Histology WPR2583		
Transport			
Storage notes	Store at room temperature – do not refrigerate		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	12 - 28°C (Ambient Temperature)		
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A histology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) o DOB o Address o NHS/ District number • Sample(s) received in a container of 10% formalin, labelled with patient identifiers. • Request form with corresponding patient identifiers, sample site and relevant clinical details. • For a multi-part case: If a number of samples are removed from the same patient during a single procedure they should be placed in separate containers and each pot must be distinguishable (sample site/ suffix). Only one request form is required; and all samples/ pots must be listed with corresponding details to pots. All high risk specimens should be clearly marked 'Danger of infection' on both form and pot. Unsuitable for frozen section or DIF		
Platform	Choose an item.		
Tests in Panel	*Literal* *Unit* *Lab Code* *Lab Name* *Lab Comment*		
Site	Choose an item.		

Test Panel	**Tissue/Fluid Microscopy & Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M825
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Tissue / Fluid	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Patient located on:		M0013	WARD	
MALDI ID		M0071	MALDI ID	
MALDI VALUE		M0072	MALDI VALUE	
Specimen Type:		M6001	ST	
.		M6011	ISOL 1 SENS	
.		M6012	ISOL 1 VITEK	
.		M6013	ISOL 1 EXTRAS	
.		M6014	ISOL 1 N/R	
Culture Result:		M6021	SW NEGS	
.		M6041	ISOL 2 SENS	
.		M6042	ISOL 2 VITEK	
.		M6043	ISOL 2 EXTRAS	
.		M6044	ISOL2 N/R	
.		M6046	ISOL 3 SENS	
.		M6047	ISOL 3 VITEK	
.		M6048	ISOL 3 EXTRAS	
.		M6049	ISOL 3 N/R	
.		M6051	ISOL 4 SENS	
.		M6052	ISOL 4 VITEK	
.		M6053	ISOL 4 EXTRAS	

	.	M6054	ISOL 4 N/R
	EXTRA NOTES	M6056	EXTRA NOTES
	SUBCULTURE INFO:	M6085	SUB INFO1
	PLATES FOR RE-INCUBATION	M6086	PLATE RI
	SUB ISOL 2	M6090	SUB INFO2
	GROWTH	M6092	SUB GROWTH
	GROWTH	M6093	SUB GROWTH 2
	GROWTH	M6094	SUB GROWTH3
	SUB ISOL3	M6095	SUB INFO3
	GROWTH	M6097	SUB GROWTH4
	SUB ISOL 4	M6098	SUB INFO4
	Site:	M6101	SS
		M6102	SP COMM
	Y for complete S for extra sens :	M6200	REPCOM1
	Not isolated:	M6205	REPCOMM2
	To follow:	M6210	REPCOM3
	Isolate 1	M8100	MISOLATE1
	Isolate 2	M8120	ISOLATE2
	Isolate 3	M8140	MISOLATE3
	Isolate 4	M8144	ISOLATE4
Site			

Test Panel	Tissue Transglutaminase Antibodies		
Synonyms			
Abbreviation		*Lab Test Code*	C984
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Test for screening for Coeliac disease		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements	If patients are IgA deficient, no result will be reported		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes	Send to laboratory on day of collection		
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Phadia 250		

Tests in Panel

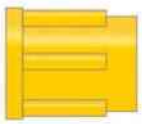
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W2256	TTG Returned :	
IgA t-Transglutaminase:	U/ml	W3330	IgA TTG :	
Referred Test :		W4321	Referred Test	

Site	Choose an item.

Reference Ranges

Test	Coeliac Screen
ISS Code	C984
ISS Test Name	Coeliac Screen (IgA TTG)
Ref Range Comments	

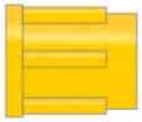
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Immunoglobulin A	Female	0 Days	14 Days	0.01	0.08	g/L	04/09/2020
Immunoglobulin A	Female	14 Days	42 Days	0.02	0.15	g/L	04/09/2020
Immunoglobulin A	Female	42 Days	90 Days	0.05	0.4	g/L	04/09/2020
Immunoglobulin A	Female	3 Months	6 Months	0.1	0.5	g/L	04/09/2020
Immunoglobulin A	Female	6 Months	9 Months	0.15	0.7	g/L	04/09/2020
Immunoglobulin A	Female	9 Months	12 Months	0.2	0.7	g/L	04/09/2020
Immunoglobulin A	Female	1 Years	2 Years	0.3	1.2	g/L	04/09/2020
Immunoglobulin A	Female	2 Years	3 Years	0.3	1.3	g/L	04/09/2020
Immunoglobulin A	Female	3 Years	6 Years	0.4	2	g/L	04/09/2020
Immunoglobulin A	Female	6 Years	9 Years	0.5	2.4	g/L	04/09/2020
Immunoglobulin A	Female	9 Years	12 Years	0.7	2.5	g/L	04/09/2020
Immunoglobulin A	Female	12 Years	45 Years	0.8	2.8	g/L	04/09/2020
Immunoglobulin A	Female	45 Years	110 Years	0.8	4	g/L	04/09/2020
Immunoglobulin A	Male	0 Days	14 Days	0.01	0.08	g/L	04/09/2020
Immunoglobulin A	Male	14 Days	42 Days	0.02	0.15	g/L	04/09/2020
Immunoglobulin A	Male	42 Days	90 Days	0.05	0.4	g/L	04/09/2020
Immunoglobulin A	Male	3 Months	6 Months	0.1	0.5	g/L	04/09/2020
Immunoglobulin A	Male	6 Months	9 Months	0.15	0.7	g/L	04/09/2020
Immunoglobulin A	Male	9 Months	12 Months	0.2	0.7	g/L	04/09/2020
Immunoglobulin A	Male	1 Years	2 Years	0.3	1.2	g/L	04/09/2020
Immunoglobulin A	Male	2 Years	3 Years	0.3	1.3	g/L	04/09/2020
Immunoglobulin A	Male	3 Years	6 Years	0.4	2	g/L	04/09/2020
Immunoglobulin A	Male	6 Years	9 Years	0.5	2.4	g/L	04/09/2020
Immunoglobulin A	Male	9 Years	12 Years	0.7	2.5	g/L	04/09/2020
Immunoglobulin A	Male	12 Years	45 Years	0.8	2.8	g/L	04/09/2020
Immunoglobulin A	Male	45 Years	110 Years	0.8	4	g/L	04/09/2020
IgA t-Transglutaminase (TTG) Ab	Female	0 Years	115 Years	0	7	U/mL	10/10/2020
IgA t-Transglutaminase (TTG) Ab	Male	0 Years	115 Years	0	7	U/mL	10/10/2020

Test Panel	**Tobramycin Assay**		
Synonyms			
Abbreviation		*Lab Test Code*	M835
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Please provide dosing information. Assays with incomplete dosing and specimen details may be rejected.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term			
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Dosing Regime:		M0060	Dosing Regime	
Date sent:		M3678	DATER	
Date result received:		M3679	DATERET	
Reference lab no:		M3682	RL NO	
WHO SENT?		M3683	WHO SENT	
Reference lab:		M3691	TOB REF	
Tobramycin level	mg/l	M8568	TOBRA LEVEL	
Time of last dose:		M8571	DOSE G	
Time of sample collection:		M8572	SAMPLE G	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Topiramate**		
Synonyms			
Abbreviation		*Lab Test Code*	W319R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements	Analysis on Saliva can also be undertaken		
Containers	 SST		Choose an item.
	Analysis on Saliva can also be undertaken		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

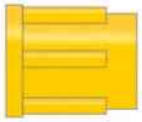
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Topiramate level	mg/L	W0205	TOPIRAMATE LEVEL	
Topiramate Dose		W0206	TOPIRAMATE DOSE	
Topiramate time		W0207	TOPIRAMATE TIME	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Topiramate
ISS Code	W319R
ISS Test Name	Topiramate Result
Ref Range Comments	

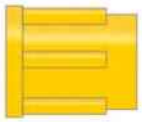
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Topiramate level	Female	0 Years	115 Years	5	20	mg/L	01/09/2012
Topiramate level	Male	0 Years	115 Years	5	20	mg/L	01/09/2012

Test Panel	**TORCH Screen inc Rubella**		
Synonyms			
Abbreviation		*Lab Test Code*	V055A
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Rubella IgM antibody :		V6660	RUBELLA IgM.	
Vidas Test Value		V6661	RUBM VALUE	
Lot No.		V6662	RUBM LOT	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Total Protein & Albumin**		
Synonyms			
Abbreviation		*Lab Test Code*	C112
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Part of LFT and Bone Profile		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

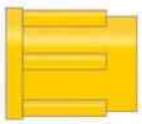
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Haemolysis index		C1026	HI	
Total Protein	g/L	C1050	T.PROTEIN	
Albumin	g/L	C1055	ALBUMIN	
Globulin	g/L	C1060	GLOBULIN	

Site	

Reference Ranges

Test	Total Protein & Albumin
ISS Code	C112
ISS Test Name	Total Protein & Albumin
Ref Range Comments	

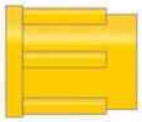
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Albumin	Female	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Female	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Female	16 Years	115 Years	35	50	g/L	12/12/2011
Albumin	Male	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Male	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Male	16 Years	115 Years	35	50	g/L	12/12/2011
Globulin	Female	0 Years	115 Years	23	40	g/L	21/06/2012
Globulin	Male	0 Years	115 Years	23	40	g/L	21/06/2012
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Total Protein	Female	0 Years	115 Years	60	80	g/L	12/12/2011
Total Protein	Male	0 Years	115 Years	60	80	g/L	12/12/2011

Test Panel	**Toxocara Serology**		
Synonyms			
Abbreviation		*Lab Test Code*	V484
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	2 Weeks
Investigation Comments	For Serological diagnosis of Enterovirus infection. Please include clinical details, dates of onset and exposure history.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Bordier (Toxocara) Elisa		V4192	Toxocara	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

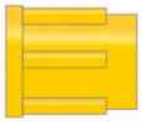
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Toxoplasma Confirmation**		
Synonyms			
Abbreviation		*Lab Test Code*	V436
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Only used for serological confirmation of Toxoplasma infection, following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Toxoplasma Dye Test	IU/ml	V4113	TOXODYE	
Toxoplasma IgM (EIA)		V4114	TOXOMEIA	
Toxoplasma Total Ab (Latex)		V4115	TOXLATEX	
Toxoplasma IgM Antibody		V4116	TOXMAB	
Toxoplasma IgG Antibody		V4117	TOXGAB	
Toxoplasma IgG avidity		V4207	TOXO G AVID	
Toxoplasma ISAGA IgA		V4208	TOXO ISGA IGA	
Toxoplasma ISAGA IgM		V4209	TOXO ISAGA IGM	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

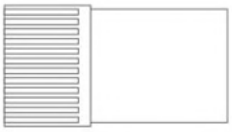
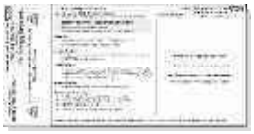
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Toxoplasma IgG/IgM**		
Synonyms	Toxoplasma Serology (IgG/IgM)		
Abbreviation		*Lab Test Code*	V286
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Test for past exposure to (or immunity against) Toxoplasma or acute infection. If pregnant, test can be carried out on the booking sample if available. Please contact virology at DRI to discuss.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Toxoplasma IgG Antibody:		V0140	TOXO GAB	
Value	S/CO	V0141	VALUE	
Lot:		V0142	Toxo G Lot	
Toxoplasma IgM Antibody:		V0143	TOXO MAB	
Value	S/CO	V0144	M VALUE	
Lot:		V0145	TOXO M LOT	

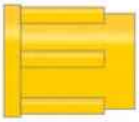
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Toxoplasma PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V485
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	For molecular detection of Toxoplasma gondii DNA.		
Availability	Routine hours only		
Specimen	Cerebro-Spinal Fluid & Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA  Universal		
	EDTA, CSF or Fluid		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
TOXOPLASMA PCR		V4219	TOXOPLASMA PCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Toxoplasmosis**			
Synonyms				
Abbreviation		*Lab Test Code*	V400A	
Department	Virology			
Clinical Contact	01142 266477			
Contact	01302 642840	*Turnaround Time*	1 Week	
Investigation Comments	Screen for previous exposure to Toxoplasma.			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	2ml	
Requirements				
Containers	 SST			
Request Forms	 Pathology Combined			
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.			
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform				
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name* / *Lab Comment*
Site				

Test Panel	**Trace Metals**		
Synonyms			
Abbreviation		*Lab Test Code*	W299R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Interpreting zinc concentrations in 'sick' individuals is very problematic. Studies show zinc and selenium concentrations decrease as CRP increases. Recommend only assess zinc in individuals with CRP less than 15ng/L. Plasma zinc responds to intake in		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	4.5ml
Requirements			
Containers	 Trace Element		
	Trace Element – Dark Blue with RED stripe		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

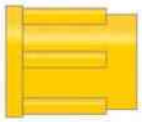
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Zinc	umol/L	W0045	Zinc Result	
Zinc (by ICP)	umol/L	W0047	Zinc (By ICP)	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Copper	umol/L	W5666	Copper :	
Copper (by ICP)	umol/L	W5667	Copper (By ICP)	
Selenium (by ICP)	umol/L	W6028	Selenium :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Trace Metals
ISS Code	W299R
ISS Test Name	Trace Metals Results
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Copper (by ICP)	Female	0 Months	6 Months	5.9	16.3	umol/L	01/01/2015
Copper (by ICP)	Female	6 Months	12 Months	3.8	23.8	umol/L	01/01/2015
Copper (by ICP)	Female	1 Years	12 Years	11	27.2	umol/L	01/01/2015
Copper (by ICP)	Female	13 Years	49 Years	11	38.9	umol/L	01/01/2015
Copper (by ICP)	Female	49 Years	115 Years	11	27.2	umol/L	01/01/2015
Copper (by ICP)	Male	0 Months	6 Months	5.9	16.3	umol/L	01/01/2015
Copper (by ICP)	Male	6 Months	12 Months	3.8	23.8	umol/L	01/01/2015
Copper (by ICP)	Male	1 Years	115 Years	11	27.2	umol/L	01/01/2015
Selenium (by ICP)	Female	0 Years	2 Years	0.22	1.22	umol/L	01/07/2016
Selenium (by ICP)	Female	2 Years	5 Years	0.33	1.44	umol/L	01/07/2016
Selenium (by ICP)	Female	5 Years	16 Years	0.52	1.52	umol/L	01/07/2016
Selenium (by ICP)	Female	16 Years	110 Years	0.61	1.24	umol/L	01/07/2016
Selenium (by ICP)	Male	0 Years	2 Years	0.22	1.22	umol/L	01/07/2016
Selenium (by ICP)	Male	2 Years	5 Years	0.33	1.44	umol/L	01/07/2016
Selenium (by ICP)	Male	5 Years	16 Years	0.52	1.52	umol/L	01/07/2016
Selenium (by ICP)	Male	16 Years	110 Years	0.61	1.24	umol/L	01/07/2016
Zinc (by ICP)	Female	0 Years	115 Years	7.2	20.43	umol/L	01/01/2015
Zinc (by ICP)	Male	0 Years	115 Years	7.2	20.43	umol/L	01/01/2015

Test Panel	**Transferrin**		
Synonyms			
Abbreviation		*Lab Test Code*	C601
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Transferrin is the major plasma transport protein for iron. Measure with iron and ferritin in the assessment of iron status.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Transferrin	g/L	C4040	TRANSFERRIN	
TIBC	umol/L	C4041	TIBC	
Transferrin sat	%	C4042	TRANS SAT	

Site	

Reference Ranges

Test	Transferrin
ISS Code	C601
ISS Test Name	TRANSFERRIN
Ref Range Comments	

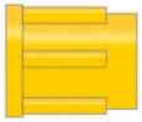
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Transferrin sat	Female	0 Years	115 Years	15	40	%	14/01/2021
Transferrin sat	Male	0 Years	115 Years	15	50	%	14/01/2021
Transferrin	Female	0 Years	115 Years	2	3.2	g/L	12/12/2011
Transferrin	Male	0 Years	115 Years	2	3.2	g/L	12/12/2011

Test Panel	**Trichomonas PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V492
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Molecular method for Detection of Trichomonas vaginalis.		
Availability	Routine hours only		
Specimen	Swab	*Volume Required*	2ml
Requirements			
Containers	 Viral Swab		
	Genital Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Trichomonas vaginalis DNA		V1095	Trichomonas vaginalis DNA	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Trimethylamine**		
Synonyms			
Abbreviation		*Lab Test Code*	W959R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

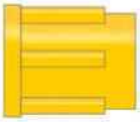
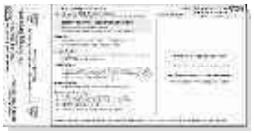
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:			W0125	RESULTRETURNED
Referred Test :			W4321	Referred Test
FreeTrimethylamine (TMA) / Creatinine Ratio :		umol/mmol creat	W9592	Trimethylamine (TMA) :
TMA-n-Oxide / Creatinine Ratio :		umol/mmol creat	W9593	TMA-n-Oxide :
Urine creatinine (Assayed at SCH) :		mmol/L	W9595	Urine creatinine (SCH) :
% N-Oxidation		%	W9597	% N-Oxidation

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Trimethylamine
ISS Code	W959R
ISS Test Name	TRIMETHYLAMINE RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
TMA-n-Oxide / Creatinine Ratio :	Female	1 Years	110 Years	0	119	umol/mmol creat	01/08/2011
TMA-n-Oxide / Creatinine Ratio :	Male	1 Years	110 Years	0	119	umol/mmol creat	01/08/2011
FreeTrimethylamine (TMA) / Creatinine Ratio :	Female	1 Years	110 Years	0	7.7	umol/mmol creat	01/08/2011
FreeTrimethylamine (TMA) / Creatinine Ratio :	Male	1 Years	110 Years	0	7.7	umol/mmol creat	01/08/2011

Test Panel	**Tryptase**		
Synonyms			
Abbreviation		*Lab Test Code*	W414
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	2 Weeks
Investigation Comments	Anaphylaxis - mast cell syndromes such as mastocytosis		
Availability	Routine hours only		
Specimen	Plasma	*Volume Required*	5ml
Requirements	Samples should be collected within 1 hour of anaphylactic reaction and subsequently at 3 and 24 hours. Rheumatoid factor may interfere with assay.		
Containers	 EDTA  SST		
	Either Lavender EDTA or Gold SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

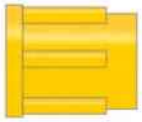
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Tryptase :	ug/L	W1234	TRYPTASE	
IgG :	g/L	W1235	IgG :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Tryptase
ISS Code	W414
ISS Test Name	TRYPTASE RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
IgG :	Female	0 Years	110 Years			g/L	01/08/2014
IgG :	Male	0 Years	110 Years			g/L	01/08/2014
Tryptase :	Female	0 Years	110 Years	2	14	ug/L	03/03/2011
Tryptase :	Male	0 Years	110 Years	2	14	ug/L	03/03/2011

Test Panel	**TSH-Receptor Stimulating Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W315
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Reported by External Lab		W0124	Reported by External Lab	
Date Result Returned:		W0125	RESULTRETURNED	
TSH receptor Ab :	IU/L	W0300	TSHAB	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

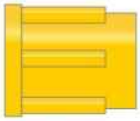
Reference Ranges

Test	TSH Receptor Antibodies
ISS Code	W315
ISS Test Name	TSH RECEPTOR AB RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
TSH receptor Ab :	Female	0 Years	115 Years	0	0.9	IU/L	01/09/2011
TSH receptor Ab :	Male	0 Years	115 Years	0	0.9	IU/L	01/09/2011

Test Panel	**Tyrosine Kinase Mutation**			
Synonyms				
Abbreviation		*Lab Test Code*	W063	
Department	Haematology			
Clinical Contact	Consultant Haematologist			
Contact	01302 642870	*Turnaround Time*	2 Weeks	
Investigation Comments	By arrangement with Consultant Haematologist			
Availability	Routine hours only			
Specimen	Venous Blood	*Volume Required*	2ml	
Requirements				
Containers	 EDTA			
Request Forms	 Pathology Combined			
Transport	Sample referred to external source			
Storage notes				
Stability	12 - 28°C (Ambient Temperature)			
Long Term	4 - 10°C			
Comments				
Platform				

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required				

Test Panel	Type 1 DM Antibody Screen (ZnT8, IA-2, GAD)		
Synonyms			
Abbreviation		*Lab Test Code*	W373
Department	Immunology		
Clinical Contact	Choose an item.		
Contact	Choose an item.	*Turnaround Time*	2 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.5ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*GAD Antibodies* *IA-2 Antibodies* *Zinc Transporter 8 Antibodies*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Uncrossmatched Blood Issue**		
Synonyms			
Abbreviation		*Lab Test Code*	J887
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	Speak to blood bank: Sample maybe required
Requirements			
Containers	 EDTA X-Match  EDTA		
	Speak to blood bank: Sample maybe required		
Request Forms	 Blood Bank		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4°C for 6 days		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
COMPATIBILITY TEST		J0005	COMPATIBILITY	
UNIT NUMBER		J9600	UNIT No	
PRODUCT		J9610	PROD	
FRACTION NUMBER		J9620	FRAC No	
UNIT GROUP		J9630	UNIT GP	
UN-X-MATCHED ISSUE		J9650	ISSUE UXM	

Site	

Test Panel	**Urea & Electrolytes (24hr urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C510
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	24hour Urine	*Volume Required*	
Requirements	For a 24 hour collection, all of the urine should be collected over the 24 hour period. It is important that the sample is refrigerated during this time period. There should be NO preservative in the container. Please refer to instructions on container		
Containers	 24hr Urine		
Request Forms	 Pathology Combined		
Transport	Do not use air transport tube		
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

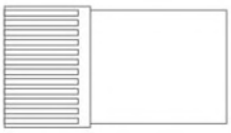
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
24 Hr Urine Volume.	Litres	C5000	UVOL URINE	
U.Creat.Conc.	mmol/L	C5030	CREATININE	
U.Creat.Exc.	mmol/24hr	C5040	U.Creat.Excretion	
U.Urea Conc.	mmol/L	C5050	UUREA	
U.Urea Exc.	mmol/24hr	C5060	UUREAEX	
U.Sodium Conc.	mmol/L	C5070	UNA	
U.Sodium Exc.	mmol/24hr	C5080	UNAEX	
U.Potassium Conc.	mmol/L	C5090	UK	
U.Potassium Exc.	mmol/24hr	C5100	UKEX	
U.Chloride Conc.	mmol/L	C5110	UCL	
U.Chloride Exc.	mmol/24hr	C5120	UCLEX	

Site	

Reference Ranges

Test	Urea & Electrolytes (24hr urine)
ISS Code	C510
ISS Test Name	U&E (24Hr urine)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Creat.Exc.	Female	16 Years	115 Years	5.9	14.1	mmol/24hr	12/12/2011
U.Creat.Exc.	Male	16 Years	115 Years	7.7	21.3	mmol/24hr	12/12/2011
U.Chloride Exc.	Female	0 Years	115 Years	110	250	mmol/24hr	12/12/2011
U.Chloride Exc.	Male	0 Years	115 Years	110	250	mmol/24hr	12/12/2011
U.Potassium Exc.	Female	0 Years	115 Years	25	125	mmol/24hr	12/12/2011
U.Potassium Exc.	Male	0 Years	115 Years	25	125	mmol/24hr	12/12/2011
U.Sodium Exc.	Female	0 Years	115 Years	40	220	mmol/24hr	12/12/2011
U.Sodium Exc.	Male	0 Years	115 Years	40	220	mmol/24hr	12/12/2011
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011
U.Urea Conc.	Female	0 Years	115 Years			mmol/L	25/07/2022
U.Urea Conc.	Male	0 Years	115 Years			mmol/L	25/07/2022
U.Urea Exc.	Female	0 Years	115 Years	428	714	mmol/24hr	12/12/2011
U.Urea Exc.	Male	0 Years	115 Years	428	714	mmol/24hr	12/12/2011

Test Panel	**Urea & Electrolytes (random urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C515
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	10ml
Requirements			
Containers	 Universal		
	Mid Stream Urine Container		
Request Forms	 Pathology Combined		
Transport	Do not use air transport tube		
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

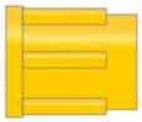
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
			URINE	
U.Creat.Conc.	mmol/L	C5030	CREATININE	
U.Urea Conc.	mmol/L	C5050	UUREA	
U.Sodium Conc.	mmol/L	C5070	UNA	
U.Potassium Conc.	mmol/L	C5090	UK	
U.Chloride Conc.	mmol/L	C5110	UCL	

Site	

Reference Ranges

Test	Urea & Electrolytes (random urine)
ISS Code	C515
ISS Test Name	U&E (random urine)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011
U.Urea Conc.	Female	0 Years	115 Years			mmol/L	25/07/2022
U.Urea Conc.	Male	0 Years	115 Years			mmol/L	25/07/2022

Test Panel	**Urea & Electrolytes**		
Synonyms			
Abbreviation	U&E	*Lab Test Code*	C094
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	0.25ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
eGFR-EPI	mL/min/1.73*2	C1008	eGFR-EPI	
Creatinine :	umol/L	C1009	ABBOTT Creatinine	
Creatinine	umol/L	C1012	NORMALISED CREAT	
eGFR-MDRD	mL/min/1.73*2	C1013	eGFR-MDRD	
Urea	mmol/L	C1016	UREA.	
AKI Status :		C1017	AKI.STATUS	
Sodium	mmol/L	C1021	SODIUM.	
AKI Status NHS :		C1022	NHS AKI STATUS	
AKI Status NTH :		C1023	NTH AKI STATUS	
Aki Status		C1024	AKI Status	
Haemolysis index		C1026	HI	
Potassium	mmol/L	C1027	POTASSIUM.	
		C9090	C	

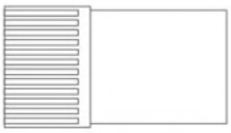
Site	

Reference Ranges

Test	Urea & Electrolytes
ISS Code	C094
ISS Test Name	ELU
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Creatinine	Female	0 Days	13 Days	27	81	umol/L	28/11/2016
Creatinine	Female	14 Days	365 Days	14	34	umol/L	28/11/2016
Creatinine	Female	1 Years	3 Years	15	31	umol/L	28/11/2016
Creatinine	Female	3 Years	5 Years	23	37	umol/L	28/11/2016
Creatinine	Female	5 Years	7 Years	25	42	umol/L	28/11/2016
Creatinine	Female	7 Years	9 Years	30	48	umol/L	28/11/2016
Creatinine	Female	9 Years	11 Years	28	57	umol/L	28/11/2016
Creatinine	Female	11 Years	12 Years	36	64	umol/L	28/11/2016
Creatinine	Female	12 Years	13 Years	36	67	umol/L	28/11/2016
Creatinine	Female	13 Years	14 Years	38	74	umol/L	28/11/2016
Creatinine	Female	14 Years	15 Years	43	75	umol/L	28/11/2016
Creatinine	Female	15 Years	16 Years	44	79	umol/L	28/11/2016
Creatinine	Female	16 Years	17 Years	48	81	umol/L	28/11/2016
Creatinine	Female	17 Years	110 Years	49	90	umol/L	28/11/2016
Creatinine	Male	0 Days	13 Days	27	81	umol/L	28/11/2016
Creatinine	Male	14 Days	365 Days	14	34	umol/L	28/11/2016
Creatinine	Male	1 Years	3 Years	15	31	umol/L	28/11/2016
Creatinine	Male	3 Years	5 Years	23	37	umol/L	28/11/2016
Creatinine	Male	5 Years	7 Years	25	42	umol/L	28/11/2016
Creatinine	Male	7 Years	9 Years	30	48	umol/L	28/11/2016
Creatinine	Male	9 Years	11 Years	28	57	umol/L	28/11/2016
Creatinine	Male	11 Years	12 Years	36	64	umol/L	28/11/2016
Creatinine	Male	12 Years	13 Years	36	67	umol/L	28/11/2016
Creatinine	Male	13 Years	14 Years	38	76	umol/L	28/11/2016
Creatinine	Male	14 Years	15 Years	40	83	umol/L	28/11/2016
Creatinine	Male	15 Years	16 Years	47	98	umol/L	28/11/2016
Creatinine	Male	16 Years	17 Years	54	99	umol/L	28/11/2016
Creatinine	Male	17 Years	110 Years	64	104	umol/L	28/11/2016
Aki Status	Female	0 Years	16 Years	0	2		05/03/2015
Aki Status	Female	16 Years	200 Years	0	2		05/03/2015
Aki Status	Male	0 Years	16 Years	0	2		05/03/2015
Aki Status	Male	16 Years	200 Years	0	2		05/03/2015
eGFR-EPI	Female	0 Years	110 Years			mL/min/1.73*2	02/05/2006
eGFR-EPI	Male	0 Years	110 Years			mL/min/1.73*2	02/05/2006
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Potassium	Female	0 Years	115 Years	3.5	5.3	mmol/L	12/12/2011
Potassium	Male	0 Years	115 Years	3.5	5.3	mmol/L	12/12/2011
Sodium	Female	0 Years	16 Years	133	146	mmol/L	12/12/2011
Sodium	Female	16 Years	115 Years	133	146	mmol/L	12/12/2011
Sodium	Male	0 Years	16 Years	133	146	mmol/L	12/12/2011

Sodium	Male	16 Years	115 Years	133	146	mmol/L	12/12/2011
Urea	Female	0 Days	28 Days	0.8	5.5	mmol/L	12/12/2011
Urea	Female	29 Days	365 Days	1	5.5	mmol/L	12/12/2011
Urea	Female	1 Years	16 Years	2.5	6.5	mmol/L	12/12/2011
Urea	Female	16 Years	115 Years	2.5	7.8	mmol/L	12/12/2011
Urea	Male	0 Days	28 Days	0.8	5.5	mmol/L	12/12/2011
Urea	Male	29 Days	365 Days	1	5.5	mmol/L	12/12/2011
Urea	Male	1 Years	16 Years	2.5	6.5	mmol/L	12/12/2011
Urea	Male	16 Years	115 Years	2.5	7.8	mmol/L	12/12/2011

Test Panel	**Ureaplasma Molecular Testing**		
Synonyms			
Abbreviation		*Lab Test Code*	V469
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	For molecular detection of Ureaplasma urealyticum/parvum DNA		
Availability	Routine hours only		
Specimen	Viral Swab or NPA	*Volume Required*	1ml
Requirements	Urine, Dry Genital swab, NPA (neonate)		
Containers	 Universal  Swab		
	Urine, Dry Genital swab, NPA (neonate)		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Ureaplasma urealyticum/parvum DNA		V6100	UREAPLASMA DNA	
Ureaplasma species PCR		V6101	UREAPLASMA SP PCR	
Ureaplasma culture:		V6102	UREAPLASMA CULTURE	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Uric Acid (24 hr urine)**		
Synonyms			
Abbreviation		*Lab Test Code*	C530
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	Useful for investigating hyperuricemia and recurrent stone formation.		
Availability	Routine hours & On Call		
Specimen	24hour Urine	*Volume Required*	
Requirements	For a 24 hour collection, all of the urine should be collected over the 24 hour period. It is important that the sample is refrigerated during this time period. There should be NO preservative in the container. Please refer to instructions on container		
Containers	 24hr Urine		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	4 - 10°C		
Long Term			
Comments			
Platform	Abbott Architect		

Tests in Panel

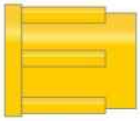
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
24 Hr Urine Volume.	Litres	C5000	UVOL URINE	
U.Creat.Conc.	mmol/L	C5030	CREATININE	
U.Creat.Exc.	mmol/24hr	C5040	U.Creat.Excretion	
U.Urate Conc.	mmol/L	C5170	UUA	
U.Urate Exc.	mmol/24hr	C5180	UUAEX	

Site	

Reference Ranges

Test	Uric Acid (24 hr urine)
ISS Code	C530
ISS Test Name	24 hr URINE URATE
Ref Range Comments	

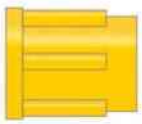
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
U.Creat.Exc.	Female	16 Years	115 Years	5.9	14.1	mmol/24hr	12/12/2011
U.Creat.Exc.	Male	16 Years	115 Years	7.7	21.3	mmol/24hr	12/12/2011
U.Creat.Conc.	Female	16 Years	115 Years	3.9	9.4	mmol/L	12/12/2011
U.Creat.Conc.	Male	16 Years	115 Years	5.1	14.2	mmol/L	12/12/2011
U.Urate Exc.	Female	0 Years	115 Years	1.5	4.5	mmol/24hr	12/12/2011
U.Urate Exc.	Male	0 Years	115 Years	1.5	4.5	mmol/24hr	12/12/2011

Test Panel	Uric Acid (random urine)		
Synonyms			
Abbreviation		*Lab Test Code*	C532
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	72 Hours
Investigation Comments	Useful for investigating hyperuricaemia and recurrent stone formation.		
Availability	Routine hours & On Call		
Specimen	24hour Urine	*Volume Required*	24 hour collection
Requirements			
Containers	 SST		
	For a 24 hour collection, all of the urine should be collected over the 24 hour period. It is important that the sample is refrigerated during this time period. There should be NO preservative in the container. Please refer to instructions on container		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
U.Creat.Conc.	mmol/L	C5030	URINE CREATININE	
U.Urate Conc.	mmol/L	C5170	UUA	
U.Urate/Creat ratio	mmol/mmol Cr	C5173	U.URATE/CREAT RATIO	

Site	

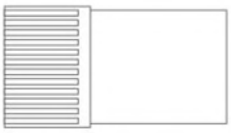
Test Panel	**Uric Acid**		
Synonyms			
Abbreviation		*Lab Test Code*	C125
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Raised in various conditions including gout, renal failure & toxaemia of pregnancy. May also be elevated in patients undergoing chemotherapy or radiation therapy.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	0.2ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Urate	umol/L	C1115	URATE	
Site					

Reference Ranges

Test	Uric Acid
ISS Code	C125
ISS Test Name	URIC ACID
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Haemolysis index	Female	0 Years	100 Years	0	1		28/09/2000
Haemolysis index	Male	0 Years	100 Years	0	1		28/09/2000
Urate	Female	0 Years	115 Years	140	360	umol/L	12/12/2011
Urate	Male	0 Years	115 Years	200	430	umol/L	12/12/2011

Test Panel	**Urinary Free Cortisol**		
Synonyms			
Abbreviation		*Lab Test Code*	W457C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Random Urine	*Volume Required*	5ml
Requirements			
Containers	 Universal (Plain Urine)  24hr Urine		
	Can use Universal or Plain 24 hour Urine		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

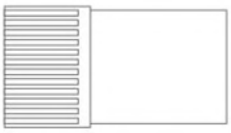
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Urine Volume :	Litres	W4545	Urine Volume :	
Urine Free Cortisol :	nmol/L	W4546	Urine Free Cortisol :	
Urine Free Cortisol (24h) :	nmol/24h	W4547	Urine Free Cortisol (24h)	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Urinary Free Cortisol
ISS Code	W457C
ISS Test Name	Urinary Free Cortisol Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Urine Free Cortisol (24h) :	Female	0 Years	110 Years	0	165	nmol/24h	03/03/2011
Urine Free Cortisol (24h) :	Male	0 Years	110 Years	0	165	nmol/24h	03/03/2011

Test Panel	**Urinary Steroid Profile**		
Synonyms			
Abbreviation		*Lab Test Code*	W590
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Random Urine	*Volume Required*	20ml
Requirements			
Containers	 Universal	 24hr Urine	
	Preferred sample is a portion of a 24 hour urine. A random sample may be used for the diagnosis of inborn errors of metabolism or if a 24 hour sample is difficult to collect, but the interpretation may be limited.		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

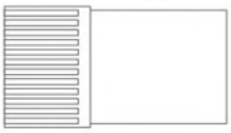
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Comment :		W5999	COMMENT :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Urine – Non gynae cytology**		
Synonyms	Non Gynae Cytology		
Abbreviation		*Lab Test Code*	T030
Department	Histology		
Clinical Contact	Consultant Histopathologist		
Contact	01302 642843	*Turnaround Time*	1 Week
Investigation Comments	If urgent / part of two week wait pathway please indicate this on the request form and state date by which the result is required.		
Availability	Monday – Friday (9am - 5pm), except bank holidays. Specimen(s) should be received at DRI Histopathology before 3pm for same day processing.		
Specimen	Urine	*Volume Required*	Less than 20ml
Requirements	Sample(s) received in a universal and labelled with patient identifiers.		
Containers	 Universal		
Request Forms	 Histology WPR2583		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments	A lack of patient or sample information may result in the laboratory not conducting the analysis / examination. A Non gynae cytology request will only be processed once the following acceptance criteria are met: • A minimum of 3 patient identifiers on pot(s) and form. To include: o Full name (forename & surname) *Mandatory* o DOB o Address o NHS/ District number • Sample(s) received in a universal, labelled with patient identifiers. • Request form with corresponding patient identifiers, sample site and relevant clinical details. Less than 20ml. If a larger volume has been collected, please decant a 20ml sample for cytology investigations. Unsuitable for frozen section or DIF		
Platform	Choose an item.		

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*

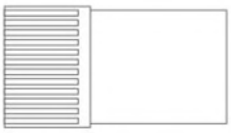
Site	Choose an item.

Test Panel	**Urine Dipstix**		
Synonyms			
Abbreviation		*Lab Test Code*	C711
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Routine hours & On Call		
Specimen	Urine	*Volume Required*	
Requirements			
Containers	 Universal		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Analysed		C0130	Analysed by	
U.pH	pH Units	C1930	UPH	
U.Protein		C1931	U.PROT	
U.Glucose		C1932	U.GLUC	
U. Ketone		C1933	U.KET	
U.Ascorbic acid		C1934	UASC0	
U.Bilirubin		C1935	U.BILI	
U.Nitrite		C1937	U.NITRITE	
U.Leucocytes		C1939	ULEUC	
U.Blood		C1940	U.BLD	
U.Specific Gravity		C1942	USG	
U.Urobilinogen		C1945	U.URO	

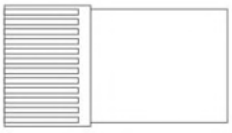
Site	

Test Panel	**Urine Heavy Metal Screen**		
Synonyms			
Abbreviation		*Lab Test Code*	W529R
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	5ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	Minus 20°C		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:			W0125	RESULTRETURNED
Creatinine (Assayed at Leeds & Bradford) :		mmol/L	W2645	Creatinine @ L+B :
Random Urine Lead :		ug/L	W2646	Random Lead :
Urine Mercury :		nmol/L	W2647	Urine Mercury :
Urine Hg/Cre Ratio :		nmol/mmol (creat)	W2648	Urine Hg/Cre Ratio :
Referred Test :			W4321	Referred Test

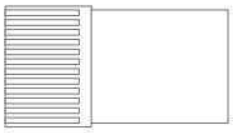
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

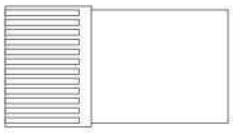
Test Panel	**Urine Microscopy & Culture**		
Synonyms			
Abbreviation		*Lab Test Code*	M200A
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Specimens received in universal containers greater than 24hrs or in non-sterile containers will be rejected		
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	
Requirements	A midstream sample of urine should be collected and transported to the laboratory without delay. Catheter specimens should be collected only if the patient is pyrexial or systemically unwell.		
Containers	 Sterile CE-marked Urine Primary Tube w/boric acid  Sterile Universal		
	Microbiology accept boric acid tubes routinely and only samples from paediatrics will be accepted in universals due to low volumes		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	2-8°C if in universal container		
Long Term	Up to 3 days at room temperature if in a primary tube with boric acid.		
Comments			
Platform			

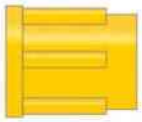
Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
WBC	/HPF	M0006	IQWBC	
RBC	/HPF	M0012	IQRBC	
Squames		M0016	IQSQ	
Bacteria		M0026	IQBAC	
Unclassified casts		M0031	IQUNC	
Cellular casts		M0032	IQCC	
Hyaline Casts		M0033	IQHC	
Granular Casts		M0034	IQGC	
Yeast		M0037	IQY	
ALL SMALL PARTICLES		M0038	IQASP	
Result-		M0041	URINE NEG	
		M0080	LAB COMMENTS	
		M0083	PYELONEPHRITIS	

Site	

Test Panel	Urine Sialic Acid		
Synonyms			
Abbreviation		*Lab Test Code*	W754
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	3ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*Urine Sialic Acid* *Urine Free Sialic Acid* *Urine Bound Sialic Acid*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	Urinary Sulphocysteine		
Synonyms			
Abbreviation		*Lab Test Code*	W486
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Utilised for diagnosis of Sulphite Oxidase or Molybdenum Cofactor deficiency.		
Availability	Routine hours only		
Specimen	Urine	*Volume Required*	1ml
Requirements			
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Send to laboratory on day of collection		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Minus 20°C		
Comments			
Platform	Choose an item.		
Tests in Panel	*Urine Creatinine* *Urine Sulphocysteine* *Urine Sulphocysteine/Creatinine Ratio*		
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required		

Test Panel	**Valproate**		
Synonyms			
Abbreviation		*Lab Test Code*	C060
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Measurement of valproate is not useful for therapeutic drug monitoring. Indications for measurement are restricted to: ?compliance and ?toxicity.		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

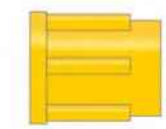
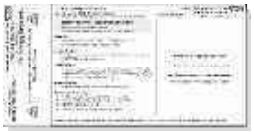
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Valproic Acid	umol/L	C2010	VALPROIC ACID	
Valproic Acid	mg/L	C3009	VALPROATE.	

Site	

Reference Ranges

Test	Valproate
ISS Code	C060
ISS Test Name	VALPROATE
Ref Range Comments	

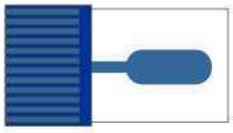
Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Valproic Acid	Female	0 Years	115 Years			mg/L	21/11/2015
Valproic Acid	Male	0 Years	115 Years			mg/L	21/11/2015

Test Panel	**Vancomycin Assay**		
Synonyms			
Abbreviation		*Lab Test Code*	M015
Department	Microbiology		
Clinical Contact	Consultant Microbiologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments			
Availability	Available 7 days per week between the hours of 08:00 and 20:00. Requests outside this time frame must be discussed with Consultant Microbiologists.		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Dosing Regime:		M0060	Dosing Regime	
Dose (Pre or Post):		M0062	Dose.	
Vancomycin level :	mg/L	M0066	Vancomycin	
FILED BY MICRO BMS		M0076	FILED BY MICRO	
Received full details?		M0096	DETAILS RECEIVED	
Date of sample collection:		M8560	DATE COLLECTED	
Time of sample collection:		M8572	SAMPLE G	
Date of last dose:		M8573	Date of last infusion	
Time of last dose:		M8574	TIME LAST DOSE	
Dose:		M8575	ASSAY DOSE	

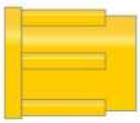
Site	

Test Panel	Vancomycin Resistant Enterococci		
Synonyms	VRE		
Abbreviation	VRE	*Lab Test Code*	M728
Department	Microbiology		
Clinical Contact	Consultant Microbiologist or Infection Control		
Contact	01302 642870	*Turnaround Time*	1 Week
Investigation Comments	Please complete "Assay Request Forms" in full, specific labels for assay samples are available. These can be obtained from Pathology Reception. Assays with incomplete dosing and specimen details will be rejected.		
Availability	Routine hours only		
Specimen	Charcoal Transport Swab	*Volume Required*	3ml
Requirements	Charcoal Transport Swab, Faeces or Urine		
Containers	 Faeces  Swab		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
API:		M0355	VRE API	
SUBCULTURE INFO:		M9353	VRE NOTE1	
		M9354	VRE NOTE2	
E TEST:		M9356	VRE ETEST	
Vancomycin Resistant Enterococcus (VRE):		M9357	VRE	

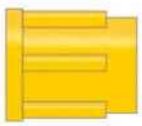
Site	

Test Panel	Varicella zoster (Chicken pox) Confirmation		
Synonyms			
Abbreviation		*Lab Test Code*	V439
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Only used for serological confirmation of Varicella zoster immunity or infection, following initial screening results at DRI.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Varicella Zoster IgM Antibody		V4122	VZVMAB	
Varicella Zoster IgG Antibody :		V6704	VZVG AB	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

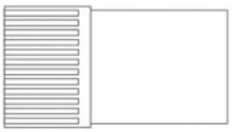
Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Varicella zoster (Chicken pox) IgG**		
Synonyms			
Abbreviation		*Lab Test Code*	V160
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	72 Hours
Investigation Comments	Test for past exposure to (or immunity against) Varicella zoster. If pregnant / immunocompromised include contact / rash history. If pregnant, test can be carried out on the booking sample if available. Please contact virology at DRI to discuss.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	If contact in pregnancy please state gestation with date and nature of contact. Please include contact telephone number.		
Containers	 SST		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
VZ IgG Value:	mIU/ml	V0282	VZV NUM	
Varicella Zoster IgG Antibody :		V6704	VZVG AB	

Site	

Test Panel	**Varicella zoster (Chicken pox) PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V481
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	1 Week
Investigation Comments	Test designed for diagnosis of acute infection and not for determining immunity.		
Availability	Routine hours only		
Specimen	Viral Swab, CSF or Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 Viral Swab  Sterile Universal		
	For acute confirmation. Green topped viral swab, CSF or EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Varicella Zoster PCR DNA		V4121	VZVPCR	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Very Long Chain Fatty Acids**		
Synonyms			
Abbreviation	VLCFA	*Lab Test Code*	W870
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Screening tests for peroxisomal disorders. Test includes phytanic acid.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

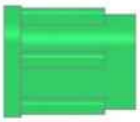
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
VLC Fatty Acids		W2016	VLCFA :	
		W2017	VLC2 :	
		W2018	VLC3 :	
		W2019	VLC4 :	
Referred Test :		W4321	Referred Test	
Docosanoate (C22)	umol/L	W6045	DOCOSANOATE :	
Tetracos. (C24)	umol/L\	W6046	TETRACOSANOATE :	
Hexacos. (C26)	umol/L	W6047	HEXACOS.:	
C24/C22 Ratio		W6048	C24/C22 :	
C26/C22 Ratio		W6049	C26/C22 :	
Phytanate	umol/L	W6050	PHYTANATE :	
Pristinate	umol/L\	W6051	PRISTINATE :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Very Long Chain Fatty Acids
ISS Code	W870
ISS Test Name	Very Long chain Fatty Acids Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
C24/C22 Ratio	Female	0 Years	115 Years	0.44	0.97		22/03/2011
C24/C22 Ratio	Male	0 Years	115 Years	0.44	0.97		22/03/2011
C26/C22 Ratio	Female	0 Years	115 Years	0.005	0.03		22/03/2011
C26/C22 Ratio	Male	0 Years	115 Years	0.005	0.03		22/03/2011
Docosanoate (C22)	Female	0 Years	115 Years	15	112	umol/L	22/03/2011
Docosanoate (C22)	Male	0 Years	115 Years	15	112	umol/L	22/03/2011
Hexacos. (C26)	Female	0 Years	115 Years	0.33	1.5	umol/L	22/03/2011
Hexacos. (C26)	Male	0 Years	115 Years	0.33	1.5	umol/L	22/03/2011
Phytanate	Female	0 Years	110 Years	0.2	19.3	umol/L	05/08/2014
Phytanate	Male	0 Years	110 Years	0.2	19.3	umol/L	05/08/2014
Pristinate	Female	0 Years	115 Years	0	1.88	umol/L\	22/03/2011
Pristinate	Male	0 Years	115 Years	0	1.88	umol/L\	22/03/2011
Tetracos. (C24)	Female	0 Years	115 Years	14	80	umol/L\	22/03/2011
Tetracos. (C24)	Male	0 Years	115 Years	14	80	umol/L\	22/03/2011

Test Panel	**Vigabatrin**		
Synonyms			
Abbreviation		*Lab Test Code*	W444C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	An anti-convulsant drug. Routine monitoring of blood levels is unnecessary. Sample taken immediately before a dose, at least ?? days after initiation of treatment.		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Take blood sample just before dose (ie trough level)		
Containers	 Plain  Heparin		
	Red Plain or Green Lithium Heparin		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

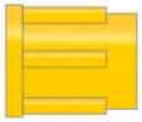
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Vigabatrin :	mg/L	W2041	Vigabatrin :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Vigabatrin
ISS Code	W444C
ISS Test Name	Vigabatrin Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Vigabatrin :	Female	0 Years	110 Years	5	35	mg/L	19/03/2003
Vigabatrin :	Female (Pregnant)	0 Years	110 Years	5	35	mg/L	19/03/2003
Vigabatrin :	Male	0 Years	110 Years	5	35	mg/L	19/03/2003

Test Panel	**Vitamin A & E**		
Synonyms			
Abbreviation		*Lab Test Code*	W898
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Protect from light and send to laboratory within one hour.		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Vit A	umol/L	W1800	Vitamin A :	
Vit E	umol/L	W1801	Vitamin E :	
Vitamin E lipid corr ratio		W1802	Vit E Ratio :	
Cholesterol :	mmol/L	W1803	VITECHOL	
Triglyceride :	mmol/L	W1804	VITETRIG	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Vitamin A & E
ISS Code	W898
ISS Test Name	Vitamins A and E Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Vitamin E lipid corr ratio	Female	1 Years	7 Years	3	5		12/11/2020
Vitamin E lipid corr ratio	Female	7 Years	13 Years	2	5		12/11/2020
Vitamin E lipid corr ratio	Female	13 Years	18 Years	2	4		12/11/2020
Vitamin E lipid corr ratio	Female	18 Years	110 Years	3.9	5.9		12/11/2020
Vitamin E lipid corr ratio	Male	1 Years	7 Years	3	5		12/11/2020
Vitamin E lipid corr ratio	Male	7 Years	13 Years	2	5		12/11/2020
Vitamin E lipid corr ratio	Male	13 Years	18 Years	2	4		12/11/2020
Vitamin E lipid corr ratio	Male	18 Years	110 Years	3.9	5.9		12/11/2020
Vit A	Female	0 Years	1 Years	0.5	1.5	umol/L	06/05/2014
Vit A	Female	1 Years	7 Years	0.7	1.5	umol/L	06/05/2014
Vit A	Female	7 Years	13 Years	0.91	1.71	umol/L	06/05/2014
Vit A	Female	13 Years	20 Years	0.91	2.51	umol/L	06/05/2014
Vit A	Female	20 Years	110 Years	0.84	3.6	umol/L	06/05/2014
Vit A	Male	0 Years	1 Years	0.5	1.5	umol/L	06/05/2014
Vit A	Male	1 Years	7 Years	0.7	1.5	umol/L	06/05/2014
Vit A	Male	7 Years	13 Years	0.91	1.71	umol/L	06/05/2014
Vit A	Male	13 Years	20 Years	0.91	2.51	umol/L	06/05/2014
Vit A	Male	20 Years	110 Years	0.84	3.6	umol/L	06/05/2014
Vit E	Female	0 Months	12 Months	5	50	umol/L	12/11/2020
Vit E	Female	1 Years	7 Years	7	21	umol/L	12/11/2020
Vit E	Female	7 Years	13 Years	10	21	umol/L	12/11/2020
Vit E	Female	13 Years	18 Years	13	24	umol/L	12/11/2020
Vit E	Female	18 Years	110 Years	11.6	35.5	umol/L	12/11/2020
Vit E	Male	0 Months	12 Months	5	50	umol/L	12/11/2020
Vit E	Male	1 Years	7 Years	7	21	umol/L	12/11/2020
Vit E	Male	7 Years	13 Years	10	21	umol/L	12/11/2020
Vit E	Male	13 Years	18 Years	13	24	umol/L	12/11/2020
Vit E	Male	18 Years	110 Years	11.6	35.5	umol/L	12/11/2020
Triglyceride :	Female	16 Years	110 Years		<1.7	mmol/L	20/04/2022
Triglyceride :	Male	16 Years	110 Years		<1.7	mmol/L	20/04/2022

Test Panel	**Vitamin B1**		
Synonyms	Thiamine		
Abbreviation		*Lab Test Code*	W440
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Vitamin B1 - Thiamine, Vitamin B2 - Riboflavin		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 EDTA		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes	Light sensitive - Keep specimen in the dark and send sample to lab as soon as possible		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Thiamine	nmol/L	W1739	NEWB1	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Vitamin B6**		
Synonyms			
Abbreviation		*Lab Test Code*	W621C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

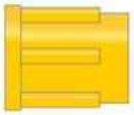
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Whole Blood Vitamin B6 :	nmol/L	W7575	Vitamin B6 :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Vitamin B6
ISS Code	W621C
ISS Test Name	Vitamin B6 Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Whole Blood Vitamin B6 :	Female	0 Years	115 Years	35	110	nmol/L	12/10/2018
Whole Blood Vitamin B6 :	Male	0 Years	115 Years	35	110	nmol/L	12/10/2018

Test Panel	**Vitamin B12**		
Synonyms			
Abbreviation		*Lab Test Code*	Y016
Department	Clinical Biochemistry		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	If result less than 120 ng/L sample will automatically be tested for Intrinsic Factor antibodies		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Refer to Short Term Stability		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) (3 days)		
Long Term	2 - 8°C (up to 7 days)		
Comments			
Platform	Abbott Architect		

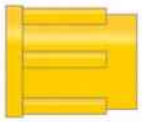
Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	Vitamin B12	ng/L	Y0012	ABBOTT Vitamin B12	

Site	

Reference Ranges

Test	Vitamin B12
ISS Code	Y016
ISS Test Name	SERUM VIT B12
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Vitamin B12	Female	16 Years	110 Years	187	883	ng/L	01/10/2011
Vitamin B12	Male	16 Years	110 Years	187	883	ng/L	01/10/2011

Test Panel	**Vitamin C**		
Synonyms			
Abbreviation		*Lab Test Code*	W904
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Measurement of vitamin C in plasma reflects recent dietary intake and is a poor index of tissue stores. Subclinical deficiency is common in the elderly housebound. Since ascorbic acid is cheap and non-toxic, a therapeutic trial of vitamin supplementation		
Availability	Routine hours only (sent away)		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements	Special treatment of sample required. Contact lab before collecting.		
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

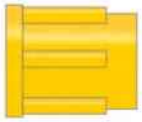
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Vitamin C (Plasma)	umol/L	W1732	Plasma Vitamin C	
Leuc Vit C	umol/10*9 WBC	W1733	WBC Vit C :	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

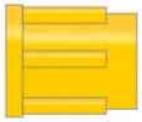
Test	Vitamin C
ISS Code	W904
ISS Test Name	VITAMIN C RESULT
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Vitamin C (Plasma)	Female	0 Years	115 Years	26.1	84.6	umol/L	01/01/2015
Vitamin C (Plasma)	Male	0 Years	115 Years	26.1	84.6	umol/L	01/01/2015

Test Panel	**Vitamin D 1,25 OH**		
Synonyms			
Abbreviation		*Lab Test Code*	W402
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Useful when assessing calcium homeostasis		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel	*Literal*	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
	1-25-dihydroxy vitamin D :	pmol/L	W1746	125DIVITD	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**Vitamin D 25 OH**		
Synonyms			
Abbreviation		*Lab Test Code*	C402
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Useful when assessing calcium homeostasis		
Availability	Routine hours & On Call		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		
Request Forms	 Pathology Combined		
Transport			
Storage notes	Refer to Short Term Stability		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform	Abbott Architect		

Tests in Panel

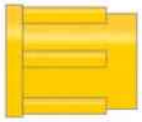
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Albumin	g/L	C1055	ALBUMIN	
Calcium	mmol/L	C1090	CALCIUM	
Adjusted Ca	mmol/L	C1095	ADJ CA	
25-OH Vitamin D	nmol/L	C1745	25-OH Vitamin D	

Site	

Reference Ranges

Test	Vitamin D 25 OH
ISS Code	C402
ISS Test Name	25-OH Vitamin D
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
25-OH Vitamin D	Female	0 Years	115 Years	>50		nmol/L	20/11/2017
25-OH Vitamin D	Male	0 Years	115 Years	>50		nmol/L	20/11/2017
Adjusted Ca	Female	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Adjusted Ca	Female	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019
Adjusted Ca	Female	6209 Days	6574 Days	2.2	2.6	mmol/L	01/11/2019
Adjusted Ca	Female	18 Years	115 Years	2.2	2.6	mmol/L	01/11/2019
Adjusted Ca	Male	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Adjusted Ca	Male	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019
Adjusted Ca	Male	6209 Days	6574 Days	2.2	2.6	mmol/L	01/11/2019
Adjusted Ca	Male	18 Years	115 Years	2.2	2.6	mmol/L	01/11/2019
Albumin	Female	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Female	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Female	16 Years	115 Years	35	50	g/L	12/12/2011
Albumin	Male	0 Years	1 Years	30	45	g/L	12/12/2011
Albumin	Male	1 Years	16 Years	30	50	g/L	12/12/2011
Albumin	Male	16 Years	115 Years	35	50	g/L	12/12/2011
Calcium	Female	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Calcium	Female	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019
Calcium	Male	0 Days	364 Days	2.13	2.74	mmol/L	01/11/2019
Calcium	Male	365 Days	6208 Days	2.29	2.63	mmol/L	01/11/2019

Test Panel	**Voltage Gated Calcium Channel Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W563R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Acquired neuromyotonia (Isaacs syndrome)		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	1ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments			
Platform	Choose an item.		

Tests in Panel

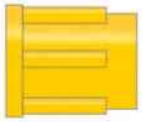
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
ANTI-VGCC	pmol/L	W1210	Anti-VGCC	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Voltage Gated Calcium Channel Antibodies
ISS Code	W563R
ISS Test Name	Anti- VGCC Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
ANTI-VGCC	Female	0 Years	115 Years	0	45	pmol/L	01/06/2014
ANTI-VGCC	Male	0 Years	115 Years	0	45	pmol/L	01/06/2014

Test Panel	**Voltage Gated Potassium Channel Antibodies**		
Synonyms			
Abbreviation		*Lab Test Code*	W564R
Department	Immunology		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments			
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	2ml
Requirements			
Containers	 SST		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	4 - 10°C		
Long Term	4 - 10°C		
Comments	150pm = positive		
Platform	Choose an item.		

Tests in Panel

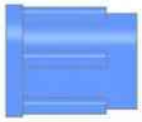
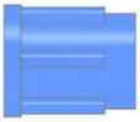
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
ANTI-VGKC AB	pmol/L	W4522	Anti-VGKC Antibody	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Voltage Gated Potassium Channel Antibodies
ISS Code	W564C
ISS Test Name	Anti-VGKC Ab Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
ANTI-VGKC AB	Female	0 Years	115 Years	0	69	pmol/L	23/11/2015
ANTI-VGKC AB	Male	0 Years	115 Years	0	69	pmol/L	23/11/2015

Test Panel	**Von Willibrands Screen**		
Synonyms	Factor VIII		
Abbreviation		*Lab Test Code*	W501
Department	Haematology		
Clinical Contact	Consultant Haematologist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	By arrangement with Consultant Haematologist		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	9ml
Requirements			
Containers	 Citrate  Citrate		
	2x Citrate tubes - 4.5ml (filled to line)		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature) - 4 to 6 hours		
Long Term	Minus 70°C		
Comments			
Platform	Choose an item.		

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Referred Test :		W4321		Referred Test
Factor VIII (chromogenic)	IU/mL	X8010		FACTOR V111C
vWF:Ag (by latex)	IU/mL	X8015		VWF AG
vWF Activity	IU/mL	X8020		VWF RCOF
vWF:Activity:Ag Ratio		X8050		VWF:AG RATIO

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

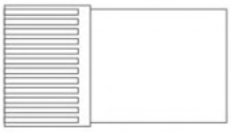
Test	Von Willibrands Screen
ISS Code	W501
ISS Test Name	VWF SCREEN (RHH) Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor VIII (chromogenic)	Female	0 Days	1 Days	0.5	1.78	IU/mL	23/02/2022
Factor VIII (chromogenic)	Female	2 Days	5 Days	0.5	1.54	IU/mL	23/02/2022
Factor VIII (chromogenic)	Female	6 Days	30 Days	0.5	1.57	IU/mL	23/02/2022
Factor VIII (chromogenic)	Female	31 Days	90 Days	0.5	1.25	IU/mL	23/02/2022
Factor VIII (chromogenic)	Female	91 Days	180 Days	0.5	1.09	IU/mL	23/02/2022
Factor VIII (chromogenic)	Female	181 Days	150 Days	0.62	1.99	IU/mL	23/02/2022
Factor VIII (chromogenic)	Male	0 Days	1 Days	0.5	1.78	IU/mL	23/02/2022
Factor VIII (chromogenic)	Male	2 Days	5 Days	0.5	1.54	IU/mL	23/02/2022
Factor VIII (chromogenic)	Male	6 Days	30 Days	0.5	1.57	IU/mL	23/02/2022
Factor VIII (chromogenic)	Male	31 Days	90 Days	0.5	1.25	IU/mL	23/02/2022
Factor VIII (chromogenic)	Male	91 Days	180 Days	0.5	1.09	IU/mL	23/02/2022
Factor VIII (chromogenic)	Male	181 Days	150 Days	0.62	1.99	IU/mL	23/02/2022
vWF:Ag (by latex)	Female	0 Years	110 Years	0.46	1.64	IU/mL	24/02/2020
vWF:Ag (by latex)	Male	0 Years	110 Years	0.46	1.64	IU/mL	24/02/2020
vWF Activity	Female	0 Years	110 Years	0.48	1.73	IU/mL	24/02/2020
vWF Activity	Male	0 Years	110 Years	0.48	1.73	IU/mL	24/02/2020

Reference Ranges

Test	VWF Screen (SCH)
ISS Code	W502
ISS Test Name	VWF Screen (SCH)
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Factor VIII:	Female	0 Days	1 Days	0.5	1.78	U/mL	23/02/2022
Factor VIII:	Female	2 Days	5 Days	0.5	1.54	U/mL	23/02/2022
Factor VIII:	Female	6 Days	30 Days	0.5	1.57	U/mL	23/02/2022
Factor VIII:	Female	31 Days	90 Days	0.5	1.25	U/mL	23/02/2022
Factor VIII:	Female	91 Days	180 Days	0.5	1.09	U/mL	23/02/2022
Factor VIII:	Female	181 Days	150 Days	0.5	1.49	U/mL	23/02/2022
Factor VIII:	Male	0 Days	1 Days	0.5	1.78	U/mL	23/02/2022
Factor VIII:	Male	2 Days	5 Days	0.5	1.54	U/mL	23/02/2022
Factor VIII:	Male	6 Days	30 Days	0.5	1.57	U/mL	23/02/2022
Factor VIII:	Male	31 Days	90 Days	0.5	1.25	U/mL	23/02/2022
Factor VIII:	Male	91 Days	180 Days	0.5	1.09	U/mL	23/02/2022
Factor VIII:	Male	181 Days	150 Days	0.5	1.49	U/mL	23/02/2022
VWF Act:	Female	0 Years	110 Years	0.48	2.39	U/mL	28/04/2016
VWF Act:	Male	0 Years	110 Years	0.48	2.39	U/mL	28/04/2016
VWF Ag:	Female	0 Years	110 Years	0.42	1.76	U/mL	28/04/2016
VWF Ag:	Male	0 Years	110 Years	0.42	1.76	U/mL	28/04/2016

Test Panel	**Whipples Disease PCR**		
Synonyms			
Abbreviation		*Lab Test Code*	V471
Department	Virology		
Clinical Contact	01142 266477		
Contact	01302 642840	*Turnaround Time*	4 Weeks
Investigation Comments	Test for Molecular detection of Tropheryma whippelii DNA		
Availability	Routine hours only		
Specimen	EDTA, Viral swab, CSF	*Volume Required*	1ml
Requirements	Please discuss request with Consultant Microbiologists.		
Containers	 Sterile Universal  EDTA		
Request Forms	 Pathology Combined		
	When requesting investigations for Microbiology please do not mix with samples for other departments. It is essential that when requesting Virology investigations that a separate request form is completed to accompany the sample.		
Transport			
Storage notes	Specimens should be sent to the laboratory without delay during normal hours. Outside of normal hours samples should be placed in the pathology reception fridge.		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	4 - 10°C		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Whipples		V4186	Whipples	
Date result received		V6814	DRR	
Reference Lab No		V6816	RLN	
REF LAB DATE REC		V6825	REF LAB DATE RECEIVED	
REF LAB DATE REPORTED		V6835	REF LAB DATE REPORTED	
Referred Test :		W4321	Referred Test	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Test Panel	**White Cell Enzymes**		
Synonyms			
Abbreviation		*Lab Test Code*	W359C
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Screening tests for lysosomal storage disorders.		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements	Do not collect sample after midday on Thursday, or on Friday.		
Containers	 EDTA		Choose an item.
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	24hrs - Store at 4°C until sent to Reference Lab		
Long Term	Not Possible		
Comments			
Platform	Choose an item.		

Tests in Panel

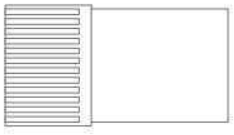
Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Aspartylglucosaminidase	umol/L.H	C6530	ASPARTYLGLUCOSAMINIDASE	
B-Hexosaminidase	umol/L.H	C6531	B-HEXOSAMINIDASE	
B-Mannosidase	umol/L.H	C6532	B-MANNOSIDASE	
B-Glucuronidase	umol/g.h	C6534	B-GLUCURONIDASE	
B-Galactosidase	umol/g.h	C6535	B-GALACTOSIDASE	
A-Mannosidase	umol/g.h	C6536	A-MANNOSIDASE	
A-Galactosidase	umol/g.h	C6537	A-GALACTOSIDASE	
A-Fucosidase	umol/g.h	C6538	A-FUCOSIDASE	
Acid Esterase	umol/g.h	C6539	ACID ESTERASE	
Aryl Sulphatase A	umol/g.h	C6540	ARYL SULPHATASE A	
B-Glucosidase	umol/g.h	C6541	B-GLUCOSIDASE	
Sphingomyelinase	umol/g.h	C6542	SPHINGOMYELINASE	
Galactocerebrosidase	umol/g.h	C6543	GALACTOCEREBROSIDASE	
NAC-Galactosaminidase :	umol/g.h	C6544	NAC-GALACTOSAMINIDASE	
Plasma B Hexosamindas A (Tay - Sachs Disease) :	umol/L.H	C6548	Plasma B-Hexo	
Date Result Returned:		W0125	RESULTRETURNED	
Referred Test :		W4321	Referred Test	
Plasma Chitotriosidase :	umol/g.h	W6543	Plasma Chitotriosidase :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	White Cell Enzymes
ISS Code	W359C
ISS Test Name	White Cell Enzymes Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Acid Esterase	Female	0 Years	115 Years	350	2000	umol/g.h	08/08/2012
Acid Esterase	Male	0 Years	115 Years	350	2000	umol/g.h	08/08/2012
A-Fucosidase	Female	0 Years	100 Years	50	250	umol/g.h	12/08/1996
A-Fucosidase	Male	0 Years	100 Years	50	250	umol/g.h	12/08/1996
A-Galactosidase	Female	0 Years	100 Years	10	50	umol/g.h	12/08/1996
A-Galactosidase	Male	0 Years	100 Years	10	50	umol/g.h	12/08/1996
A-Mannosidase	Female	0 Years	110 Years	100	800	umol/g.h	01/06/2011
A-Mannosidase	Male	0 Years	110 Years	100	800	umol/g.h	01/06/2011
Aryl Sulphatase A	Female	0 Years	115 Years	50	250	umol/g.h	01/05/2004
Aryl Sulphatase A	Male	0 Years	115 Years	50	250	umol/g.h	01/05/2004
Aspartylglucosaminidase	Female	0 Years	100 Years	10	60	umol/L.H	12/08/1996
Aspartylglucosaminidase	Male	0 Years	100 Years	10	60	umol/L.H	12/08/1996
B-Galactosidase	Female	0 Years	100 Years	100	400	umol/g.h	12/08/1996
B-Galactosidase	Male	0 Years	100 Years	100	400	umol/g.h	12/08/1996
B-Glucosidase	Female	0 Years	100 Years	1	5	umol/g.h	12/08/1996
B-Glucosidase	Male	0 Years	100 Years	1	5	umol/g.h	12/08/1996
B-Glucuronidase	Female	0 Years	115 Years	100	800	umol/g.h	01/10/1997
B-Glucuronidase	Male	0 Years	115 Years	100	800	umol/g.h	01/10/1997
B-Hexosaminidase	Female	0 Years	115 Years	600	3500	umol/L.H	01/05/2004
B-Hexosaminidase	Male	0 Years	115 Years	600	3500	umol/L.H	01/05/2004
B-Mannosidase	Female	0 Years	115 Years	150	1500	umol/L.H	01/05/2004
B-Mannosidase	Male	0 Years	115 Years	150	1500	umol/L.H	01/05/2004
Galactocerebrosidase	Female	0 Years	110 Years	0.8	4	umol/g.h	01/08/2011
Galactocerebrosidase	Male	0 Years	110 Years	0.8	4	umol/g.h	01/08/2011
NAC-Galactosaminidase :	Female	0 Years	110 Years	5	50	umol/g.h	01/06/2011
NAC-Galactosaminidase :	Male	0 Years	110 Years	5	50	umol/g.h	01/06/2011
Plasma B Hexosamindas A (Tay -Sachs Disease) :	Female	0 Years	110 Years	50	250	umol/L.H	02/08/2011
Plasma B Hexosamindas A (Tay -Sachs Disease) :	Male	0 Years	110 Years	50	250	umol/L.H	02/08/2011
Plasma Chitotriosidase :	Female	0 Years	110 Years	4	120	umol/g.h	01/05/2011
Plasma Chitotriosidase :	Male	0 Years	110 Years	4	120	umol/g.h	01/05/2011
Sphingomyelinase	Female	0 Years	115 Years	1	10	umol/g.h	01/05/2004
Sphingomyelinase	Male	0 Years	115 Years	1	10	umol/g.h	01/05/2004

Test Panel	Xanthochromia Screen		
Synonyms			
Abbreviation		*Lab Test Code*	C163
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	24 hours
Investigation Comments	Test used to rule out Subarachnoid Haemorrhage as the cause of sudden onset headache in CT negative patients. Record on request form 1) Date & time of onset of symptoms, 2) Date & time of sample collection, 3) CT result.		
Availability	Routine hours only		
Specimen	CSF - PROTECT FROM LIGHT	*Volume Required*	1ml
Requirements	Take sample at least 12 hours after onset of headache. Protect from light. Send sample to lab ASAP. Do not use vacuum tube. Take blood sample for LFTs.		
Containers	 Universal		Choose an item.
Request Forms	 Pathology Combined		
Transport			
Storage notes	Ideally, samples should be received in the laboratory within 1 hour of collection..		
Stability	12 - 28°C (Ambient Temperature)		
Long Term	2 - 8°C		
Comments			
Platform			
Tests in Panel			
Site	Choose an item.		

Test Panel	**Zinc**		
Synonyms			
Abbreviation		*Lab Test Code*	W305
Department	Clinical Biochemistry		
Clinical Contact	Clinical Biochemist		
Contact	01302 642870	*Turnaround Time*	4 Weeks
Investigation Comments	Interpreting zinc concentrations in 'sick' individuals is very problematic. Studies show zinc and selenium concentrations decrease as CRP increases. Recommend only assess zinc in individuals with CRP less than 15ng/L. Plasma zinc responds to intake in		
Availability	Routine hours only		
Specimen	Venous Blood	*Volume Required*	5ml
Requirements			
Containers	 Trace Element		
	Trace Element – Dark Blue with RED stripe		
Request Forms	 Pathology Combined		
Transport	Sample referred to external source		
Storage notes			
Stability	12 - 28°C (Ambient Temperature)		
Long Term	Not Possible		
Comments			
Platform			

Tests in Panel

Literal	*Unit*	*Lab Code*	*Lab Name*	*Lab Comment*
Zinc	umol/L	W0045	Zinc Result	
Zinc (by ICP)	umol/L	W0047	Zinc (By ICP)	
Date Result Returned:		W7825	Zinc Returned :	

Site	This test is processed at an external centre, contact the laboratory if further details of external centre required

Reference Ranges

Test	Zinc
ISS Code	W305
ISS Test Name	Zinc Result
Ref Range Comments	

Test	*Gender*	*Start Age*	*End Age*	*Low*	*High*	*Units*	*Effective Date*
Zinc (by ICP)	Female	0 Years	115 Years	7.2	20.43	umol/L	01/01/2015
Zinc (by ICP)	Male	0 Years	115 Years	7.2	20.43	umol/L	01/01/2015
Zinc	Female	0 Years	115 Years	7.2	20.43	umol/L	08/01/2015
Zinc	Male	0 Years	115 Years	7.2	20.43	umol/L	08/01/2015

Pathology Services

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Telephoned Pathology Results

This procedural document supersedes: PAT/T 61 v.3 – Telephoned Pathology Results

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor(s):	Abigail Trainer
Author/reviewer: (this version)	Andrew Wood Pathology Quality Manager
Date written/revised:	15 September 2021
Approved by:	Policy Approval and Compliance Group
Date of approval:	29 September 2021
Date issued:	21 October 2021
Next review date:	29 September 2024
Target audience:	Clinical and Pathology staff, Trust-wide and in Primary Care

Amendment Form

Please record brief details of the changes made alongside the next version number. If the procedural document has been reviewed without change, this information will still need to be recorded although the version number will remain the same.

Version	Date Issued	Brief Summary of Changes	Author
Version 4		-Updated Pathology Policy reference number -Updated formatting for SBAR script for easier viewing -Updated SBAR script to include requesting the name of the information is being given. -Formatting changes throughout -Further clarification throughout, changes highlighted in blue -Addition of Data protection section added -Appendix 1 flowchart updated to merge information about doctor receiving results.	A Wood
Version 3	26 October 2018	Updated to reflect Care Group structure & references updated & added Designated Bleep holder as an alternative to Clinical Site Manager	F Dunn
Version 2	19 October 2015	Updated to reflect Care Group structure	J Wardell
Version 1	24 June 2013	This is a new procedural document, please read in full	S Bayliss

Contents

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1. INTRODUCTION

This policy has been developed to ensure that all staff

- Understand the significance of telephoned pathology results
- Are clear about the actions they need to take
- Know the timescale within which they must act

This policy does not replace the essential requirement for each clinician to be responsible for promptly accessing and acting on the result of every investigation they request, but is designed to provide a safety net for the highlighting of 'highly significant' findings i.e. those that fall outside the critical limits as defined by the laboratory. These limits have been developed following guidance issued by the Royal College of Pathologists (document number G158, Oct 2017). The limits are based on the first abnormal set of results or on repeat results that have shown a markedly significant change for an individual patient. It is anticipated that immediate medical evaluation is required for patients with such results. The laboratory does NOT telephone all abnormal results, only those outside the critical limits.

The electronic requesting and reporting system (also known as Order Comms or ICE) provides a reliable electronic means of accessing pathology results that have been released. ICE includes a 'flag' for highlighting reports that include an abnormal result, but it remains incumbent on requestors to actively search for the results of all pathology investigations they have requested, including ones that have not yet been reported and are therefore not visible on ICE. It is also the responsibility of the requesting clinical team to have proper handover arrangements in place to review and act on abnormal results 'out of hours' or when a particular clinician is away. A 'green tick' against a result in ICE indicates that someone has viewed the result, but NOT necessarily that they have acted upon it OR even that they were clinical staff rather than admin (e.g. Clinical Coders). Therefore, the Trust recommends that clinicians should electronically 'file' reports once they have reviewed them AND taken the required action.

2. PURPOSE

Results outside the laboratory critical limits require urgent clinical evaluation and appropriate action. This policy is designed to introduce designated pathways between Pathology and requesting clinicians and their teams, and to minimise the risk of serious harm to patients resulting from significant pathology results being overlooked, even though they have been correctly reported. It defines timescales within which staff are expected to act.

3. DUTIES AND RESPONSIBILITIES

This policy covers the communication of critically abnormal pathology results to Trust and Primary Care staff. This includes:-

- Trust employees
- Agency/Locum/Bank Staff
- Primary Care staff

It is the responsibility of each member of staff involved in the requesting, reporting and review of pathology tests:-

- To comply with the standards set out in this guidance.
- To work within their own competence.
- To report all issues regarding the communication of urgent pathology results (including near miss events) using the Trust's Incident Reporting procedures.
- Where possible to ensure that location and responsible consultant information on request forms and ICE are clear, relevant to the time the request will be actioned and if necessary a clear alternative escalation path for critical results is stated.

Any such issues should be discussed at relevant Clinical Governance Groups and any identified actions that result from the incidents should be implemented.

It is the responsibility of each member of staff and individual clinical departments to ensure they adhere to the training and audit requirements set out in Sections 5 and 6 of this guidance.

Trust Board: The Board, via the Chief Executive, is ultimately responsible for ensuring that systems are in place that effectively manage the risks associated with critically abnormal pathology results

Medical Director: Is responsible for implementing patient management strategies throughout the Trust that include appropriate and timely requesting and review of pathology tests

Divisional Directors, Clinical Directors and Specialty Leads: Are responsible for implementing patient management strategies throughout the Trust that include appropriate and timely requesting and review of pathology tests, and have proper handover arrangements in place to review and act on abnormal results when a particular clinician is not available/away.

Consultant Medical Staff: Are responsible for ensuring that their team, including junior staff, read and understand this policy, and adhere to the principles contained in it at all times.

Ward and Department Managers: Are responsible for ensuring implementation within their area, and for ensuring all staff who work within the area adhere to the principles at all times.

Clinical Site Managers or Designated Bleep Holder (1393 DRI, 3235 BDGH): are responsible for identifying an appropriate clinician to evaluate a patient with a critically abnormal result, when the responsible consultant cannot be contacted and the escalation process has been implemented.

Primary Care Clinical Commissioning Groups: are responsible for implementing patient management strategies throughout Primary Care that include appropriate and timely requesting and review of pathology tests, and have proper handover arrangements in place to review and act on abnormal results when a particular clinician is not available/away.

4. PROCEDURE

Pathology staff

Pathology staff will urgently telephone results that fall outside the laboratory critical limits as follows:

In-patients:	Will phone to the patient location i.e. ward, and will ask to speak to a doctor or nurse. They may give the results to another member of ward staff if a doctor or nurse is unavailable.
Out-patients:	Will phone the DBTH based secretary of the named consultant (or t*h*e patient location if they are likely to still be present on a hospital site).
Primary Care patients:	Will phone the GP practice (or out-of hours GP service if practice is closed)

Pathology staff will attempt to telephone the results, using all the available numbers on ICE or the request form and/or those listed for the consultant/GP or patient location, on at least three occasions, a few minutes apart. If this is unsuccessful within 30 minutes they will follow the Pathology Escalation Procedure. They will log successful calls as per Pathology procedure - PATH-SOP-19 (Telephone Answering and Results Service)

Pathology staff will use the SBAR Communication Script for communicating results that fall outside the laboratory critical limits as follows:
(Establish and record the name and position of the person taking the call)

Situation:	Hello, this is (name). I'm calling from Pathology with a critical result that needs urgent action for patient (name/number) Do you have this patient on your ward/clinic/surgery? If yes: the result is (value), the abnormal result is (name), and the normal reference range for this patient is (range). Ask for receiver to repeat back information to ensure understanding. If no: review request details and CaMIS and phone to correct location/doctor
Background:	The results should be accessible electronically via ICE/ your practice system
Assessment:	covered in 'situation'
Recommendation:	These results need urgent review and action. If the doctor is not available within one hour you must follow the Trust policy for escalating telephoned pathology results.

Pathology staff will ask receiver to repeat key information to ensure understanding, take their name and log all details as per Pathology local policy PATH-SOP-19 (Telephone Answering and Results Service).

Pathology Escalation Procedure

Pathology staff must follow this escalation procedure if they have been unable to contact the consultant/GP or patient location within 30 minutes.

In-patients and Out-patients:

1. First level escalation to Specialist Registrar of the clinical service, department from which the request originated (Bleep via switchboard), any stated escalation procedure given on the request form or, for visiting consultants, the relevant specialist registrar at their source hospital.
2. Second level escalation to Consultant on-call for the relevant division (Bleep via switchboard)
3. Third level escalation to Clinical Site Manager (Bleep via switchboard) or Designated Bleep holder (1393 DRI, 3235 BDGH),

Pathology staff will ask receiver to repeat key information to ensure understanding, take their name and log all details in the Telephone Module of the Pathology IT system as per Pathology local policy PATH-SOP-19 (Telephone Answering and Results Service).

Primary care patients (GP Practice closed or cannot be contacted):
Pathology staff will phone results to the deputising service (typically this is the out of hours service located in the respective A&E departments and the GP contact lines will redirect calls to the appropriate one). When telephoning results in these circumstances, staff will use the SBAR script and will provide the following additional information:

- The date and time of the request if available
- The name of the requesting physician and/or the practice number
- As much clinical history as is available
- Contact address for the patient, and telephone number if known

Staff will record all information as per Pathology local policy PATH-SOP-19 (Telephone Answering and Results Service).

In line with Pathology standard operating procedures, Pathology staff will inform the requesting GP of the information provided to the 'Out of hours GP service' as soon as possible after the event.

Clinical staff receiving telephoned pathology results

Staff must record information from the phone call (in patient notes or on locally agreed documentation) , detailing the patient ID, the result that falls outside the laboratory critical limits, the reference range, the time the call was received, the name of the Pathology member of staff, their own name and any other relevant information. They must communicate the information to a doctor as soon as possible, but no longer than one hour after the phone call, using the SBAR tool as follows:

Situation:	*Hello, this is (name). I have received a telephone call from Pathology with a critical result that needs urgent review/action for patient (name/number) and location (name). The abnormal result is xxx, value yyy and reference range zzz*
Background:	*I have the following additional information about the patient…….*
Assessment:	*covered in 'situation'*
Recommendation:	*I need you to urgently review the electronic results on ICE, with reference to the clinical condition of the patient, and take immediate appropriate action*

Actions should be recorded in writing in the patient notes, and/or using the electronic 'notepad' function on ICE.

Consultants/Doctors should electronically 'file' reports on ICE once they have reviewed them AND taken the required action.

If the doctor/clinician is not available within one hour, you must follow this escalation procedure:

In-patients and Out-patients:

1. First level escalation to duty doctor/Specialist Registrar
   1.1. Bleep the appropriate duty doctor according to the site and clinical service involved

Use the SBAR Communication Script for communicating the results that fall outside the laboratory critical limits:

Situation:	*Hello, this is (name). I have received a telephone call from Pathology with a critical result that needs urgent review/action for patient (name/number) and location (name). Consultant/doctor (name) or location (name) have failed to respond to my attempts to contact them with the urgent result. The abnormal result is xxx, value yyy and reference range zzz.*
Background:	I have the following additional information about the patient….
Assessment:	*covered in 'situation'*
Recommendation:	*I need you to urgently review the electronic results on ICE, with reference to the clinical condition of the patient, and take immediate appropriate action.*

2. Second level escalation to Consultant on-call
   2.1. In the event that the first level escalation is unsuccessful, staff should pass the result to the Consultant on-call for action and investigation (Bleep via switchboard)
3. Third level escalation to Clinical Site Manager or Designated Bleep holder.
   3.1. In the event that the second level escalation is unsuccessful, staff should pass the result to the Clinical Site Manager or Designated Bleep holder (1393 DRI, 3235 BDGH), who will identify an appropriate clinician to provide action and investigation (Bleep via switchboard)

Consultant / Doctor Actions

On receipt of a telephoned pathology result, the Consultant/Doctor should urgently review all available results electronically on ICE, along with patient notes (if available), and determine if urgent treatment is required. Actions should be recorded in writing in the patient notes, and/or using the electronic 'notepad' function on ICE.

If the patient has left the hospital, and the Consultant/Doctor determines that urgent treatment is required, the Consultant/Doctor should:

- Attempt to telephone the patient, using all known contact details, to arrange for them to attend for urgent treatment
- If this is unsuccessful, they should telephone the next of kin, as listed on CaMIS

- If this is unsuccessful:
  - In normal working hours, they should telephone the GP to request their assistance in contacting the patient.
  - Out of hours, they should contact Police to request their assistance in contacting the patient.

Actions should be recorded in writing in the patient notes, and/or using the electronic 'notepad' function on ICE.

PATIENTS LACKING CAPACITY

Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.
- Any act done for, or any decision made on behalf of a patient who lacks capacity must be done, or made, in the persons Best Interest.
- Further information can be found in the MCA policy, and the Code of Practice, both available on the intranet.

There is no single definition of Best Interest. Best Interest is *determined on an individual basis. All factors relevant to the decision must be taken into account, family and friends should be consulted, and the decision should be in the Best interest of the individual. Please see S5 of the MCA code of practice for further information.*

5. TRAINING/SUPPORT

Each staff member is accountable for his or her practice and should always act in such a way as to promote and safeguard the wellbeing and interest of patients. Staff will receive instructions and direction regarding the requesting, review and communication of critically abnormal pathology results from a number of sources:-

- Trust Policies and Procedures available on the intranet
- Ward/departmental/line managers

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

The Pathology Services Management Team will review this policy in the following circumstances:-

- When new national or international guidance is received.
- When newly published evidence demonstrates need for change to current practice.
- Every three years routinely.

Responsibility for implementation of this policy lies with the Divisional Directors.

Incidents where non-compliance with this policy is noted, and are considered an actual or potential risk, should be documented on DATIX.

What is being Monitored	Who will carry out the Monitoring	How often	How Reviewed/ Where Reported to
Did Pathology staff phone the urgent result within 30 minutes?	Pathology CSU	Ongoing via DATIX	Pathology Services Management Team
Did Clinical staff receiving the urgent result record the information and communicate it to a relevant doctor within one hour	Clinical CSUs	Quarterly	Clinical Service Management Team or Clinical Governance Group

7. DEFINITIONS

CaMIS : Patient administration system (PAS)
Critical limits: Specific action limits for pathology tests or analytes. Results falling outside these for the first time, or repeat results that have shown a markedly significant change for an individual patient, may require immediate medical intervention, including admission to hospital or change in the patient's treatment
DBTH: Doncaster & Bassetlaw Teaching Hospitals NHS Foundation Trust
Highly significant findings: results that fall outside the critical limits as defined by the laboratory (follow guidance issued by the Royal College of Pathologists)
IBMS: Institute of Biomedical Science
ICE: "Integrated Clinical Environment" web-based applications for electronic requesting and reporting. Available for Pathology and Medical Imaging at DBTH
NHS: National Health Service
SBAR: Situation, Background, Assessment, Recommendation communication tool, as recommended by the NHS Institute for Innovation and Improvement
SOP: Standard Operating Procedure

8. EQUALITY IMPACT ASSESSMENT

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment for All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. See Appendix 2.

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- Standard Operating Procedure, Pathology procedure - PATH-SOP-19 Telephone Answering and Results Service
- Standard Operating Procedure, Pathology procedure - PATH-SOP-20 Communication of critical pathology results
- Trust Policy CORP/COMM 1 - Approved Procedural Documents (APDs), Development and Management Policy
- Trust Policy CORP/EMP 04 - Fair Treatment For All
- Trust Policy CORP/EMP 27 – Equality Analysis Policy
- Trust Policy PAT/PA 19 - Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)
- Trust Policy PAT/PA 28 - Privacy and Dignity Policy
- Trust Policy PAT/PA 31 - Handover Policy

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

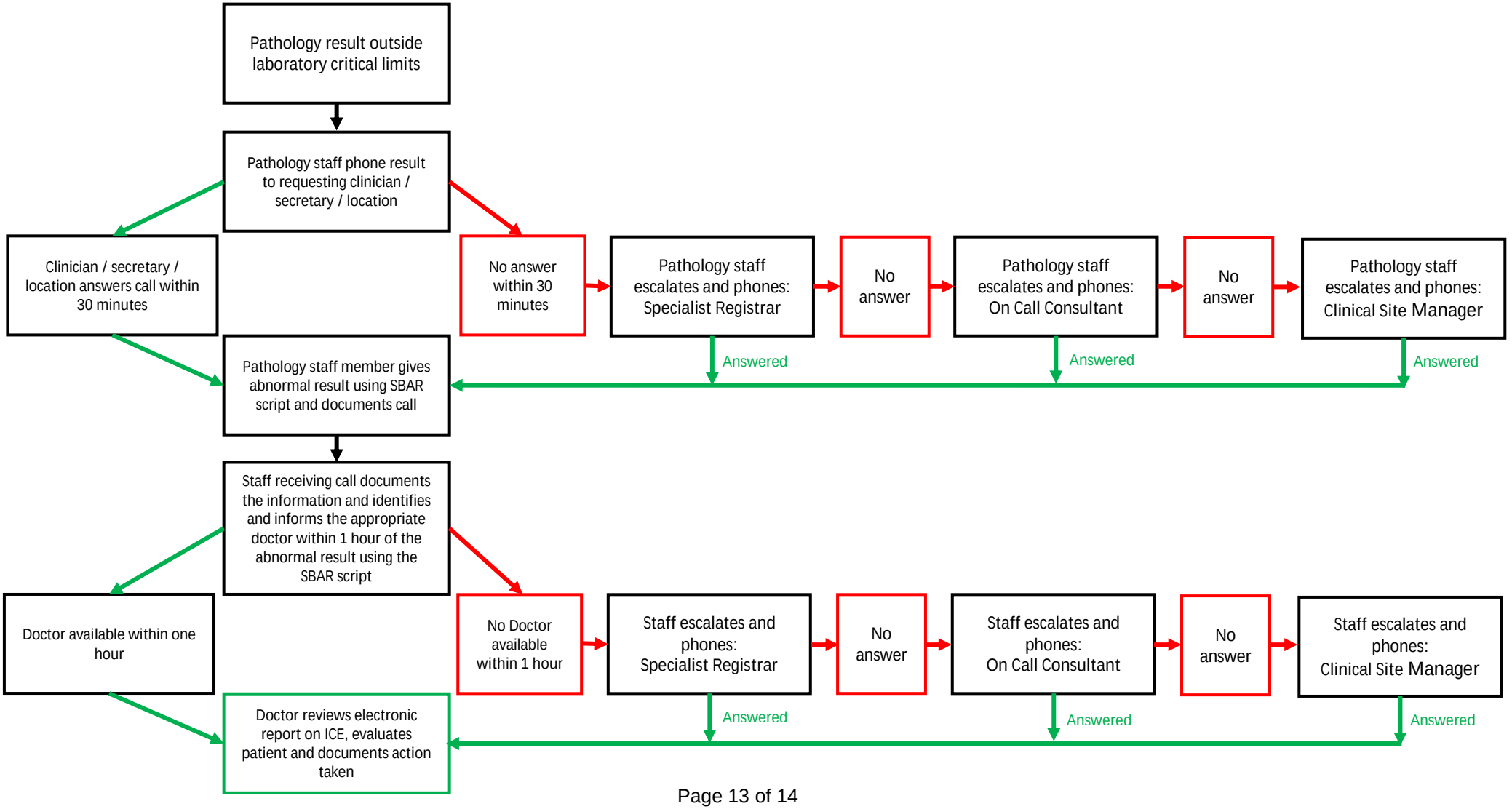
For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

- IBMS (2018) Communication of Pathology Results
- NHS Institute for Innovation and Improvement (2008) *SBAR: Situation, Background, Assessment, Recommendation*
- Royal College of Pathologists (document G158, Oct 2017) *The communication of critical and unexpected pathology results*
- Department of Constitutional Affairs Mental Capacity Act (2005): Code of Practice, 2007 www.dca.gov.uk

APPENDIX 1 - FLOWCHART FOR TELEPHONED PATHOLOGY RESULTS

Appendix 1: flowchart for telephoned Pathology results PAT/ T61



APPENDIX 2 - EQUALITY IMPACT ASSESSMENT PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division/Executive Directorate and Department	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Telephoned Results Policy	Clinical Specialties Division	Andrew Wood	Revised Existing Policy	12/10/2021

1) Who is responsible for this policy? Clinical Specialties Division

2) Describe the purpose of the service / function / policy / project/ strategy? Trust wide policy

3) Are there any associated objectives? This policy has been developed to ensure that all staff:
   i. understand the significance of telephoned pathology results
   ii. are clear about the actions they need to take
   iii. know the timescale within which they must act

4) What factors contribute or detract from achieving intended outcomes? – compliance to policy

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? no -

- If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation] –

6) Is there any scope for new measures which would promote equality? no

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4

Date for next review: 29/09/2024

Checked by: Dr. Richard Stott Date: 29/09/2021

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

Blood Transfusion Policy

Pre-Administration

This procedural document supersedes: PAT/T2 v.6 – Blood Transfusion Policy

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor:	Medical Director
Author/reviewer:	Gill Bell - Chief Biomedical Scientist Transfusion
Date revised:	May 2021
Authorised by:	Atchuta Bobbili – Chair Hospital Transfusion Committee (HTC)
Approved by:	Hospital Transfusion Committee
Approval date:	14 June 2021
Date issued:	25 June 2021
Next review date:	June 2024
Target Audience:	Trust wide; all staff involved in the transfusion process

Amendment Form

Version	Date Issued	Brief Summary of Changes	Author
Version 1	25 June 2021	• This is a new procedural document, please read in full.	Gill Bell – Chief Biomedical Scientist Transfusion

Contents

1. INTRODUCTION

Errors in the requesting, supply and administration of blood lead to significant risks to patients.

Errors either in the collection or labelling of the sample for blood grouping and compatibility testing, or in the laboratory, or to failure of the final pre-transfusion checks account for a number of patient deaths in the UK each year.

The incidence of `wrong blood in tube' episodes has changed little over several decades. This contrasts with the dramatic reductions in other hazards of transfusion such as viral transmission. The introduction nationally of the "2 Sample Rule" whereby two separate samples are taken and tested prior to routine transfusion should help to address this.

Variation in the practice of the administration of blood is remains increasingly evident from audit, both local and national and from the annual Serious Hazards of Transfusion (SHOT) reports. Consequently the Trust is committed to the use of competency assessment of all staff involved in the transfusion process.

2. PURPOSE

This policy is based on recognised guidelines and provides the Trust with local procedures for the ordering and administration of blood products and the management of transfused patients.

3. DUTIES AND RESPONSIBILITIES

- All staff involved in the transfusion process must be aware of this policy.
- All staff involved in the transfusion process should understand their role and responsibilities.
- Role specific training requirements must be met; the competencies are mandatory.
- Ensure transfusion is appropriate and alternatives have been explored.
- All transfusion documentation must be completed.
- Recognise and manage transfusion reactions.
- Always report untoward transfusion events / reactions to Blood Bank and by Datix.
- Recognition of Massive Haemorrhage; activate the Massive Haemorrhage protocol.

4. PROCEDURE

- All samples must be handwritten and labelled to include surname, forenames, date of birth, district (D) number / NHS number, (identification numbers from other hospitals are not acceptable), date and ward. 6 ml of blood is required for grouping and crossmatching (pink top EDTA). Addressographs may be used on request forms, do not use Addressograph Labels on Samples. Both the sample and request form must be signed by the person taking the sample.

- Urgent requests must also be telephoned to the Blood Bank. Do not write "ASAP" for time required. The sample and request form must be brought directly to Blood Bank and presented to a member of blood bank staff

- Blood products must be prescribed on blood prescription sheet WPR26564.

- When a unit of blood is transfused to a patient the sticker from the blood tag must be signed by two nursing or medical staff one with responsibility for the actual administration of the blood. The start and finish time must be recorded and the sticker attached to the prescription sheet. The tear off tag must have the “patient identity confirmed by:” box filled in and then this tag must be returned to Blood Bank immediately.

- It is extremely important that the units of blood are transfused in expiry date order. Some
  units of blood will have a shorter expiry time and must be used before other units; some of the requested units may indeed not be needed and can then be returned and used for other patients. Blood products must not be removed from the Blood Bank until you are ready to start the transfusion, the pre-transfusion checks must have been performed and ensure that the patient has adequate venous access.

- Transfusion of should be commenced within 30 minutes of collection. If after the blood is collected a problem arises which prevents immediate transfusion, the unit must be returned to the Blood Bank within 30 minutes of collection and Blood Bank staff informed. There have been instances of blood being left on the ward for hours and having to be discarded. Such wastage of this valuable resource must be avoided.

- Each unit of blood should be used within four hours of removal from the blood fridge. It is essential that medical / nursing staff check that the drip is running satisfactorily; and if it isn't, that this is rectified in order that the unit of blood may be given within the required time.

- Recognise trigger and activate pathway for management of massive haemorrhage; if you

need emergency uncrossmatched i.e. Emergency group O blood or group specific where possible) you need to consider activating the Massive Haemorrhage protocol. Communication with the Blood Bank is essential to ensure blood products are made available as quickly as possible.

Patients Lacking Capacity:

Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.
- Any act done for, or any decision made on behalf of a patient who lacks capacity must be done, or made, in the persons Best Interest.
- Further information can be found in the MCA policy, and the Code of Practice, both available on the Extranet.

There is no single definition of Best Interest. Best Interest is *determined on an individual basis. All factors relevant to the decision must be taken into account, family and friends should be consulted, and the decision should be in the Best interest of the individual. Please see S5 of the MCA code of practice for further information.*

4.1. POSITIVE IDENTIFICATION OF PATIENTS AND SAMPLE COLLECTION

Key Recommendations:

- Positive patient identification at all stages of the transfusion process is essential.
- Where possible, patients (and for children; those with parental responsibility) should have the risks, benefits and alternatives to transfusion explained to them in a timely and understandable manner.
- Samples are to be taken by trained member of staff with a valid competency in venepuncture.
- The request form must be completed in full (Addressograph labels may be used).
- The sample tube must be labelled immediately after the blood has been taken (at the patient's bedside), sample tubes must not be pre-labelled. Addressograph labels cannot be used.
- Blood Bank has a zero tolerance policy on incorrectly labelled samples and/or request forms.

4.1.1. Positive identification of the patient is essential and is based on:

- Direct questioning of the patient - by asking them to state their surname, first name and date of birth. This must always be done where the patient is judged capable of giving an accurate, reliable response. Staff should never lead the patient, the answer yes is not sufficient to establish correct identification.
- Checking the details on the patient's identification wristband, match those on the request form. All in-patients and all patients undergoing a transfusion must have an ID band complying with the Trust's Patient Identification Policy.
- All patients including unconscious and unknown patients must have a patient identification number and an ID wristband with this number. When additional details become available the Blood Bank must be informed but details must not be changed mid incident.
- No wristband – no transfusion.

Positive identification of the patient must occur prior to:

- Venepuncture
- Transfusion of blood and blood products

4.1.2. Sample Collection

- Samples are to be taken by a trained member of staff with a valid competency in venepuncture.
- All patients being sampled must be positively identified. Sample tubes should not be pre-labelled.
- The collection of the blood sample from the patient into the sample tubes and the sample labelling should be performed as one continuous uninterrupted event, involving one patient and one trained and competent healthcare worker only, samples to be labelled at the bedside using information taken from the patient's ID wristband.

4.1.3. The Request Form

The request form must be completed in full (Addressograph labels may be used) and include:

- Full name - surname and forename
- Hospital number and/or NHS number may be used - Hospital numbers from other hospitals are not acceptable as they do not uniquely identify the patient on CaMIS. The NHS number must be available for the issue of blood products using Bloodhound
- Date of birth
- Patients location

- Consultant
- Number and type of blood products required
- Date and time required
- Patient's diagnosis / clinical details (include pregnancy status)
- Reason for the request (clinical indication) including most recent haemoglobin and or platelet count if applicable, include date tested
- Any special requirements (e.g. Irradiated, HLA matched, CMV or HEV negative)
- Date and time bled
- Gender
- Requestors name and signature
- The request form should be signed by the person drawing the sample
- Date of last transfusion
- Any known antibodies
- If pregnant within the last 6 months and Rh D negative please state the dates and doses of any prophylactic Anti-D immunoglobulin administered during this pregnancy

4.1.4. The Sample

- Addressograph labels must not be used
- The patient must be positively identified at the time a sample is taken
- The sample tube must be labelled immediately after the blood has been taken (at the patient's bedside), sample tubes must not be pre-labelled
- Never copy details from the request form onto sample tubes

The sample tube must be labelled with the following details taken from the ID band:

- Full name - surname and forename
- District number, NHS number, Hospital numbers from other hospitals are not acceptable
- Date of Birth
- Gender
- Signature of person taking the blood sample
- Ward or Clinical area
- Date sample taken
- Time sample taken

4.1.5. The Unconscious and or Unknown Patient including Major Incident Patients

- The minimum identification for an unconscious unknown patient is the district number and the gender of the patient. Follow the Trust protocol for the identification of unconscious patients. This level of identification is essential even for use of the emergency group O blood packs.

- Avoid changing the details of the unknown patient mid incident / acute treatment; this would result in samples with the new details being required to obtain further blood products. The original wristband must be left in place until all merges are complete, this will mean two wristbands may be in place for a short time.

- Wristbands must not be removed if you intend to continue transfusing blood products labelled with the original details. Either complete their infusion with the original wristband in place and use this for all checks or return unused products to Blood Bank.

4.1.6. Incorrectly labelled samples or request forms

- The Blood Bank has a zero tolerance policy on this and will not accept any sample where the request form and/or sample are inadequately or incorrectly labelled.

- A substantial number of requests arrive with labelling or request form errors. This can contribute to serious errors and delays in blood product provision. In clinical emergency situations group O blood will be available for the patient while the sampling and labelling process is repeated correctly.

Samples and forms cannot be amended, even in a clinical emergency a new sample and form must be provided

4.2. PRESCRIBING AND REQUESTING BLOOD PRODUCTS

Key Recommendations:

- Patients must be given information regarding the risks/benefits and alternatives to transfusion, including the option of no transfusion.
- Blood products should only be prescribed when the clinician is satisfied that the risk of not transfusing is likely to be greater than the risk of transfusing.
- Blood products can be prescribed by a doctor or an appropriately trained and approved senior nurse. The requirement for training / completed competencies includes Locum / agency staff.
- Serological studies should be performed using blood collected no more than 3 days in advance of the actual transfusion when the patient has been transfused or pregnant within the preceding 3 months.

- Where there has been no transfusion or pregnancy within the preceding 3 months, the sample is valid for up to 7 days.
- A second sample should be requested for confirmation of the ABO / D group of a first time patient prior to transfusion, where this does not impede the delivery of urgent red cells or other components

4.2.1. Contacts

Blood Bank

- DRI 644044
- BDGH 572452

The Hospital Transfusion Team

- Blood Bank Manager DRI 644031
- Transfusion Practitioner Contact via Switchboard
- Consultant Haematologist Contact via Switchboard

4.2.2. Consent

Patients have the right to know about the treatment being offered and the available alternatives. This should be done in a timely and understandable manner. It is essential to follow the Trust policies on consent; these are available on the intranet.

- Patients must be given information regarding the risks/benefits and alternatives, including the option of no transfusion. This should be recorded in the patient notes, this is the responsibility of a doctor; however, signed consent is not required.
- It is helpful to provide patients with an information sheet outlining the risks and benefits of blood transfusion. For example, NHS Blood & Transplant produce a number of patient information leaflets; these are available from the Transfusion Practitioner.
- If a patient refuses a transfusion the Doctor in charge of the patient and Blood Bank should be informed and any blood product on the ward immediately returned to the Blood Bank.

It is recommended that the following information is documented in the case notes using blood prescription sheet WPR26564:

- The discussion with the patient. (Details of the information provided to the patient)

- Reason for transfusion (clinical and laboratory data)
- The administration of the transfusion and any complications
- The clinical outcome
- Consent to proceed
- If unable to obtain consent prior to transfusion, document retrospective patient notification

Wherever consent is not possible i.e. in an emergency or for an unconscious patient, the decision to treat must be documented in the patient's medical notes detailing why the transfusion is judged to be in the best interests of the patient. Any known advance directives, DNAR decisions and consultations regarding the patient's rights under the mental capacity legislation must be taken into account and included in the entry in the notes.

In addition, if a patient is unable to give consent prior to transfusion they should be provided with information retrospectively to comply with SABTO recommendations (Oct 2011).

Post Transfusion; complete patient discharge list and inform GP, transfusion episodes should be recorded in the discharge summary.

4.2.3. Patient Blood Management

Good patient blood management (PBM) can be described as management of the patient at risk of transfusion so as to minimise the need for allogeneic transfusion.
Blood products should only be prescribed when the clinician is satisfied that the risk of not transfusing is likely to be greater than the risk of transfusing.

Questions to think about before prescribing a transfusion:

- Have you acted on an up to date result?
- Have you reviewed the clinical condition of your patient?
- Is your patient symptomatic?
- Is the transfusion appropriate? Is intervention required?
- Is transfusion the only appropriate intervention?
- Is your patient <50Kg? Be aware there is an increased risk of TACO – transfusion associated circulatory overload.
- What volume should be transfused? Guidelines recommend a one unit transfusion

then review before prescribing further units for non-bleeding patients.

- Are the blood products prescribed on blood prescription sheet WPR26564
- Have you documented in the medical notes why you made the decision to transfuse?
- Does the patient have the mental capacity required to be able to make an informed decision regarding the transfusion?
- Have you discussed the need for transfusion with the patient, and advised them of all known risks and obtained informed verbal consent?

4.2.4. Prescribing Blood Products

- Blood can be prescribed by a Doctor or authorised non-medical staff e.g. midwife or nurse with the appropriate NMA training / competencies completed. This includes the organisational competency based package for prescribing blood and blood products. Competencies are recorded on Oracle Learning Management (OLM). The requirement for training / completed competencies includes Locum / agency staff.

- Red cells (this may be expanded to include Platelets following approval by the Hospital Transfusion Team) can also be prescribed within a controlled framework for select patient groups by an appropriately trained and approved senior nurse providing the following are adhered to:

  The nurse must:

  - Work in an area of clinical practice where making the clinical decision to transfuse and authorising blood components is relevant.
  - Have the Trust's written permission to undertake the NHSBT Non-Medical Authorisation of Blood Components course (a programme for senior nurses and midwives who are working towards making the clinical decision and providing the written instruction for blood component transfusion as part of service development).
  - Have an identified clinical mentor to support learning in practice.
  - Have notified the Hospital transfusion Team. (Please note that the above will be verified by NHSBT with the Trust via our Transfusion Practitioner)
  - Have completed the organisational competency based package for prescribing blood and blood products. Competencies are recorded on Oracle Learning Management (OLM).

- All staff prescribing must be aware of the risks / benefits of transfusion.
- All prescribers of blood products must have the appropriate training / competencies.
- All prescribers must have completed and follow both local and national guidelines; failure to do so may result in requests being rejected.
- The prescription for blood and blood products must be signed and dated by the prescriber on the appropriate blood prescription sheet (WPR26564).
- It is essential that the prescription sheet contains the patient identification details surname, first name, date of birth, patient identification number.
- It is essential that all documentation provides a unique identification of the patient

The prescription must document the following:

- Consent obtained
- Retrospective notification of transfusion if consent not obtained.
- What components are to be transfused
- Date of transfusion
- The volume/number of units to be transfused
- The rate of transfusion for red cells is usually 1.5 - 2 hours. Transfusion must be completed within 4 hours of removal from the Blood Fridge or authorised sealed blood product transit box.
- The rate of transfusion is 20 - 30 minutes for an adult therapeutic dose of platelets / bag of fresh frozen plasma (FFP) or Cryoprecipitate.
- Any other special instructions or requirements e.g. Irradiated, HLA matched, CMV or HEV negative products required and the reason. Blood Bank must be made aware of any special requirements prior to transfusion.
- Requirement for any concomitant drugs.
- Any adverse reactions

4.2.5. Requesting Blood Products

- Blood can only be requested by a Doctor or authorised non-medical staff e.g. midwife or nurse with the appropriate training / competencies completed. The requirement for training / completed competencies includes Locum / agency staff.

- All telephone requests must be followed by a written request form, failure to do so will result in a delay in blood product provision.

Requesting HLA Matched Products for Renal Transplant Patients

Only patients with confirmed live donors require HLA matched products. This is required to maintain the match between the live donor and the recipient. The provision of HLA matched products can take 3-5 working days and will require timely planning with Blood Bank.

4.2.6. Timing and viability of Blood Bank samples

Where there has been no transfusion or pregnancy within the preceding 3 months, the sample is valid for up to 7 days. See *Table 1* for summary of sample validity.

Table 1. Working limits for use of stored whole blood for pre-transfusion testing

Patient Type	Sample Stored at 4°C
Patient transfused or pregnant in last 3 months	Up to 3 days
Patient not transfused and not pregnant in last 3 months	Up to 7 days

4.2.7. The Two Sample Prior To Transfusion Rule

First Sample

- This can be an historical sample i.e. >7 days old or taken on the same day as the 2nd sample.

Second Sample

- Must be a separate venepucture event with new patient ID checks performed.
- Must be sent to the laboratory site which will perform the blood issue. Ideally this would be performed by a different member of staff but this is not mandatory.

General principles

This national recommendation is based on the evidence from –

- The BEST studies as referenced in BCSH Guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories.
- National data from the IBCT and the Near Miss chapters in recent SHOT reports (SHOT, 1996 to 2010) – 386 cases of “wrong blood in tube” (WBIT) were reported as near misses in

2010.

- Local data confirms an unacceptable number of WBIT cases among patients where it can be detected due to having a historical group on record.

Those taking samples for transfusion need to understand that the second sample is required due to the possibility of inadequate patient identification and labelling errors which lead to an unacceptable risk of WBIT and potentially a never event.

The two samples must be taken independently of one another. Incidents have reported of the two samples being taken at the same time and one "saved" to send to the transfusion laboratory at a later time with a false time of venepuncture, this is a severe breach of the rules and could result in a "never event" should this lead to the transfusion of ABO incompatible red cells.

4.2.8. Urgent Situations

A second sample must be obtained and tested before issue of group specific red cells.

The urgency of the situation is always considered, as delays in provision of blood could compromise patient outcome, therefore in an urgent situation when it is not possible to obtain a second sample, group O red cells will be issued until a second sample is received and tested.

4.3. ADMINISTRATION OF BLOOD PRODUCTS AND TRACEABILITY

Key Recommendations

- Final check must be conducted next to the patient by the same trained and competent licensed healthcare professional who administers the component.
- All patients receiving a transfusion must be positively identified.
- All patient core identifiers on the patient's identification wristband must match the details on the blood component label.
- All blood components should be administered using a blood administration set with integral mesh filter.
- All transfusions should be completed within 4 hours of leaving temperature controlled storage.

4.3.1 Staff Administrating Blood Components

Blood components are excluded from the current legal definition of medicinal products and the requirement for prescription by a registered medical practitioner but are viewed as medicines for administration purposes. Blood components should only be

administered by a licensed professional such as doctor (GMC registered), or a nurse holding current registration of the NMC Professional Register as a Registered General Nurse (RGN), Registered Sick Children's Nurse (RSCN), Registered Midwife (RM) or Operation Department Practitioner (ODP) who has completed the organisational competency package in Receipt/Administration of blood and blood products. Competencies must be recorded on OLM.

4.3.2. Receipt of Blood Products in the Clinical Area

- The blood group and unit number of the blood product must be identical to that described on the attached blood tag label.
- The blood or blood component must be checked for compliance with any special requirements as specified on the prescription sheet e.g. Irradiated, CMV negative.
- The blood or blood component must be checked to ensure that it has not and will not have passed its expiry date during the transfusion period i.e. in date at the start and end of transfusion.

4.3.3. Inspection of Blood or Blood Products

It is essential that staff administering blood or blood products inspect each unit prior to transfusion and return the unit to the Blood Bank if any defects are found.

The inspection should pay attention to:

- The integrity of the pack by checking for leaks at the port or seams.
- Evidence of haemolysis in the plasma or at the interface between red cells and plasma.
- Evidence of unusual discoloration or turbidity.
- The presence of large clots.

4.3.4. Responsibility for the Identity Check of the Patient and the Blood Product

Although two members of staff may be involved in the checking procedure it is recommended that one member of staff should be responsible for carrying out the identity check of the patient and the unit of blood at the patient's bedside. The responsible member of staff must be a doctor, or a nurse holding current registration of the GMC Professional Register as a Registered General Nurse (RGN), Registered Sick Children's Nurse (RSCN) or Registered Midwife (RM) providing they are signed off for IV drug administration.

In certain clinical areas the second checker may be a Nursing Associate providing they have completed the required transfusion competencies. Check this is permitted before second checking.

4.3.5. The Final Bed Side Check

This is ESSENTIAL and is based on: Tag & Bag, Tag & Wristband Checks

Only the labelled blood product and the patient's wristband are to be used as part of the final bedside check, NOT the prescription sheet.

Always start with direct questioning of the patient to establish positive identification. In the case of patients who are judged capable of giving an accurate reliable response ask their surname, first name and date of birth. Checking this information against the wristband is mandatory.

- Check the details on the patient's wristband match the blood tag label:

  The surname, first name, gender, date of birth and unique identification number must be identical with the blood tag label attached to the blood component.

- Check the blood tag label is attached to the correct bag by checking the donation number, product type and blood group of both matches.

- Any discrepancies identified by these checks should be reported to Blood Bank immediately and the transfusion delayed until clarification of any point is made.

- The transfusion of blood and blood components should begin as soon as possible.

- The minimum identification for an unconscious unknown patient is the NHS or hospital number and the gender of the patient. Follow the Trust protocol for the identification of unconscious patients.
- The prescription sheet must be readily available during the transfusion. The ideal location may vary from one clinical area to another, but a local policy should exist defining this location. The report must then be filed in the medical notes following completion.

4.3.6. Traceability

The return of the blood tags is mandatory and a legal requirement under the Blood Quality & Safety Act (BSQR 2005).

- The completed detachable blood tag must immediately be returned to Blood Bank following the completed transfusion. This is to enable full traceability and to ensure the Trust fulfils its legal requirements as defined by BSQR 2005.
- The peel off sticker from the blood tag must be attached to the prescription sheet (WPR26564).

- The start and finish time of the transfusion must be recorded on the blood prescription sheet (WPR26564).
- The efficacy/ outcome/ benefit of this transfusion must be recorded in the patient's notes.

4.3.7. Documentation of Transfusions

Full documentation of transfusions is mandatory and a legal requirement under BSQR 2005.

Documentation in the Patients Notes:

A permanent record of the transfusion must be held in the patient's medical notes by completing a blood prescription sheet (WPR26564), with the following information:

- Start and finish time of the transfusion on the blood prescription sheet.
- The indication for the transfusion.
- The type and number of blood products used.
- The efficacy/ outcome/ benefit of this transfusion must be recorded in the patient's notes.
- The occurrence and management of any adverse effect.
- The peel off sticker from the blood tag must be attached to the prescription sheet.
- The sheets used for nursing observations during the transfusion.

Documentation to be returned to Blood Bank:

The return of the tags is mandatory and a legal requirement.

The completed detachable blood tag must be returned to Blood Bank immediately following transfusion to enable full traceability and ensure the Trust fulfils its legal requirements as defined by BSQR 2005.

4.4. COLLECTION AND RETURN OF BLOOD PRODUCTS

Clear documentation of the blood audit trail is mandatory and a legal requirement under the Blood Quality & Safety ACT (BSQR 2005)

Key Recommendations:

- Before collection, ensure the patient is ready to start the transfusion, baseline observations have been taken and the patient has venous access.

When collecting the blood component from the Blood Bank or blood refrigerator:

- Bloodhound blood tracking system is used to control blood product collection.
- Ensure the person collecting components has been Bloodhound trained and has a valid competency.
- Take authorised documentation containing the patient's core identifiers and bar coded NHS number e.g. an addressograph label. This must still be done if Teletrack is used to organise collection.
- Check core patient identifiers with the label on the blood component.
- Core patient identifiers, date and time of collection and staff identification details must whenever possible be recorded using Bloodhound. If Bloodhound fails or room temperature products are collected, staff must use the Blood Register to sign out each unit removed with the date and time.
- The component should be delivered to the clinical area and given directly to the staff responsible for transfusion without delay.

4.4.1. Staff authorised to collect Blood Products

- Only staff that have been fully trained and have had a competency assessment to use Bloodhound can collect products from the Blood Bank / Blood fridges.
- Bloodhound blood collection training is provided from a trained assessor in your clinical area. If training or reassessment is required this should be arranged through your manager. Reassessment is required 2 yearly. Collection training must be recorded on OLM, managers must ensure that their staff have a valid competency if they need to collect blood products as part of their role and to ensure service provision.

Collection of Blood Products from a Bloodhound controlled Blood Fridge:

- Collection can be arranged using the Teletrack system however, the staff member removing the blood from the Blood Bank must have information including the patient's full name, date of birth and district number.
- The blood product identification details on the bag (blood group and donation number and expiry date) must also be checked with the details on the compatibility label (blood tag) attached to the unit.
- It is extremely important that the units of blood are transfused in expiry date order. This is because some units of blood will have a shorter expiry time and must be used before other units.

4.4.2. Receipt of Blood Products on the Ward

The blood must be immediately handed to the person responsible for administrating the transfusion and NOT left on the Nurses station.

Note: Blood must only be stored in designated Blood Bank fridges and not in the ward, drug or domestic fridges.

4.4.3. Returning Blood Products

Unboxed Single Units:

- Blood and blood products should be transfused as soon as possible after delivery to the ward / clinical area i.e. within 30 minutes of leaving the blood fridge
- If after collection of the blood a problem arises which prevents immediate transfusion, the unit must be returned to Blood Bank within 30 minutes of collection.

Boxed Units e.g. unused:

- The transit box containing the units should be handed directly to a member of Blood Bank Staff.
- Units can be stored in a cool box, unopened, for up to 2 hours before being returned to Blood Bank. Once the box is opened the transfusion must be completed within 4 hours.

There have been instances of blood being left on the ward/clinical area resulting in wastage of this valuable resource, this must be avoided.

Blood Products returned for disposal:

- If blood has been out of the fridge for more than 30 minutes and there is no prospect of its immediate use i.e. the unit to be transfused within 4 hours, the hospital blood bank should be informed. The blood must be returned to the blood bank for disposal due to the risk of bacterial growth and breach of the cold chain regulations.
- The blood product for disposal must never be placed in a Blood Bank fridge; it must always be handed directly to a member of Blood Bank staff.

5. TRAINING/ SUPPORT

Role specific competencies are in place. Staff must have the relevant competencies to perform a transfusion related task / procedure e.g. venepucture, collection of blood products, administration of blood products and prescribing blood products. Competencies are recorded on OLM. Advice regarding the relevant competencies is available from the Transfusion Practitioner.

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

- The Hospital Transfusion Team will ensure that systematic audit and review of the transfusion process is undertaken and will report outcomes to the Hospital Transfusion Committee.

- This will include participation in the programme for national comparative audit of blood transfusion as well as local and regional audits.

- The Hospital Transfusion Committee will review all serious adverse transfusion events / reactions which must be notified direct to blood bank staff in addition to the Trust's incident reporting system; Datix.

7. DEFINITIONS

All defined within the document.

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment for All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 1)

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- PAT/PA 19 Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)

- PAT/PA 28 Privacy and Dignity Policy

- PAT/T 8 Specimen and Request Form Labelling Policy

- PAT/PS 7 Patient Identification Policy

- PAT/PA 2 Consent to Examination or Treatment Policy
- PAT/PA 24 Transfer of Patients and their Records

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

This policy is written in accordance with the following guidelines and policies: BSH Guidelines

- Use of Platelet Transfusions 2016
- Transfusion for Fetuses, Neonates and Older Children 2016
- Haematological Management of Major Haemorrhage 2015
- Use of Anti-D Immunoglobin for the Prevention of Haemolytic Disease of the Fetus and Newborn 2014
- Management of Anaemia and Red Cell Transfusion in Adult Critically Ill Patients 2012
- Pre-transfusion Compatibility Procedures in Blood Transfusion Laboratories 2012
- Investigation and Management of Acute Transfusion Reactions 2012
- Use of Irradiated Blood Components 2020
- Administration of Blood Components 2017
- The Estimation of Fetomaternal Haemorrhage 2009
- Spectrum of Fresh-Frozen Plasma and Cryoprecipitate products 2018

APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Blood Transfusion Policy – Pre-Administration	Pathology	Gill Bell	New Policy	14.06.2021

1) Who is responsible for this policy? Name of Care Group/Directorate: Pathology

2) Describe the purpose of the service / function / policy / project/ strategy? The policy provides the Trust with local procedures for pre-administration of blood products.

3) Are there any associated objectives? Legislation, targets national expectation, standards – Yes compliance with BSQR 2005, BSH & NICE guidelines.

4) What factors contribute or detract from achieving intended outcomes? Lack of compliance

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

. If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation]

6) Is there any scope for new measures which would promote equality? [any actions to be taken

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4	

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form - see CORP/EMP 27.

Date for next review: June 2024

Checked by: Atchuta Bobbili Date: 14.06.2021

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

Blood Transfusion Policy

Blood Components, Blood Products and Transfusion Reactions

This procedural document supersedes: PAT/T 2 v.6 – Blood Transfusion Policy

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor:	Medical Director
Author/reviewer:	Gill Bell - Chief Biomedical Scientist Transfusion
Date revised:	May 2021
Authorised by:	Atchuta Bobbili – Chair Hospital Transfusion Committee (HTC)
Approved by:	Hospital Transfusion Committee
Approval date:	14 June 2021
Date issued:	25 June 2021
Next review date:	June 2024
Target Audience:	Trust wide; all staff involved in the transfusion process

Amendment Form

Version	Date Issued	Brief Summary of Changes	Author
Version 1	25 June 2021	• This is a new procedural document, please read in full.	Gill Bell – Chief Biomedical Scientist Transfusion

Contents

1. INTRODUCTION

Errors in the requesting, supply and administration of blood lead to significant risks to patients.

Errors either in the collection or labelling of the sample for blood grouping and compatibility testing, or in the laboratory, or to failure of the final pre-transfusion checks account for a number of patient deaths in the UK each year.

Variation in the practice of the administration of blood is remains increasingly evident from audit, both local and national and from the annual Serious Hazards of Transfusion (SHOT) reports. Consequently the Trust is committed to the use of competency assessment of all staff involved in the transfusion process.

The Blood Safety and Quality Regulations (BSQR SI 2005 No.50 as amended) define blood components as a therapeutic constituent of blood (red blood cells, platelets, fresh-frozen plasma (FFP), cryoprecipitate or granulocytes), whereas blood products are derived from the whole blood or plasma [e.g. OctaplasLG and anti-D immunoglobulin) and are classed as medicinal products.

2. PURPOSE

This policy is based on recognised guidelines and provides the Trust with local procedures for the ordering and administration of blood products and the management of transfused patients.

3. DUTIES AND RESPONSIBILITIES

The member of staff responsible for the care and monitoring of the patient during the transfusion must be a nurse holding current registration of the NMC Professional Register as a Registered General Nurse (RGN), Registered Sick Children's Nurse (RSCN), a Registered Midwife (RM) or a doctor.
They must take charge of the patient during the transfusion and be responsible for ensuring that all care and monitoring of the patient is performed.

- All staff involved in the transfusion process must be aware of this policy.
- All staff involved in the transfusion process should understand their role and responsibilities.
- Role specific training requirements must be met; the competencies are mandatory.
- Ensure transfusion is appropriate and alternatives have been explored.
- All transfusion documentation must be completed.

- Recognise and manage transfusion reactions.
- Always report untoward transfusion events / reactions to Blood Bank and by Datix.
- Recognition of Massive Haemorrhage; activate the Massive Haemorrhage protocol.

4. PROCEDURE

- Blood products must be prescribed on blood prescription sheet WPR26564.
- When a unit of blood is transfused to a patient the sticker from the blood tag must be signed by two nursing or medical staff one with responsibility for the actual administration of the blood. The start and finish time must be recorded and the sticker attached to the prescription sheet. The tear off tag must have the "patient identity confirmed by:" box filled in and then this tag must be returned to Blood Bank immediately.
- It is extremely important that the units of blood are transfused in expiry date order. Some units of blood will have a shorter expiry time and must be used before other units; some of the requested units may indeed not be needed and can then be returned and used for other patients. Blood products must not be removed from the Blood Bank until you are ready to start the transfusion, the pre-transfusion checks must have been performed and ensure that the patient has adequate venous access.
- Transfusion of should be commenced within 30 minutes of collection. If after the blood is collected a problem arises which prevents immediate transfusion, the unit must be returned to the Blood Bank within 30 minutes of collection and Blood Bank staff informed. There have been instances of blood being left on the ward for hours and having to be discarded. Such wastage of this valuable resource must be avoided.
- Each unit of blood should be used within four hours of removal from the blood fridge. It is essential that medical / nursing staff check that the drip is running satisfactorily; and if it isn't, that this is rectified in order that the unit of blood may be given within the required time.
- Recognise trigger and activate pathway for management of massive haemorrhage; if you need emergency uncrossmatched i.e. Emergency group O blood or group specific where possible) you need to consider activating the Massive Haemorrhage protocol. Communication with the Blood Bank is essential to ensure blood products are made available as quickly as possible.

Patients Lacking Capacity:

Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.
- Any act done for, or any decision made on behalf of a patient who lacks capacity must be done, or made, in the persons Best Interest.
- Further information can be found in the MCA policy, and the Code of Practice, both available on the Extranet.

There is no single definition of Best Interest. Best Interest is *determined on an individual basis. All factors relevant to the decision must be taken into account, family and friends should be consulted, and the decision should be in the Best interest of the individual. Please see S5 of the MCA code of practice for further information.*

4.1. Giving Sets

- Adhere to strict aseptic techniques when handling blood or blood components.
- Blood products should be transfused through a sterile giving set designed for the procedure.
- Filter size; 170 – 200 micron filter is required.

4.2 Cannula

A 20 gauge cannula is the minimum size required for transfusion in an adult. The size of cannula chosen can affect the speed at which the blood can be transfused.

4.3. Drugs

- Drugs must never be added to blood products under any circumstances.
- Drugs should not be administered through the same cannula when transfusion of blood or blood products is in progress.

4.4. Observations

Observations should be undertaken for every unit transfused. Minimum monitoring of the patient should include:

- Regular visual observation of the patient – this is often the best way of assessing the condition of the patient during transfusion. Transfusions should be given in clinical areas

where patients can be readily observed by members of the clinical staff, patients should be able to alert staff if they experience any adverse effects.

- Pre Transfusion Checks – this should include: pulse (P), blood pressure (BP), temperature (T), respiratory rate (RR) and O2 saturation. To be taken no more than 60 minutes before starting transfusion.
- Vital Signs - A complete set of vital signs should be taken 15 minutes after the start of each component transfusion for all patients. Note: For a stable patient repeat vital signs at the halfway mark.
- Rapid Transfusions - More frequent observations may be required for certain patient's e.g. in cases of rapid transfusion, or patients who are unable to complain of symptoms which would raise suspicion of a developing transfusion reaction.
- Possible Transfusion Reaction - If the patient shows signs or symptoms of a possible transfusion reaction, the vital signs should be monitored immediately, recorded, and appropriate action taken. Vital signs must continue to be monitored every 5 - 15 minutes depending on severity of reaction and until the possible reaction has resolved.
- Unconscious patients - Unconscious patients are more difficult to monitor for signs of transfusion reactions and therefore it is recommended routine observation patterns should continue.
- Post Transfusion Checks - Post transfusion observations should be taken and recorded not more than 60 minutes after the end of the component transfusion. Patients should be observed during the subsequent 24 hours for or, if discharged, counselled about the possibility of late adverse reactions. Clinical areas should ensure that systems are in place to ensure patients have 24 hour access to clinical advice.
- Blood Tag - The start and finish time of the transfusion must be recorded on the peel off sticker from the blood tag which is attached to the blood prescription sheet (WPR26564).

4.5. Completion of Transfusion

Upon completion of a transfusion the clinical areas must ensure:

- If a further blood component unit is prescribed repeat the administration/identity check with each unit.
- If no further units are prescribed remove the blood administration set and dispose of bag and tubing.
- Ensure all transfusion documentation is completed and the tag is returned immediately to Blood Bank.
- Return any unused blood products immediately to Blood Bank.

Documentation in Patients Notes:

Full documentation of transfusions is mandatory and a legal requirement.

A permanent record of the transfusion must be held in the patient's medical notes, including the following:

- A complete record of the transfusion on the blood prescription sheet (WPR26564), with the following information: start and finish time of the transfusion on the blood prescription sheet.
- The indication for the transfusion. The type and number of blood products used.
- The efficacy/ outcome/ benefit of this transfusion must be recorded in the patient's notes.
- The occurrence and management of any adverse effect.
- The peel off sticker from the blood tag must be attached to the prescription sheet.
- The sheets used for nursing observations during the transfusion.

Documentation to be returned to Blood Bank:

- The return of the tags is mandatory and a legal requirement.
- The completed detachable blood tag must be returned to Blood Bank immediately following transfusion to enable full traceability and ensure the Trust fulfils its legal requirements as defined by BSQR 2005.

4.6. Disposal of Blood Bags

Check! Is the blood tag still attached to the bag? If so remove and return the completed tag to Blood Bank.

On completion of the transfusion the empty bag and tubing should be disposed using one of the following containers following the anatomical or offensive waste route:

Yellow bin with red lid.


Yellow bag with black stripes


Orange bag.

Following Massive Transfusions on Ward Areas:

If 10 to 20 products (red cell, platelets, FFP or Cryoprecipitate) are transfused in an emergency situation then all bags to be disposed of in the anatomical waste stream i.e. yellow bin with red lid.

4.7. TRANSFUSION OF RED CELLS

Red Cells (RBC) in Additive Solution, Leucodepleted (220-340mL)

Key Recommendations:

- Typically red cells are transfused over 2-3 hours – this can be quicker in an emergency situation.

- After each single-unit red blood cell transfusion, clinically reassess and check haemoglobin levels, and give further transfusions if needed.
- Alternatives to transfusion should be offered to patients if clinically appropriate.
- If special requirements are needed for red cell transfusion i.e. HLA matched, irradiated, antigen negative products for patients with antibodies etc. then Blood Bank must be informed immediately to ensure any delays in providing products are kept to a minimum.
- Blood products should only be administered after appropriate verbal/written consent is obtained and an information leaflet is provided to the patient.

4.7.1. Indications for Use

Red cell transfusions are required to increase the oxygen carrying capacity of the blood by raising the haemoglobin concentration of patients with acute or chronic anaemia and avoid tissue hypoxia.

Single-unit red blood cell transfusions are recommended [National Institute for Health and Care Excellence (NICE), 2015] for adults (or equivalent volumes calculated based on body weight for children or adults with low body weight) who do not have active bleeding, with further clinical assessment to determine whether additional transfusion is required.

- Transfusion should only be used when the benefits outweigh the risks and there are no appropriate alternatives. Results of laboratory tests are not the sole deciding factor for transfusion.
- Transfusion decisions should be based on clinical assessment underpinned by evidence-based clinical guidelines.
- Not all anaemic patients need transfusion, there is no universal 'transfusion trigger' and alternate options i.e. intravenous/oral iron, EPO etc. should be considered where possible.
- The clinical guideline Investigation and Management of Anaemia within DBTH is available on intranet. See the following link:
  Clinical Guideline: Investigation and Management of Anaemia within DBTH
- 'Top up' transfusions should only be carried out during core hours and not during the night unless the patient is actively bleeding.

4.7.2. Red Cell Selection for ABO group

Recipient's group	O	A	B	AB
1st choice	O	A	B	AB
2nd choice	-	O	O	A or B
3rd choice	-	-	-	O

4.7.3. Rh D Red Cell Selection

- Red cells of the correct Rh D type should be used.
- Recipients with preformed anti-D antibodies should receive RhD negative red cells.
- In an emergency, females of child bearing age, if the Rh group is unknown, should receive RhD negative red cells.

4.7.4. Administration of Red Cells

- Electronic infusion pumps may damage blood cells and should not be used for administration of red cells unless the manufacturers have verified them as safe to use for this purpose, staff have been trained in their use and all maintenance requirements are met.
- To prevent bacterial growth a new giving set must be used after 12 hours or after 3 units whichever is earlier. Some giving sets may be issued with different instructions, if the usage life of a giving set is shorter always follow the manufacturer's instructions.
- Start the transfusion as soon as the unit is received from Blood Bank.
- Each unit of blood must be used within four hours of leaving a temperature controlled environment i.e. blood bank fridge or a validated, blood bank cool box.
- Typically red cells are transfused over 2-3 hours – this can be quicker in an emergency situation.
- Washing through the remainder of the blood in the line with Sodium Chloride 0.9% is not recommended.
- All blood products are leucocyte depleted.
- All blood products produced by NHSBT are HEV negative.
- Red cells ate typically supplied as packed red cells in additive solution (SAGM).
- Red cells can be irradiated, HLA matched, HT, K, Hb S or CMV negative for specific patient groups. Blood Bank must be notified of any special requirements as there may be a time delay on these products.
- Drugs must not be added to blood products under any circumstances.

4.7.5. Blood Warmers

- Blood should only be warmed using a specifically designed regularly maintained and calibrated commercial device with a visible thermometer and audible warning following manufacturer's instructions.
- A blood warmer is indicated:
    - At flow rates of >50mL kg^{-1} h^{-1} in adults.
    - At flow rates of >15ml kg^{-1} h^{-1} in children.
    - For exchange transfusions.
    - For patients with clinically significant cold agglutinins.

4.8. TRANSFUSION OF PLATELETS

Platelets (PLT) Apheresis or Pooled, Leucodepleted (150-400mL)

Key Recommendations:

- Platelets can be requested by any clinical staff members if the cause of thrombocytopenia known and targets as below. If there is no clear diagnosis or a request does not meet the criteria below please contact the Haematology consultants for advice.

- One standard adult therapeutic dose (ATD) is either one apheresis donation pack or a pool derived from four buffy coats from whole blood donations.

- A new, clean standard blood or platelet giving set should be used for the administration of platelets (not one previously used to transfuse blood).

- Platelets should be transfused stat or over a maximum of 30 minutes.

- Platelets require pre-ordering where possible due to the short shelf-life of the product.

- If Rh D positive Platelets have to be given in a clinical emergency where a delay in waiting for RhD negative platelets would increase risk to the patient, prophylactic anti-D immunoglobulin must be given at a dose of 500 IU immediately, by intramuscular injection, after platelet transfusion to all females of child-bearing potential.

- Blood products should only be administered after appropriate verbal/written consent is obtained and an information leaflet is provided to the patient.

4.8.1. Indications for Use

Platelets should be used for the prevention and treatment of bleeding due to thrombocytopenia or platelet function defects – BSH Guidelines: *Guidelines for the use of platelet transfusions, 2016.*

Indication	Transfusion indicated threshold ($x10^9$/L)
Pre-central venous catheter (CVC) excluding PICC line	20
Pre-lumbar puncture	40
Pre-percutaneous liver biopsy	50
Pre-major surgery	50
Pre-epidural anaesthesia, insertion and removal	80
Pre-neurosurgery or ophthalmic surgery involving the posterior segment of the eye	100
Severe bleeding	50
Multiple trauma, brain or eye injury, spontaneous intracerebral haemorrhage	100
Bleeding (WHO grade 2 or greater) but not severe	30
Chemotherapy induced thrombocytopenia with neutropenic sepsis	20
Chemotherapy induced thrombocytopenia without neutropenic sepsis	10
Disseminated intravascular bleeding	Use pre-procedure/ therapeutic threshold as guideline
Platelet function defect	Discuss with Consultant Haematologist
Immune thrombocytopenia (ITP/HIT/TTP/PTP)	Discuss with Consultant Haematologist

4.8.2. Dosage

One standard adult therapeutic dose (ATD) is either one apheresis donation pack or a pool derived from four buffy coats from whole blood donations. Larger doses are required in acute bleeding, non-immune refractoriness, DIC and AITP.

4.8.3.. Platelet Selection for ABO group

Recipient's ABO group	ABO group of Platelets	
O	First choice	O
	Second choice	A or B
A	First choice	A
	Second choice	AB *(if readily available)*
	Third choice	B* or O*
B	First choice	B
	Second choice	AB *(if readily available)*
	Third choice	A* or O*
AB	First choice	AB
	Second choice	A* or B*
	Third choice	O*

* components tested negative for 'high-titre' anti-A and/or anti-B should be used here.

4.8.4. Administration of Platelets

- A standard blood or platelet giving set should be used for the administration of platelets.
- Platelets should be transfused through a new, clean standard blood or platelet giving set (not one already used for blood).
- Platelet components must not be placed in a refrigerator.
- Start infusion as soon as the pack is received from the Blood Bank.
- Infuse stat or maximum time 30 minutes in an adult.
- In paediatrics infuse over 60 minutes via the designated pump (unless specifically directed otherwise in emergency situations).
- Children under the age of 16 should whenever possible receive apheresis platelets rather than pooled platelets.
- All requests for platelets must be authorised by the on-call consultant haematologist and the name of the authorising haematology consultant stated clearly on the form for audit purposes. (Unless Massive Haemorrhage Protocol activated.)

- Platelets can be irradiated, HLA matched, HT or CMV negative for specific patient groups. Blood Bank must be notified of any special requirements as there may be a delay in providing those products.
- All blood products produced by NHSBT are HEV negative.

4.8.5. Rh D Negative Female of Child Bearing Age

- If Rh D positive Platelets have to be given in a clinical emergency where a delay in waiting for RhD negative platelets would increase risk to the patient, prophylactic anti-D immunoglobulin must be given at a dose of 500 IU immediately, by intramuscular injection, after platelet transfusion.
- This 500 IU dose is enough to cover five successive adult therapeutic doses of RhD positive platelets over a period of up to six weeks.
- Nevertheless, if a unit of RhD positive platelets has been given and followed by anti-D prophylaxis, and if further treatment with platelet concentrates is required, RhD negative platelets are still preferred and recommended.

4.8.6. HLA and HPA Selected Platelets

These can be selected from platelets in stock or donors may be asked to donate platelets for an individual case following discussion with a consultant in NHSBT AT Sheffield. HPA selected platelets are stocked in Filton, Tooting, Barnsley and Manchester. 24hrs notice is required.

Specific Clinical Indication for HLA/HPA Selected Platelets:

Indication for HLA/HPA selected platelets is prophylaxis or treatment of bleeding in thrombocytopenic patients, who are refractory to pooled / apheresis platelets due to HLA or HPA alloimmunisation. Note: HLA selected platelet concentrates will be irradiated by NHSBT prior to issue.
NHSBT requires feedback on patient platelet increments (using the form issued with the platelets) to assess how well the platelets have been matched and inform future selection for the patient.

4.9 TRANSFUSION OF PLASMA PRODUCTS INLCLUDING FRESH FROZEN PLASMA AND CRYOPRECIPITATE

Fresh Frozen Plasma (FFP) Leucodepleted (200-340mL)

Cryoprecipitate (Cryo) Pooled, Leucodepleted (100-300mL)

Key Recommendations:

- These products have no cellular content and therefore do not need to be irradiated or selected as Cytomegalovirus (CMV) sero-negative.
- In an emergency it is important to factor the thawing time of these frozen products into the availability of the component (usually 20-30 minutes).
- Once thawed these products cannot be re-frozen.
- Once thawed, standard FFP may be stored at 4°C ± 2°C in an approved temperature-controlled blood storage refrigerator before administration to a patient as long as the infusion is completed within 24 hours of thawing.
- Once thawed, cryoprecipitate must not be refrozen and should be used immediately. If delay is unavoidable, the component should be stored at ambient temperature and used within 4 hours. Never store in a fridge.
- The typical infusion rate is 10-20mL/ kg/hr.
- All blood products produced by NHSBT are HEV negative.
- Group O plasma should only be given to group O patients.
- Fresh frozen plasma and cryoprecipitate of any RhD group may be transfused. If RhD positive plasma is given to an RhD negative individual, no anti-D prophylaxis is required.
- FFP should NEVER be used as circulating volume replacement.
- PT and APTT do not reflect the true haemostatic status of patients with advanced liver disease. There is no good evidence to endorse the use of prophylactic FFP for correction of abnormal clotting tests in non-bleeding patients prior to interventions.
- All requests for plasma products must be authorised by the on-call consultant haematologist and the name of the authorising haematology consultant stated clearly on the form for audit purposes.

4.9.1. Indications for Use

FFP:

- Massive haemorrhage according to protocol.
- Single factor deficiency for which no virus safe fractionated product is available. At the moment only applies to Factor V deficiency.
- DIC and bleeding or pre procedure to correct coagulation factors.

- TTP – for plasma exchange use Octaplas.

Use of FFP in Patients with Liver Disease:

- PT and APTT do not reflect the true haemostatic status of patients with advanced liver disease. Abnormalities of PT and APTT need to be interpreted with caution in these patients.
- There is no good evidence to endorse the use of prophylactic FFP for correction of abnormal clotting tests in non-bleeding patients prior to interventions such as elective variceal banding. But it is treating clinician's decision to use FFP for these indications in liver disease.
- The impact of commonly used doses of FFP to correct clotting results, or to reduce the bleeding risk, is very limited, particularly when the PT ratio or INR are between 1·5–1·9.
- We recommend the BSH (British society of Haematology) guidelines that state prophylactic transfusion of FFP and cryoprecipitate is not given in low bleeding risk procedures, such as paracentesis.
- There is no good evidence to support a role for prophylactic FFP to reduce the risk of bleeding from percutaneous liver biopsy. An alternative procedure with a lower bleeding risk, (e.g. transjugular liver biopsy), should be considered instead.

Do Not Transfuse FFP If:

- Isolated prolonged APTT with no obvious cause – seek advice from Consultant Haematologist on call.
- To reverse Warfarin (Please use Vitamin K and/or Beriplex).
- In intensive care for Vitamin K deficiency.

Cryoprecipitate:

Cryoprecipitate contains concentrated Factor VIII:C, von Willebrand factor, fibrinogen, Factor XIII, and fibronectin and is produced by further processing of Fresh Frozen Plasma (FFP). Clinically it is used to replace fibrinogen.

Clinical indications for use of cryoprecipitate in adults:

- Clinically significant bleeding and a fibrinogen level <1.5g/L (<2g/L in obstetric bleeding).
- Fibrinogen level is <1g/L and pre-procedure.
- Bleeding associated with thrombolytic therapy.
- Inherited hypofibrinogenaemia where fibrinogen concentrate is not available.

4.9.2. Plasma Product Selection

ABO group identical plasma products should be given whenever possible; if not possible, plasma products of a different ABO group may be acceptable as guided in the blood group selection tables below.

ABO compatibility for plasma components is different to that of red cells and group O Cryoprecipitate MUST only be given to group O recipients.

D group compatibility

FFP and Cryoprecipitate do NOT need to be matched for D group. D positive plasma components may be given to any D negative individual and no anti-D prophylaxis need be given in this situation. The EU Blood Directive currently requires that the RhD group is stated on the label.

FFP

FFP units must be high-titre negative (HT-) for anti-A/anti-B

Recipient Group	O	A	B	AB
1st Choice	O	A	B	AB
2nd Choice	A	B	A	A
3rd Choice	B	AB	AB	B
4th Choice	AB			
Blood group selection for MB FFP and HT untested/positive FFP				
1st Choice	O	A	B	AB
2nd Choice	A	AB	AB	A[1]
3rd Choice	B	B[1]	A[1]	B[1]
4th Choice	AB			

[1]Only suitable for emergency use in adults

MB FFP units are not tested for HT- for anti-A/anti-B. Group compatible MBFFP should be used wherever possible.

Cryoprecipitate

Recipient Group	O	A	B	AB
1st Choice	O	A	B	[2]AB
2nd Choice	A	[1]B	[1]A	[1]A
3rd Choice	B	-	-	[1]B

[1]Suitable for use in adults if negative for high titre anti-A/anti-B (labelled HT-)
[2]Small numbers of Group AB cryo may be available on request but this item is not routinely stocked

Blood group selection for MB Cryoprecipitate

Recipient Group	O	A	B	AB
1st Choice	O	A	B	AB
2nd Choice	A	AB	AB	A[3]
3rd Choice	B	B[3]	A[3]	B[3]

MB Cryoprecipitate is not tested for HT anti-A/anti-B. Group compatible plasma should be used wherever possible
[3]Non-compatible groups should only be used in emergencies when compatible groups are not available. Group AB MB cryoprecipitate is haemolysin free and suitable for patients of any ABO group but is in limited supply

4.9.3. Administration of Plasma Products

- Start infusion as soon as the pack is received from Blood Bank.
- Filter size; 170 – 200 micron filter is required (blood giving set).
- The typical infusion rate is 10-20mL/ kg/hr, but this may vary depending on the patient's condition.

4.9.4. Dosage

FFP Dosage:

In non-bleeding patients, the recommended starting dose of FFP is 15mL per kg of body weight. This equates to approximately 1L (four units) of FFP for an 'average' 70kg patient: heavier patients may require more units (but caution should be used in obese patients) and lighter patients fewer units.

In major haemorrhage, FFP should be used as part of initial resuscitation in at least a 1 unit: 2 unit ratio with red cells, until results from coagulation monitoring are available. Once bleeding is under control, further FFP should be guided by laboratory tests (transfusion trigger of PT and/or APTT >1·5 times normal) at a dose of 15-20mL/kg.

Cryoprecipitate Dosage:

Pooled units are more commonly used to treat adult patients.
The adult therapeutic dose is two pooled units, or one single unit per 5-10kg body weight, dependant on the degree of fibrinogen deficiency.

4.9.5. Prothrombin Complex Concentrate (PCC)

- Prothrombin Complex Concentrate (PCC) e.g. Beriplex is used for the rapid reversal of warfarin and DOACs therapy. The formulary is available on the intranet or see link below

  Formulary Guidance for the Use of Human Prothrombin Complex - Beriplex

- Out of hours PCC is located in A&E, Pharmacy emergency store
  Please see Bridging/reversal of anticoagulation guidelines for further information.

4.9.6. OctaplasLG®

- 200 mL bag of solution for infusion containing 9-14 g of ABO-blood group specific human plasma proteins (45-70 mg/mL).
- OctaplasLG®contains human plasma proteins, and is a pharmaceutically licensed, proven alternative to fresh-frozen plasma.

Clinical Indications:

Main Use here at DBTH is therapeutic plasma exchange procedures (PEX):

- Therapeutic plasma exchange procedures (PEX), including those in thrombotic thrombocytopenic purpura (TTP) recommend the use of octaplasLG®not FFP.

Dosage:

- In TTP or plasma exchange (PEX) for other indication the patient's whole plasma volume (2.5-3 litres) should be replaced with octaplasLG® For therapeutic PEX procedures seek advice of a haematologist.

Group Selection:

Administration of octaplasLG®must be based on ABO blood group compatibility. For plasma exchange select the patient's own ABO group or blood group AB; this can be regarded as universal plasma since it can be given to all patients regardless of blood group.

Group O OctaplasLG®MUST only be given to O recipients.

* Only suitable for emergency use in adults if unit is tested and found to negative for high titre ABO antibodies.

Recipient group	O	A	B	AB
1st choice	O	A	B	AB
2nd choice	AB	AB	AB	A*
3rd choice	A	B*	A*	B*
4th choice	B	-	-	-

Administration:

OctaplasLG® must be administered by intravenous infusion after thawing using an infusion set with a filter (blood giving set). Due to risk of citrate toxicity, infuse at a rate ≤1 mL octaplasLG®/kg/min.

Contraindications:

IgA deficiency with documented antibodies against IgA. Hypersensitivity to the active substance, excipients or residues from the manufacturing process. Severe protein S deficiency.

4.10. TRANSFUSION OF GRANULOCYTES

Granulocytes, Pooled in Additive Solution/Plasma Mix, Irradiated (175-250mL)

Key Recommendations:

- All requests for Granulocytes must be approved by a Consultant Haematologist and a NHSBT Consultant.
- A standard adult dose is two pools (derived from 20 donations), providing a dose of around 2 x 10^{10} which is considered to be an effective daily dose. Children should receive 10-20mL/kg (usually 1 pool).

- Granulocytes have a short shelf life of ~24 hours and consideration should be taken when ordering the product.
- Each pool contains approximately 2.5 adult doses of platelets thus reducing platelet transfusion requirements.
- Do not use a Pump to administer granulocytes. Typically granulocytes are transfused over 1-2 hours.
- Pooled Granulocytes can only be supplied Tuesday to Saturday during normal working weeks. They are not routinely available on Sundays, Mondays, Bank Holidays and the day after a Bank Holiday. If a Bank Holiday follows a standard working day (for example Good Friday) or follows a day with a high intake of blood donations, NHSBT may be able to manufacture a pooled granulocyte. Production cannot be guaranteed and availability will be advised on a case by case basis.

4.10.1. Indications for Use

Granulocyte transfusions can be used as supportive therapy in patients with (or who are at high risk of developing) life-threatening bacterial or fungal infection secondary to neutropenia caused by bone marrow failure or neutrophil dysfunction. Their use is not without the risk of significant adverse effects. Careful assessment of the relative risks versus benefits should therefore be undertaken before prescribing these components. Requests must be discussed with a Consultant Haematologist and a NHSBT Consultant.

4.10.2. Granulocyte Selection for ABO group

Recipient's group	O	A	B	AB
1st choice	O	A	O HT neg	A HT neg
2nd choice		O HT neg		

N.B. Group AB or B pooled granulocytes are not available. If granulocytes are not ABO group specific (e.g. group O for a group B recipient) they should be high titre (HT) negative. This may present availability issues requiring clinical input. D positive granulocyte pools should not be given to D negative females of childbearing age or any patient with anti-D blood group antibodies unless advised to do so in a life-threatening emergency on the advice of a NHSBT consultant.

4.10.3. Storage and Handling of Granulocytes

Granulocytes are irradiated prior to issue and expire at midnight following the day of donation. Storage is at 22 ± 2 ºC without agitation.

4.10.4. Administration of Granulocytes

- Do not use a Pump to administer granulocytes.
- Pooled Granulocytes are derived from the buffy coat layer of whole blood donations. They are manufactured by pooling 10 packs of 'Leucocytes, Buffy Coat' removing red cells and plasma, re-suspending in SSP+ (platelet additive solution) and the plasma from one of the male donors.
- A standard adult dose is two pools (derived from 20 donations), providing a dose of around 2 x 10^{10} which is considered to be an effective daily dose. Children should receive 10-20mL/kg (usually 1 pool).
- Granulocytes should undergo the same compatibility testing as red cells. They should be ABO, D and crossmatch compatible with any red cell antibodies detected in the recipient.
- CMV negative recipients should receive only CMV negative granulocytes
- Each pool contains approximately 2.5 adult doses of platelets thus reducing platelet transfusion requirements
- Pooled Granulocytes can only be supplied Tuesday to Saturday during normal working weeks. They are not routinely available on Sundays, Mondays, Bank Holidays and the day after a Bank Holiday.
- Granulocytes MUST be irradiated to prevent transfusion associated graft versus host disease
- Granulocytes should be transfused over 1-2 hours.

4.12. THE USE OF ANTI-D IMMUNOGLOBULIN (INCLUDING FETOMATERNAL HAEMORRHAGE (FMH) TESTING)

Key Recommendations:

- Following potentially sensitising events, anti-D Ig should be administered as soon as possible and always within 72 h of the event. If, exceptionally, this deadline has not been met some protection may be offered if anti-D Ig is given up to 10 days after the sensitising event
- In pregnancies <12 weeks gestation, anti-D Ig prophylaxis is only indicated following ectopic pregnancy, molar pregnancy, therapeutic termination of pregnancy and in cases of uterine bleeding where this is repeated, heavy or associated with abdominal pain. A dose of 250 IU should be administered. A test for fetomaternal haemorrhage (FMH) is not required.
- For potentially sensitising events between 12 and 20 weeks gestation, a dose of 500 IU should be administered within 72 h of the event. A test for FMH is not required.
- For potentially sensitising events after 20 weeks gestation, an anti-D Ig dose of 500 IU should be administered within 72 h of the event. A test for FMH is required.

- All D negative pregnant women who have not been previously sensitised should be offered routine antenatal prophylaxis with anti-D Ig (RAADP) with a single dose of 1500 IU at 28 weeks.
- It is important that the 28-week sample for blood group and antibody screen is taken prior to the first routine prophylactic anti-D Ig injection being given.
- Routine Antenatal Anti-D Ig Prophylaxis (RAADP) should be regarded as a separate entity and administered regardless of, and in addition to, any anti-D Ig that may have been given for a potentially sensitising event.
- Following birth, ABO and Rh D typing should be performed on cord blood and if the baby is confirmed to be D positive, all D negative, previously non-sensitised, women should be offered at least 500 IU of anti-D Ig within 72 h following delivery. Maternal samples should be tested for FMH and additional dose(s) given as guided by FMH tests.
- In the event of an intrauterine death (IUD), where no sample can be obtained from the baby, an appropriate dose of prophylactic anti-D Ig should be administered to D negative, previously non-sensitised women within 72 h of the *diagnosis of IUD*, irrespective of the time of subsequent delivery.
- Auditable records of issue and administration should be maintained to allow full traceability of anti-D immunoglobulin
- Where anti-D is detected in a blood sample from a pregnant woman, further history should be taken and investigation undertaken to establish whether this is immune or passive. The outcome will inform clinical decisions regarding Anti-D prophylaxis and antenatal follow-up. If no clear conclusion can be reached as to the origin of the anti-D, then prophylaxis should continue to be administered in accordance with guidelines for D negative women who have not formed immune anti-D.

4.12.1. Anti-D Immunoglobulin

Anti-D Ig is used as immunoprophylaxis to prevent sensitisation to the D antigen during pregnancy or at delivery for the prevention of haemolytic disease of the fetus and newborn (HDN). Pregnant D negative women with no immune anti-D should be offered prophylactic anti-D Ig for potentially sensitising events listed below. A dose of anti-D Ig appropriate to the gestation, see dose required below, should be administered within 72 h of a potentially sensitising event. However if, exceptionally, this deadline cannot be met, some protection may still be offered if anti-D Ig is given up to 10 days after the sensitising event.

4.12.2. Potentially sensitising events in pregnancy

- Amniocentesis, chorionic villus biopsy and cordocentesis
- Antepartum haemorrhage/Uterine (PV) bleeding in pregnancy
- External cephalic version
- Abdominal trauma (sharp/blunt, open/closed)

- Ectopic pregnancy
- Evacuation of molar pregnancy
- Intrauterine death and stillbirth
- *In-utero* therapeutic interventions (transfusion, surgery, insertion of shunts, laser)
- Miscarriage, threatened miscarriage
- Therapeutic termination of pregnancy
- Delivery – normal, instrumental or Caesarean section
- Intra-operative cell salvage

4.12.3. Sensitising events in pregnancies of less than 12 weeks of gestation

- A maternal blood group and antibody screen should be performed to determine or confirm the Rh D group and check for the presence of immune anti-D.
- Women with anomalous Rh D typing results should be treated as D negative until confirmatory testing is completed.
- A test for fetomaternal haemorrhage (FMH) is NOT required.
- In cases of spontaneous complete miscarriage confirmed by scan where the uterus is not instrumented, or where mild painless vaginal (PV) bleeding occurs before 12 weeks, prophylactic anti-D immunoglobulin is not necessary because the risk of FMH and hence maternal exposure to the D antigen is negligible.
- In cases of therapeutic termination of pregnancy, whether by surgical or medical methods, and regardless of gestational age, previously non-sensitised D negative women should receive a dose of 500 IU prophylactic anti-D Ig within 72 h of the event.
- There is a significant potential for sensitisation in cases of ectopic pregnancy. A dose of 500 IU anti-D Ig should be administered to all cases of ectopic pregnancy in previously non-sensitised, D negative women regardless of the mode of management.
- There is significant potential for sensitisation in cases of molar pregnancy. A dose of 500 IU anti-D Ig should be administered to all cases of molar pregnancy in previously non-sensitised, D negative women.

4.12.4. Sensitising events in pregnancies of 12 weeks to less than 20 weeks of gestation

- A maternal blood group and antibody screen should be performed to determine or confirm the Rh D group and check for the presence of immune anti-D.
- If anti-D is identified, further history should be obtained and investigation undertaken to determine whether this is immune or passive (as a result of previous injection of anti-D Ig).
- If no clear conclusion can be reached as to the origin of the anti-D detected, then the woman should continue to be offered anti-D prophylaxis on the assumption that it may be passive.

- Women with indeterminate Rh D typing results should be treated as *D negative* until confirmatory testing is completed.
- A test for FMH is NOT required before 20 weeks gestation.
- For any potentially sensitising event listed above, confirmed D negative, previously non-sensitised, women should receive a dose of 500 IU anti-D Ig within 72 h of the event.
- D negative women presenting with continual uterine bleeding between 12 and 20 weeks gestation should be given a dose of 500 IU anti-D Ig, at a minimum of 6 weekly intervals.

4.12.5. Sensitising events in pregnancies of 20 weeks of gestation to term

- A maternal blood group and antibody screen should be performed to determine or confirm the Rh D group and check for the presence of immune anti-D.
- If anti-D is identified, further history should be obtained and investigation undertaken to determine whether this is immune or passive (as a result of previous injection of anti-D Ig).
- If no clear conclusion can be reached as to the origin of the anti-D detected, then the woman should continue to be offered anti-D prophylaxis on the assumption that it may be passive.
- Women with indeterminate Rh D typing results should be treated as *D negative* until confirmatory testing is completed.
- A FMH test is required to detect fetal cells in the maternal circulation and, if present, to estimate the volume of FMH to allow calculation of additional anti-D doses required to clear the fetal cells.
- If FMH >4 mL is detected, follow-up samples are required at 48 h following an intravenous (IV) dose of anti-D or 72 h following an intramuscular (IM) dose to check for clearance of fetal cells
- For any potentially sensitising event listed above, confirmed D negative, previously non-sensitised, women should receive a dose of 500 IU anti-D Ig within 72 h of the event.
- A dose of 500 IU anti-D Ig should be administered within 72 h for any potentially sensitising events regardless of whether the woman has already received RAADP at 28 weeks.
- Additional dose(s) of anti-D Ig will be necessary if the volume of FMH exceeds 4mL which is that covered by a 500 IU anti-D Ig dose. A follow-up blood sample should be taken at 48 h following each IV dose of anti-D and 72 h following each IM dose of anti-D to check if fetal cells have cleared.
- In the event of continual uterine bleeding which is clinically judged to represent the same sensitising event, with no features suggestive of a new presentation or a significant change in the pattern or severity of bleeding, such as the presence of abdominal pain or another clinical presentation, a dose of 500 IU anti-D Ig should be given at six weekly intervals. In the event of further intermittent uterine bleeding, estimation of FMH should be carried out at two weekly intervals.
- If the two weekly FMH test shows the presence of fetal cells, additional anti-D Ig should be administered to cover the volume of FMH. The additional dose should be calculated as 125

IU if administered IM or 100 IU if administered IV for each mL of fetal red cells detected (minimum 500IU).

- The additional dose should be offered regardless of the presence or absence of passive anti-D in maternal plasma, and FMH should be retested after 48 h if anti-D Ig has been given IV, or 72 h if given IM.
- If new symptoms develop suggestive of a sensitising event in addition to continual uterine bleeding (e.g. abdominal pain associated with a significant change in the pattern or severity of bleeding) then it should be managed as an additional sensitising event with an appropriate additional dose of anti-D and estimation of FMH. Each new sensitising event should be managed with an appropriate additional dose of anti-D Ig regardless of the timing or dose of anti-D Ig administered for a previous event.

4.12.6. Routine antenatal anti-D prophylaxis (RAADP)

RAADP should be offered to all D negative, non -sensitised, pregnant women.

- A sample should be taken for the routine antenatal 28-week blood group and antibody screen testing in pregnancy, before RAADP is given.
- If anti-D is identified in this sample, further investigations should be undertaken to determine whether this is immune or passive (i.e. previous administration of anti-D Ig).
- If no clear conclusion can be reached as to the origin of the anti-D detected, then the woman should continue to be offered anti-D Ig prophylaxis, and should continue to be monitored monthly until 28 weeks gestation and fortnightly thereafter.
- A single dose of anti-D Ig, 1500 IU should be administered at 28 weeks prior to the 28-week blood group and antibody screen sample being taken.
- Use of routine *antenatal* anti-D Ig prophylaxis should not be affected by previous anti-D Ig prophylaxis administered for a sensitising event earlier in the same pregnancy.

4.12.7. Estimation of Fetomaternal Haemorrhage (FMH)

A test for FMH estimation should be undertaken:

- On D negative women, following delivery of a D positive baby.
- Following all potentially sensitising events in D negative women after 20 weeks gestation

A test for FMH is NOT required:

- When the sensitising event is before 20 weeks because the fetal blood volume is insufficient to exceed that covered by the minimum anti-D immunoglobulin dose in standard use.
- When the fetus/baby is known to be D negative.
- When the woman is D positive

4.12.8. Sample requirements for FMH at delivery

Maternal sample: 1 x 4ml EDTA lavender top sample and 1 x 6mL EDTA pink top sample

Baby sample: 1 x 4ml EDTA lavender top sample and 1 x 6mL EDTA pink top sample.

Following delivery, a cord blood sample should be taken from the baby of a D negative woman to establish the ABO and D group. The sample should be taken with a syringe and needle from an umbilical cord blood vessel wherever possible. If cord blood is unavailable, then consideration should be given to obtaining another sample for blood grouping. If this is not possible, then it should be assumed that the baby is D positive for the purposes of FMH determination, and administration of anti-D immunoglobulin prophylaxis.

4.12.9. Sample requirements for FMH during pregnancy (after 20 weeks of gestation)

Maternal sample: A 4ml EDTA lavender top sample AND a 6mL EDTA pink top sample

4.13. REPORTING OF SERIOUS ADVERSE EVENTS AND REACTIONS FOLLOWING OR DURING TRANSFUSION

Key Recommendations:

- Initial clinical assessment seeks to quickly identify those patients with serious or life threatening reactions so that immediate treatment/resuscitation can be initiated.
- Initial treatment of an Acute Transfusion Reaction (ATR) is not dependent on classification but should be directed by symptoms and signs. Treatment of severe reactions should not be delayed until the results of investigations are available.
- Patients with mild isolated febrile reactions may be treated with oral paracetamol (500-1000mg in adults). Patients with mild allergic reactions may be managed by slowing the transfusion and treatment with an antihistamine.
- Patients should be asked to report symptoms which develop within 24 hours of completion of the transfusion.

4.13.1. Initial Clinical Assessment

Initial clinical assessment seeks to quickly identify those patients with serious or life threatening

reactions so that immediate treatment/resuscitation can be initiated.
Additional information and references are provided at the end of this document:

- *Figure 1* shows the guideline on the investigation and management of acute transfusion reactions Prepared by the BCSH Blood Transfusion Task Force.
- *Figure 2* is a practical guide to the recognition of suspected acute transfusion reaction.
- *Figure 3:* Comparison of TRALI and TACO
- Figure 4: Detailed symptoms and signs of acute transfusion reactions

4.13.2. Immediate management of ATR

If a patient develops new symptoms or signs during a transfusion, this should be stopped temporarily, but venous access maintained. Identification details should be checked between the patient, their identity band and the compatibility label of the blood component. Perform visual inspection of the component and assess the patient with standard observations.

Initial treatment of an Acute Transfusion Reaction (ATR) is not dependent on classification but should be directed by symptoms and signs. Treatment of severe reactions should not be delayed until the results of investigations are available.

Patients should be asked to report symptoms which develop within 24 hours of completion of the transfusion.

4.13.3. Mild Adverse Reactions

For patients with mild reactions, such as pyrexia (temperature of > 38 oC and a rise of 1-2oC), and/or pruritus or rash but without other features, the transfusion may be continued with appropriate treatment and direct observation.

- If at any time a transfusion reaction is suspected, the doctor in charge of the patient should be contacted by the nurse responsible for the patient during the transfusion and should review the patient promptly.

- Any adverse events should be recorded in the patient's notes and logged on the blood prescription sheet (WPR26563).

- It is the doctor's responsibility to ensure the adverse reaction is reported to Blood Bank.

- It is the responsibility of Blood Bank staff to report the event to senior Blood Bank staff or the Transfusion Practitioner to enable external reporting to SABRE (Serious Adverse Blood Reactions and Events) and/ or SHOT if appropriate.

Patients with mild isolated febrile reactions may be treated with oral paracetamol (500-1000mg in adults). Patients with mild allergic reactions may be managed by slowing the

transfusion and treatment with an antihistamine.

Standard observations

The patient s pulse rate, blood pressure, temperature and respiratory rate should be monitored and abnormal clinical features such as fever, rashes or angioedema frequently assessed. A patient who has experienced a transfusion reaction should be observed directly until the clinical picture has improved.

4.13.4. Severe Adverse Reactions

Management is guided by rapid assessment of symptoms, clinical signs and severity of the reaction.

- The transfusion must be stopped immediately.
- The blood administration set should be changed and venous access maintained using Sodium Chloride 0.9% running slowly to keep the vein open.
- The patients physician must be informed
- A Consultant Haematologist must be informed.
- The reaction should be reported immediately to the Blood Bank, who will issue a Transfusion Reaction Investigation sheet. Follow the instructions carefully, complete the sheet and return to Blood Bank as instructed along with any remaining blood products which may have been involved in the reaction.
- The vital signs should be monitored immediately, recorded, and appropriate action taken. Vital signs must continue to be monitored every 5 - 15 minutes depending on severity of reaction and until the possible reaction has resolved.
- The volume and colour of any urine passed should be recorded in the patient’s notes.

Anaphylaxis

Anaphylaxis should be treated with intramuscular adrenaline (epinephrine) according to UKRC guidelines. Patients who are thrombocytopenic or who have deranged coagulation should also receive intramuscular adrenaline if they have an anaphylactic reaction

Hypotension

If a patient being transfused for haemorrhage develops hypotension, careful clinical risk assessment is required. If the hypotension is caused by haemorrhage, continuation of the transfusion may be life-saving. In contrast, if the blood component is considered the most likely cause of hypotension, the transfusion must be stopped or switched to an alternative component and appropriate management and investigation commenced.

Febrile symptoms of moderate severity

If a patient develops sustained febrile symptoms or signs of moderate severity (temperature > 39oC or a rise of > 2oC and/or systemic symptoms such as chills, rigors, myalgia, nausea or vomiting), bacterial contamination or a haemolytic reaction should be considered.

4.13.5. Investigation of a Suspected Severe Transfusion Reaction

- The completed form and samples should be sent immediately to the Blood Bank with the Blood Product bag/s and giving set.
- Samples required are group & save, FBC, U/E, LFT, coagulation screen, blood cultures.
- Blood Bank will complete all of the required laboratory investigations and report the findings back to the requesting location as soon as they are available.
- No further transfusion of units currently cross-matched should be undertaken until the Blood Bank investigations are complete – this may be mitigated by the Consultant Haematologist depending on circumstances

Documentation of Severe Adverse Events / Reactions

- Any adverse events should be recorded in the patient's notes and logged on the blood prescription sheet (WPR26564).
- Report via DatixWeb.
- All adverse events related to blood / blood product transfusion will be reviewed by the Hospital Transfusion Committee.
- Serious adverse events should be reported to the MHRA via SABRE (Serious Adverse Blood Reactions and Events) and to SHOT (Serious Hazards of Transfusion) via the Blood Bank.
- Suspected cases of transfusion-transmitted infection / TRALI should be reported immediately to the local Transfusion Centre via the Blood Bank.

Figure 1: Guideline on the investigation and management of acute transfusion reactions prepared by the BCSH Blood Transfusion Task Force

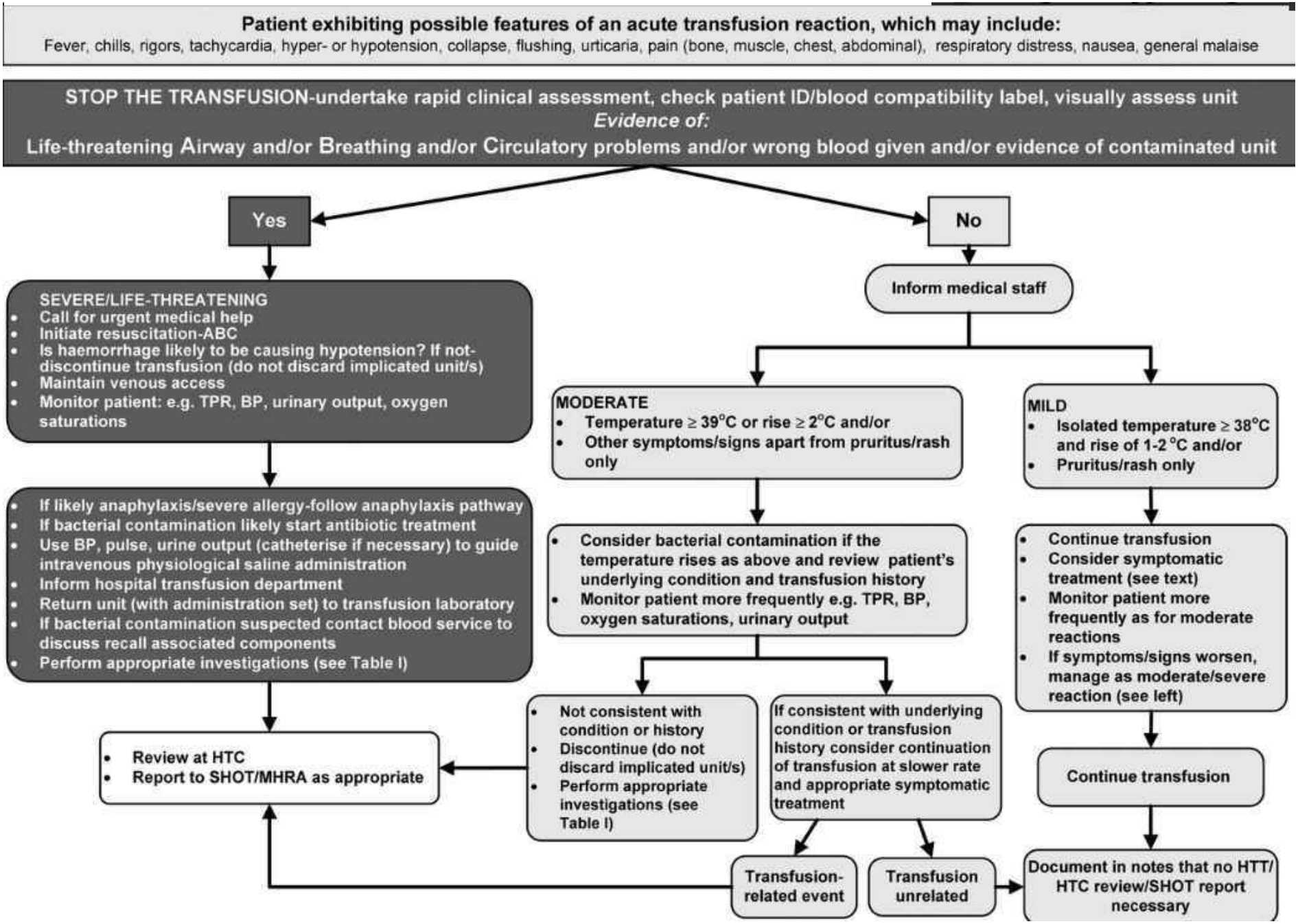


Figure 2: ISBT/IHN classification and recognition of suspected acute transfusion reactions.

	1 = Mild	2 = Moderate	3 = Severe
Febrile type reaction	A temperature ≥ 38 °C and a rise between 1and 2°C from pretransfusion values, but no other symptoms/signs	A rise in temperature of 2°C or more, or fever 39 °C or over and/or rigors, chills, other inflammatory symptoms/signs such as myalgia or nausea which precipitate stopping the transfusion	A rise in temperature of 2°C or more, and/or rigors, chills, or fever 39 °C or over, or other inflammatory symptoms/signs such as myalgia or nausea which precipitate stopping the transfusion, prompt medical review AND/OR directly results in, or prolongs hospital stay.
Allergic type reaction	Transient flushing, urticaria or rash	Wheeze or angioedema with or without flushing/urticaria/rash but without respiratory compromise or hypotension	Bronchospasm, stridor, angioedema or circulatory problems which require urgent medical intervention AND/OR, directly result in or prolong hospital stay, or **Anaphylaxis** (severe, life-threatening, generalised or systemic hypersensitivity reaction with rapidly developing airway and/or breathing and/or circulation problems, usually associated with skin and mucosal changes
Reaction with both allergic and febrile features	Features of mild febrile **and** mild allergic reactions	Features of both allergic and febrile reactions, at least one of which is in the moderate category.	Features of both allergic and febrile reactions, at least one of which is in the severe category.
Hypotensive reaction		Isolated fall in systolic blood pressure of 30 mm or more occurring during or within one hour of completing transfusion **and** a systolic blood pressure 80 mm. or less in the absence of allergic or anaphylactic symptoms. No/minor intervention required.	Hypotension, as previously defined, leading to shock (e.g., acidaemia, impairment of vital organ function) without allergic or inflammatory symptoms. Urgent medical intervention required.

Figure 3: Comparison of TRALI and TACO

	TRALI	TACO
Patient characteristics	More frequently reported in haematology and surgical patients	May occur at any age, but characteristically age > 70
Type of component	Usually plasma or platelets	Any
Speed of onset	During or within 6 hours of transfusion, usually within 2 hours.	Defined as occurring within 6 hours of transfusion
Oxygen saturation	Reduced	Reduced
Blood pressure	Often reduced	Often raised
JVP	Normal	Raised
Temperature	Often raised	Usually unchanged
CXR findings	Often suggestive of pulmonary oedema with normal heart size: may be a "whiteout"	Cardiomegaly, signs of pulmonary oedema
Echo findings	Normal	Abnormal
Pulmonary wedge pressure	Low	Raised
Full blood count	May be fall in neutrophils and monocytes followed by neutrophil leucocytosis	No specific changes
Response to fluid load	Improves	Worsens
Response to diuretics	Worsens	Improves

Figure 4: Detailed symptoms and signs of acute transfusion reactions

Fever and related symptoms or signs

Although characteristic of FNHTR, pyrexia and other symptoms or signs of an inflammatory response (myalgia, malaise, nausea, chills or rigors) may also occur in acute haemolysis, TRALI and bacterial transfusion-transmitted infection (TTI).

Transfusion can often be continued in patients with mild FNHTR but differentiation from other causes is not always straightforward. Life-threatening haemolysis due to ABO incompatibility is unlikely if the correct unit of blood has been given. Acute haemolysis due to other antibodies may occasionally present with immediate clinical features suggesting a severe or moderate febrile reaction during the transfusion, with signs of haemolysis appearing later. TRALI can be reasonably excluded if the patient has no respiratory symptoms. The possibility of bacterial TTI should always be considered as early appropriate treatment is life-saving. Several authors report this to be more likely if the rise in temperature is 2ºC or more .In the 16 confirmed reports of bacterial TTI to SHOT between 2005 and 2010, all patients had symptoms or signs in addition to pyrexia and, in the five cases where a specific temperature was stated this was either 39ºC or

above or associated with a rise of greater than 2ºC.

Inspection of the implicated unit is important as discolouration or abnormal particles are suggestive of contamination

Skin lesions and rashes

Urticaria is commonly seen with allergic reactions but other types of skin change may occur, such as maculopapular rashes, erythema or flushing. In some transfusion reactions there is no visible rash but itching is reported by the patient.

Angio-oedema

This describes localized, non-pitting, oedema of the subcutaneous or submucosal tissues and usually indicates an allergic reaction. The eyelids and mouth are most often affected, less commonly throat and tongue. If angio-oedema occurs, the transfusion must be stopped immediately and the patient promptly assessed and treated.

Dyspnoea

Shortness of breath is a non-specific symptom and successful management relies on careful clinical examination supported by the results of investigations such as radiology and measurement of oxygen saturation/blood gases. Possible causes include allergy, TRALI, TACO and TAD. Stridor and wheeze suggest an allergic reaction but also occur in patients with TACO and have been reported once, associated with chills and rigors, in bacterial TTI.

Pulmonary oedema with clinical signs of basal crackles and radiological evidence suggest a diagnosis of TACO or TRALI and helps exclude allergy. Low oxygen saturation is not diagnostic of a specific condition, although it gives information on severity. The possibility that clinical features are related to the patient s underlying illness must be kept in mind.

Anaphylaxis

The UK Resuscitation Council advises that a precise definition of anaphylaxis is not important for emergency treatment. An anaphylactic reaction involves a severe, life-threatening, generalised or systemic hypersensitivity reaction characterised by rapidly developing airway and/or breathing and/or circulation problems usually associated with skin and mucosal changes.

Hypotension

This is defined as a drop in systolic and/or diastolic blood pressure of greater than 30 mm Hg. It is a common and non-specific feature of acute haemolysis, severe allergic reaction, bacterial contamination or TRALI. It occurs rarely as an isolated finding and some cases have

been attributed to the generation of bradykinin and angiotensin when blood components were exposed to the charged surface of leucoreduction filters. Patients taking ACE inhibitors and those with a genetic defect which prevents bradykinin breakdown were most at risk. In addition hypotension may be associated with the patient's underlying condition, especially haemorrhage, so careful clinical risk assessment is required when deciding to stop the transfusion for this indication.

Bleeding diathesis of acute onset

This is highly suggestive of disseminated intravascular coagulation (DIC) especially when there is oozing from wounds or intravenous line insertion sites. It is most likely in severe acute haemolysis (especially ABO incompatibility) or bacterial contamination and is an alert that the transfusion must be stopped immediately and rapid clinical assessment undertaken.

Tingling around the face and lips

This is a recognised herald symptom of angioedema but may also occur in patients who are hyperventilating or during a plasma or red cell exchange procedure with citrate anticoagulant due to a fall in ionised calcium.

Pain

Patients with febrile reactions often complain of generalised muscular and bone aches, probably due to release of inflammatory cytokines. Acute haemolytic reactions, particularly those due to ABO incompatibility, may be characterised by pain at the infusion site, abdomen, chest and loins. Chest pain can also be an occasional feature of anaphylactic reactions, possibly due to myocardial ischemia.

Severe Anxiety

This is often reported in serious transfusion reactions. A feeling of impending doom has been described in acute haemolysis and bacterial transfusion-transmitted infection and should always initiate urgent review of the patient. However, mild anxiety is common in patients being transfused, especially for the first time.

4.14. TRANSFER OF BLOOD PRODUCTS WITH PATIENTS

Key Recommendations:

- Blood products are not routinely transferred with patients except for in extremely urgent cases.
- It is encouraged to transfuse the patient prior to transfer where possible.

- When the patient is received at their location a sample should be sent to Blood Bank in that location so blood can be provided as and when needed with minimum delay.
- Blood products should only be packaged up by laboratory staff in a verified transport box.

4.14.1. Overview of Transfer of Blood Products

Blood is not routinely crossmatched and provided for transfer with patients, blood products will only be transferred for use in transit in extremely urgent cases such as an ECMO transfer.

When blood is transferred with a patient, the Trust remains legally responsibility for full traceability of the blood products we provide for the patient.

The escort team must include members of staff competent in transfusion and treatment of transfusion complications including anaphylaxis.

4.14.2. Transfer from Bassetlaw (BDGH) to Doncaster (DRI)

- The transfer team must contact BDGH Blood Bank; during the working day phone extension 572452, out of hours bleep the on-call Haematology BMS via switchboard.
- The transfer team must ensure Blood Bank have received a request to package blood for transfer. If blood is not already crossmatched, immediately despatch a sample and/or request form to BDGH Blood Bank.
- Blood products can only be packaged by Blood Bank staff in validated blood transit boxes with appropriate transfer documentation.
- Blood will not be sent to DRI separately from the patient.
- The transfer team have responsibility for ensuring full traceability of any blood products used in transit i.e. all tags must be completed and returned to Blood Bank.
- The transfer team must complete all accompanying transfusion related paperwork including the blood tags and ensure that all the paperwork is sent to Blood Bank at the receiving site.
- Any unused units and/or the blood transit box must be taken directly to Blood Bank at the receiving site.

4.14.3. Transfer from Mexborough to Doncaster (DRI)

- The transfer team must contact the on-site laboratory on ext 649196 and DRI Blood Bank; during the working day phone ext 644044, out of hours bleep the on-call Haematology BMS via switchboard.

- The transfer team must ensure crossmatched blood is available for transfer.
- Blood products can only be packaged by authorised staff in validated blood transit boxes with appropriate transfer documentation.
- The transfer team have responsibility for ensuring full traceability of any blood products used in transit.
- The transfer team must complete all accompanying transfusion related paperwork including the blood tags and ensure that all the paperwork is sent to Blood Bank at the receiving site.
- Any unused units and/or the blood transit box must be taken directly to Blood Bank at the receiving site.

4.14.4. Transfers to Hospitals outside the Trust

- The transfer team must contact Blood Bank during the working day, out of hours bleep the on-call Haematology BMS via switchboard.
- The transfer team must ensure Blood Bank have received a request to package blood for transfer. If blood is not already crossmatched, immediately despatch a sample and/or request form to Blood Bank.
- Blood products can only be packaged by Blood Bank staff in validated blood transit boxes with appropriate transfer documentation.
- Blood will not be sent to the receiving hospital separately from the patient.
- The transfer team have responsibility for ensuring full traceability of any blood products used in transit.
- The transfer team must complete all accompanying transfusion related paperwork including the blood tags and ensure that all the paperwork is returned to Blood Bank at the sending site.
- Any unused units and/or the blood transit box must be taken directly to Blood Bank at the receiving site.

5. TRAINING/ SUPPORT

Role specific competencies are in place. Staff must have the relevant competencies to perform a transfusion related task / procedure e.g. venepucture, collection of blood products, administration of blood products and prescribing blood products. Competencies are recorded on OLM. Advice regarding the relevant competencies is available from the Transfusion Practitioner.

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

- The Hospital Transfusion Team will ensure that systematic audit and review of the transfusion process is undertaken and will report outcomes to the Hospital

Transfusion Committee.

- This will include participation in the programme for national comparative audit of blood transfusion as well as local and regional audits.

- The Hospital Transfusion Committee will review all serious adverse transfusion events / reactions which must be notified direct to blood bank staff in addition to the Trust's incident reporting system; Datix.

7. DEFINITIONS

All defined within the document.

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment for All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 1)

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- PAT/PA 19 Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)

- PAT/PA 28 Privacy and Dignity Policy

- PAT/PS 7 Patient Identification Policy

- PAT/PA 2 Consent to Examination or Treatment Policy

- PAT/PA 24 Transfer of Patients and their Records

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

This policy is written in accordance with the following guidelines and policies: BSH Guidelines

- Use of Platelet Transfusions 2016
- Haematological Management of Major Haemorrhage 2015
- Use of Anti-D Immunoglobin for the Prevention of Haemolytic Disease of the Fetus and Newborn 2014
- Management of Anaemia and Red Cell Transfusion in Adult Critically Ill Patients 2012
- Pre-transfusion Compatibility Procedures in Blood Transfusion Laboratories 2012
- Investigation and Management of Acute Transfusion Reactions 2012
- Use of Irradiated Blood Components 2020
- Administration of Blood Components 2017
- The Estimation of Fetomaternal Haemorrhage 2009
- Spectrum of Fresh-Frozen Plasma and Cryoprecipitate products 2018

APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Blood Transfusion Policy – Blood Components, Blood Products and Transfusion Reactions	Pathology	Gill Bell	New Policy	14.06.2021

1) Who is responsible for this policy? Name of Division/Directorate: Pathology

2) Describe the purpose of the service / function / policy / project/ strategy? The policy provides the Trust with local procedures for pre-administration of blood products.

3) Are there any associated objectives? Legislation, targets national expectation, standards – Yes compliance with BSQR 2005, BSH & NICE guidelines.

4) What factors contribute or detract from achieving intended outcomes? Lack of compliance

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

. If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation]

6) Is there any scope for new measures which would promote equality? [any actions to be taken

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4	

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form - see CORP/EMP 27.

Date for next review: June 2024

Checked by: Atchuta Bobbili Date: 14.06.2021

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

Blood Transfusion Policy

Massive Haemorrhage Protocol

This procedural document supersedes: PAT/T 2 v.6 – Blood Transfusion Policy

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor:	Medical Director
Author/reviewer:	Gill Bell - Chief Biomedical Scientist Transfusion
Date revised:	May 2021
Authorised by:	Atchuta Bobbili – Chair Hospital Transfusion Committee (HTC)
Approved by:	Hospital Transfusion Committee
Approval date:	14 June 2021
Date issued:	25 June 2021
Next review date:	June 2024
Target Audience:	Trust wide; all staff involved in the transfusion process

Amendment Form

Version	Date Issued	Brief Summary of Changes	Author
Version 1	25 June 2021	• This is a new procedural document, please read in full.	Gill Bell – Chief Biomedical Scientist Transfusion

Contents Page

1. INTRODUCTION

The Massive Hemorrhage Protocol is in place to ensure the best outcome is achieved for the patient.

The protocol should help to identify the key roles of team leader (often the most senior doctor directing resuscitation of the patient) and coordinator responsible for communicating with laboratories and other support services to prevent time-wasting and often confusing duplicate calls.

In an emergency situation it is essential to ensure correct transfusion identification procedures for patients, samples and blood components are performed and an accurate record is kept of all blood components transfused.

Training of clinical staff and regular drills to test the protocol and ensure the rapid delivery of all blood components is essential.

2. PURPOSE

This policy is based on recognised guidelines and provides the Trust with local procedures for the ordering and administration of blood products and the management of transfused patients.

3. DUTIES AND RESPONSIBILITIES

The member of staff responsible for the care and monitoring of the patient during the transfusion must be a nurse holding current registration of the NMC Professional Register as a Registered General Nurse (RGN), Registered Sick Children's Nurse (RSCN), a Registered Midwife (RM) or a doctor.
They must take charge of the patient during the transfusion and be responsible for ensuring that all care and monitoring of the patient is performed.

- All staff involved in the transfusion process must be aware of this policy.
- All staff involved in the transfusion process should understand their role and responsibilities.
- Role specific training requirements must be met; the competencies are mandatory.
- Ensure transfusion is appropriate and alternatives have been explored.
- All transfusion documentation must be completed.
- Recognise and manage transfusion reactions.

- Always report untoward transfusion events / reactions to Blood Bank and by Datix.
- Recognition of Massive Haemorrhage; activate the Massive Haemorrhage protocol.

4. PROCEDURE

Key Recommendations:

- The massive haemorrhage protocol must be activated via the following mobile phone numbers on each site: DRI – 07775 013348 or BDGH – 07970 423121
- Samples for FBC, clotting, U&E, LFT and Ca^{2+} must be taken and delivered to the laboratory after each massive haemorrhage pack is transfused to reassess the patient and decide whether further products are required or Blood Bank can stand down.
- Blood Bank must be advised to stand down when products are no longer required to avoid any unnecessary wastage of products and time.
- The use of haemostatic drugs should be considered i.e. tranexamic acid, vitamin K, prothrombin concentrate etc.
- All documentation should be fully complete and traceability information i.e. blood tags, returned to Blood Bank ASAP.

Patients Lacking Capacity:

Sometimes it will be necessary to provide care and treatment to patients who lack the capacity to make decisions related to the content of this policy. In these instances staff must treat the patient in accordance with the Mental Capacity Act 2005 (MCA 2005).

- A person lacking capacity should not be treated in a manner which can be seen as discriminatory.
- Any act done for, or any decision made on behalf of a patient who lacks capacity must be done, or made, in the persons Best Interest.
- Further information can be found in the MCA policy, and the Code of Practice, both available on the Extranet.

There is no single definition of Best Interest. Best Interest is *determined on an individual basis. All factors relevant to the decision must be taken into account, family and friends should be consulted, and the decision should be in the Best interest of the individual. Please see S5 of the MCA code of practice for further information.*

4.1. The Massive Haemorrhage Protocol

The following steps, A-F, should be followed to correctly activate and manage a massive haemorrhage.

Explanatory Notes for Clinical Areas:

1. Recognise trigger and activate pathway for management of massive haemorrhage.

2. Allocate team roles
   - Team leader.
   - Communication lead dedicated person for communication with other teams, especially the transfusion laboratory and support services not the most junior member of the team.
   - Sample taker / investigation organiser / documenter.
   - Transporter - porter, member of team from clinical area.

3. Complete request forms / take blood samples, label samples correctly /recheck labelling
   - U+E, FBC, Crossmatch, PT, APTT, Fibrinogen, ABG, Calcium, Lactate.

4. Request blood / blood components
   Communications lead to contact laboratory and inform the BMS of the following:
   - Activation of the massive haemorrhage protocol using the direct telephone numbers:.
     - DRI - 07775 013348
     - BDGH - 07970 423121
   - Your name, location and extension number / bleep number.
   - The patient's details: ideally surname, forename, district number.
   - Order massive haemorrhage pack 1 (MHP1).
   - Contact Blood Bank if blood has been transferred in with patient from another Trust or patient is being transferred to another Trust.

5. The clinical / laboratory interface
   - Communication lead to arrange for transport of samples / request form to the laboratory.
   - BMS to ring communication lead when blood / blood components are ready.
   - Communication lead to arrange to collect blood and blood components from the Blood Bank.

6. Communicate stand down of pathway to Blood Bank BMS
   - Return any unused products to Blood Bank immediately.

7. Ensure documentation is complete
   - Clinical area: monitoring of vital signs, timings of blood samples and communications, transfusion documentation in patient case notes, return traceability information to Blood Bank (Tags).
   - Blood Bank: keep record of communications / telephone requests on worksheet.
   - Transfusion Practitioner: completion of audit proforma, ideally within 24 hours.

Massive Haemorrhage Protocol Telephone Numbers:
DRI – 07775 013348
BDGH – 07970 423121

Massive Haemorrhage

Ongoing severe bleeding e.g.150 mLs/min. Clinical shock, 1 volume loss (~4L) in 24 hours

Activate Massive Haemorrhage Protocol

Most senior clinician to co-ordinate contact with Blood Bank, to trigger *"Massive Haemorrhage Protocol"*

Contact Blood Bank to initiate activation on:

DRI – 07775 013348

BDGH – 07970 423121

STOP THE BLEEDING

RESUSCITATE
Airway
Breathing

Haemorrhage Control

- Direct pressure / tourniquet if appropriate
- Stabilise fractures
- Surgical intervention consider damage control surgery
- Interventional radiology
- Endoscopic techniques
- Obstetric techniques

Haemostatic Drugs

***Tranexamic acid 1g bolus IV followed by 1g after 3 hrs**

Vit K and Prothrombin complex concentrate (PCC) for warfarinised patients

and

Other haemostatic agents discuss with Consultant Haematologist

Cell Salvage

If available & appropriate

Thromboprophylaxis

should be considered when patient stable

Take bloods and send to lab:

XM, FBC, PT, APTT, Fib, U+E, LFT & Ca^{2+}

Collect MHP 1

Red cells*	**4 units**
FFP (*approx. 30 mins to thaw*)	**4 units**
Platelets	**1 unit**

*Emergency group O blood or group specific blood or XM blood may be issued.

Give MHP 1

Reassess

Proceed or Stand down

Suspected continuing haemorrhage requiring further transfusion

Take repeat bloods as above and deliver to lab in exchange for MHP 2

MHP 2

Red cells	4 units
FFP	4 units
Platelets	1 unit
Cryopreciptate	2 pooled packs

Give MHP 2

Reassess

Proceed or Stand down

Suspected continuing haemorrhage requiring further transfusion

Take repeat bloods as above and deliver to lab in exchange for MHP 3

Give MHP 3

Continuous cardiac monitoring

26/07/2019

Prevent Hypothermia

- Use fluid warming device
- Used forced air warming blanket

Consider 10 mls Calcium chloride 10% over 10 mins

Aims for Therapy	
Hb	80-100 g/L
Platelets	>75 x 10^9/L
INR	< 1.5
APTT ratio	< 1.5
Fibrinogen	> 1.5 g/L
	> 2.0 g/L in obstetrics
Ca^{2+}	> 1 mmol/L
Temperature	> 36°c
pH	> 7.35 (on ABG)
Monitor for hyperkalaemia	

STAND DOWN

- Inform lab
- Return unused components
- Complete documentation

MHP = Massive Haemorrhage Pack

Author: Gemma Harte Approved: HTC
Title: MHP - Flowchart
CLS-SOP-485 Ver 9 26/07/2019

5. TRAINING/ SUPPORT

Role specific competencies are in place. Staff must have the relevant competencies to perform a transfusion related task / procedure e.g. venepucture, collection of blood products, administration of blood products and prescribing blood products. Competencies are recorded on OLM. Advice regarding the relevant competencies is available from the Transfusion Practitioner.

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

- The Hospital Transfusion Team will ensure that systematic audit and review of the transfusion process is undertaken and will report outcomes to the Hospital Transfusion Committee.

- This will include participation in the programme for national comparative audit of blood transfusion as well as local and regional audits.

- The Hospital Transfusion Committee will review all serious adverse transfusion events / reactions which must be notified direct to blood bank staff in addition to the Trust's incident reporting system; Datix.

7. DEFINITIONS

All defined within the document.

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment for All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 1)

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- PAT/PA 19 Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)
- PAT/PA 28 Privacy and Dignity Policy
- PAT/T 8 Specimen and Request Form Labelling Policy
- PAT/PS 7 Patient Identification Policy
- PAT/PA 2 Consent to Examination or Treatment Policy
- PAT/PA 24 Transfer of Patients and their Records

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

This policy is written in accordance with the following guidelines and policies: BSH Guidelines

- Use of Platelet Transfusions 2016
- Haematological Management of Major Haemorrhage 2015
- Management of Anaemia and Red Cell Transfusion in Adult Critically Ill Patients 2012
- Pre-transfusion Compatibility Procedures in Blood Transfusion Laboratories 2012
- Administration of Blood Components 2017
- Spectrum of Fresh-Frozen Plasma and Cryoprecipitate products 2018

APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Blood Transfusion Policy – Massive Haemorrhage Protocol	Pathology	Gill Bell	New Policy	14.06.2021

1) Who is responsible for this policy? Name of Division/Directorate: Pathology

2) Describe the purpose of the service / function / policy / project/ strategy? The policy provides the Trust with local procedures for pre-administration of blood products.

3) Are there any associated objectives? Legislation, targets national expectation, standards – Yes compliance with BSQR 2005, BSH & NICE guidelines.

4) What factors contribute or detract from achieving intended outcomes? Lack of compliance

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

. If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation]

6) Is there any scope for new measures which would promote equality? [any actions to be taken

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4	

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form - see CORP/EMP 27.

Date for next review: June 2024

Checked by: Atchuta Bobbili Date: 14.06.2021

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

Blood Transfusion Policy

Transfusion of Neonates, Infants and Children

This procedural document supersedes: PAT/T 2 v.6 – Blood Transfusion

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Executive Sponsor:	Medical Director
Author/reviewer:	Gill Bell - Chief Biomedical Scientist Transfusion
Date revised:	May 2021
Authorised by:	Atchuta Bobbili – Chair Hospital Transfusion Committee (HTC)
Approved by:	Hospital Transfusion Committee
Approval date:	14 June 2021
Date issued:	25 June 2021
Next review date:	June 2024
Target Audience:	Trust wide; all staff involved in the transfusion process

Amendment Form

Version	Date Issued	Brief Summary of Changes	Author
Version 1	25 June 2021	• This is a new procedural document, please read in full.	Gill Bell – Chief Biomedical Scientist Transfusion

Contents Page

1. INTRODUCTION

Errors in the requesting, supply and administration of blood lead to significant risks to patients.

Errors either in the collection or labelling of the sample for blood grouping and compatibility testing, or in the laboratory, or to failure of the final pre-transfusion checks account for a number of patient deaths in the UK each year.

The Massive Hemorrhage Protocol is in place to ensure the best outcome is achieved for the patient. The protocol should help to identify the key roles of team leader (often the most senior doctor directing resuscitation of the patient) and coordinator responsible for communicating with laboratories and other support services to prevent time-wasting and often confusing duplicate calls.

In an emergency situation it is essential to ensure correct transfusion identification procedures for patients, samples and blood components are performed and an accurate record is kept of all blood components transfused.

2. PURPOSE

This policy is based on recognised guidelines and provides the Trust with local procedures for the ordering and administration of blood products and the management of transfused patients.

3. DUTIES AND RESPONSIBILITIES

The member of staff responsible for the care and monitoring of the patient during the transfusion must be a nurse holding current registration of the NMC Professional Register as a Registered General Nurse (RGN), Registered Sick Children's Nurse (RSCN), a Registered Midwife (RM) or a doctor.
They must take charge of the patient during the transfusion and be responsible for ensuring that all care and monitoring of the patient is performed.

- All staff involved in the transfusion process must be aware of this policy.
- All staff involved in the transfusion process should understand their role and responsibilities.
- Role specific training requirements must be met; the competencies are mandatory.
- Ensure transfusion is appropriate and alternatives have been explored.
- All transfusion documentation must be completed.

- Recognise and manage transfusion reactions.
- Always report untoward transfusion events / reactions to Blood Bank and by Datix.
- Recognition of Massive Haemorrhage; activate the Massive Haemorrhage protocol.

4. PROCEDURE

Key Recommendations:

- After each single-unit red blood cell transfusion, clinically reassess and check haemoglobin levels, and give further transfusions if needed.
- If A&E needs to transfuse a neonate/infant/child they must contact neonatal unit or children's ward for appropriate pumping and blood tubing.
- For volumes less than 50mL use a syringe driver with appropriate blood pump tubing. For volumes greater than 50ml use Baxter or Alaris pump with appropriate tubing.
- Transfusion must be started within 30 minutes of the blood product leaving the blood fridge.

4.1. Indications for Use

Red cell transfusions are required to increase the oxygen carrying capacity of the blood by raising the haemoglobin concentration of patients with acute or chronic anaemia and avoid tissue hypoxia.

4.2. Pre-administration Checks

- Consent obtained.
- Completed prescription to transfuse.
- Check patient wearing correct wristband; confirm identifiers are correct (including cot card, notes).
- Check correct samples have been sent to the laboratory i.e. mothers group and antibody screen sample if patient is < 4 months of age.
- Check IV access patent.
- Check pre transfusion observations done.
- Check blood is ready for collection and a person trained in blood collection is available – this can be done via Teletrack.

4.3. Equipment Required

Note: For volumes less than 50mL use a syringe driver with appropriate blood pump tubing. For volumes greater than 50ml use Baxter or Alaris pump with appropriate tubing.

If A&E needs to transfuse a neonate/infant/child they must contact neonatal unit or children's ward for appropriate pumping and blood tubing.

- Sterile gloves.
- Apron.
- Blood product giving set2% chlorhexidine in 70% isopropyl.
- Syringe driver or extension set and pump.

4.4. Baseline Observations

The infant should be on a heart monitor, record the following:

- Temperature,
- Pulse
- Respiratory rate
- Blood pressure
- O2 saturation

4.5. Receipt of Products and Bedside Checks

Transfusion must be started within 30 minutes of the blood product leaving the blood fridge

- Assemble equipment.
- Patient blood group to be checked on ICE.
- Blood product to be checked by 2 members of staff at the bedside.
- Check red tag donation number (G number) against donation number on the bag. If any discrepancy DO NOT proceed.
- Check red tag patient details against patient's wristband. If any discrepancy DO NOT proceed.
- Check patient details with parent or guardian (if no parent / guardian available identify patient from notes with another staff member). If any discrepancy DO NOT proceed.

- Check integrity of the blood product; expiry date, CMV status and appearance (clots / discolouration). If any discrepancy DO NOT proceed.
- Verify the product to be transfused from the prescription, check for any special requirements.
- Commence the transfusion as below.

4.6. Administering the Blood Product via a Syringe Driver

- Attach blood administration set, extension set and 50ml syringe.
- Spike blood bag and fill chamber.
- Draw blood into syringe, press purge on pump to fill lower section of giving set line. Close the white clamp.
- Ensure syringe contains volume of blood prescribed. Close red clamp to the blood bag.
- Both nurses check the pump settings, volume to be transfused and the rate as prescribed.
- Flush cannula with Sodium Chloride 0.9% to ensure it is patent.
- Use 2% chlorhexidine in 70% isopropyl to clean hub, and attach extension set to cannula using non touch technique.
- Commence transfusion.
- Both nurses should sign the adhesive portion of the red tag which is placed on the prescription sheet in the notes. The front portion of the red tag should be signed and dated and sent back to the lab immediately to Blood Bank.
- Diuretic therapy should be administered as prescribed and output recorded as necessary.
- Once transfusion is completed observation of temperature, apex and respirations should be recorded.
- Flush cannula with 2mls of normal saline for paeds or till T piece clear for neonates.
- On completion of the transfusion the empty bag and tubing are to be disposed of in a yellow bag black stripe.

4.7. Administering Blood Product Volumes Greater than 50ml via a Blood Pump for a Child

- Using Blood pump giving set.
- Spike blood bag, fill chamber and line.
- Set pump to prescribed volume and transfusion rate.
- 2 nurses to verify settings.
- Clean hub with 2% chlorhexidine in 70% isopropyl prior to connecting to patients cannula using non- touch technique.

4.8. Neonatal/ Infant/ Child Observations during Transfusion

The infant should be on a heart monitor.

Observations to be done at the start of each unit, then 15 minutes following commencement of the transfusion, observations to be recorded every 15 minutes for the first 60 minutes, then every 30 minutes for the next hour then hourly until completion.

Observations must be documented on PAWS or Neonatal specific paper work. During this period stay in sight and sound of the infant.

These minimum criteria for observations apply to a stable child. If the child is not stable, observations must be done more frequently in accordance with the (PAWS) Paediatric Advanced graded response strategy and clinical judgement.

4.9. Reactions

- Pyrexia <2 degrees rise

  Inform paediatrician and Blood Bank, give paracetamol and resume infusion at a slower rate.

- Pyrexia >2 degrees rise

  Observe for other signs and symptoms; inability to maintain saturations, bradycardia, tachycardia, respiratory distress, rigors. Hypotension, localised redness / itching / tracking.
  Any of the above, inform paediatrician and Blood Bank, stop transfusion and return unit to Blood Bank along with a blood samples. Complete transfusion reaction form (available from Blood Bank) and liaise with Blood Bank.

4.10. Additional notes

- Embrace – blood on route is acceptable via a syringe driver.

- Time critical transfers. Any other ambulance other than Embrace. Blood must be packed in a validated sealed blood transit box. Blood and blood products cannot be transfused during transfer of patient. Blood in box must go directly to the receiving hospital's Blood Bank.
- Blood product collection can be requested via Teletrack.

4.11. Transfusion of Red Cells

Red cell volume and rate for neonates and children

- Paediatric packs of O RhD negative (cde/cde) / O RhD positive) dependant on neonate's Rh D type), CMV, K, HbS and HT negative are used for neonatal transfusions.
- All blood products are HEV negative
- CMV negative blood should be used for all transfusions to infants in the first year of life.
- All intra-uterine transfusions (IUTs) and exchange transfusions in the neonatal period should be irradiated. The same applies to top-up transfusions in neonates if there has been an IUT or exchange transfusion or when the child has proven or suspected immunodeficiency

Clinical situation:	Aim for HB threshold (g/L):
Anaemia in the first 24 hours of life	>120g/L
Ventilated more than 30% oxygen	>120g/L
Ventilated less than 30%oxygen	>100g/L
NCPAP more than 30% oxygen	>100g/L
NCPAP less than 30% oxygen	> 80g/L
In low flow oxygen e.g. nasal prongs	> 80g/L
In air*	> 70g/L

Volume and rate of administration for infants <45kg	
Volume	**Rate**
Vol (mls) = ((desired Hb – actual Hb) x weight (kg) x 3) ÷10	*Total volume prescribed ÷ 4 hours =* ***hourly rate***
Children > 45kg weight	
Volume	**Rate**
1 unit (= approximately 260mls -350mls)	Total unit volume ÷ 4 hours = ***hourly rate (can be given over 3 hours if tolerated)***

4.12. Transfusion of Platelets

Platelet indications for neonates and children

- Apheresis derived and not pooled Platelets are used for children under 16 years of age.
- For neonates this component is CMV & HT negative
- All blood products are HEV negative

Suggested thresholds of platelet count for neonatal platelet transfusion	Threshold platelet count ($x10^9$/l)
Neonates with no bleeding (including neonates with NAIT if no bleeding and no family history of ICH)	**<25**
Neonates with bleeding, current **coagulopathy, before surgery**, or infants with NAIT if previously affected sibling with ICH	**<50**
Neonates with major bleeding or requiring major surgery (e.g. neurosurgery)	**<100**

Suggested thresholds of platelet counts for platelet transfusion in children	Threshold platelet count ($x10^9$/l)
Irrespective of signs of haemorrhage (excluding ITP, TTP/HUS, HIT)	**<10**
Severe mucositis Sepsis Laboratory evidence of DIC in the absence of bleeding Anticoagulant therapy Risk of bleeding due to a local tumour infiltration Insertion of a non-tunnelled central venous line	**<20**
Prior to lumbar puncture	**<40**
Moderate haemorrhage (e.g. gastrointestinal bleeding) including bleeding in association with DIC Surgery, unless minor (except at critical sites) including tunnelled central venous line insertion	**<50**
Major haemorrhage or significant post-operative bleeding (e.g. post cardiac surgery) Surgery at critical sites: central nervous system including eyes	**<75 - 100**

Volume and flow rates

Volume and rate of administration for infants and children	
Volume	**Rate**
Children weighing <15 kg 10–20 ml/kg Children weighing >15 kg Single apheresis unit	Over 60 minutes

4.13. Transfusion of FFP

FFP Volume and rate

In order to reduce the risk of transfusion transmission of vCJD, it is recommended that non-UK plasma from countries with a low risk of vCJD is used for all patients born on or after 1 January 1996 (thus including all children).

MB FFP and MB cryoprecipitate are non-UK sourced and have additional pathogen inactivation steps to reduce the risk of viral transmission

Volume and rate of administration		
Volume		**Rate**
10 to 20 ml/kg *	Haemorrhage due to haemorrhagic DN	Over 60 minutes
	Coagulopathy and bleeding or risk from invasive procedure	

***Also consider Vitamin K**

Efficacy is unpredictable and it may be helpful to recheck clotting function after administration

4.14. Massive Haemorrhage

1. Recognise trigger and activate pathway for management of massive haemorrhage.

2. Allocate team roles

- Team leader.
- Communication lead dedicated person for communication with other teams, especially the transfusion laboratory and support services not the most junior member of the team.
- Sample taker / investigation organiser / documenter.
- Transporter - porter, member of team from clinical area.

3. Complete request forms / take blood samples, label samples correctly /recheck labelling

- U+E, FBC, Crossmatch, PT, APTT, Fibrinogen, ABG, Calcium, Lactate.

4. Request blood / blood components

Communications lead to contact laboratory and inform the BMS of the following:

- Activation of the massive haemorrhage protocol using the direct telephone numbers:
  DRI - 07775 013348
  BDGH - 07970 423121
- Your name, location and extension number / bleep number.
- The patient's details: ideally surname, forename, district number.
- Order massive haemorrhage pack 1 (MHP1).
- Contact Blood Bank if blood has been transferred in with patient from another Trust or patient is being transferred to another Trust.

5. The clinical / laboratory interface

- Communication lead to arrange for transport of samples / request form to the laboratory.
- BMS to ring communication lead when blood / blood components are ready.
- Communication lead to arrange to collect blood and blood components from the Blood Bank.

6. Communicate stand down of pathway to Blood Bank BMS

- Return any unused products to Blood Bank immediately.

7. Ensure documentation is complete

- Clinical area: monitoring of vital signs, timings of blood samples and communications, transfusion documentation in patient case notes, return traceability information to Blood Bank (Tags).
- Blood Bank: keep record of communications / telephone requests on worksheet.
- Transfusion Practitioner: completion of audit proforma, ideally within 24 hours.

Massive Haemorrhage Protocol Telephone Numbers:

DRI – 07775 013348

BDGH – 07970 423121

Massive Haemorrhage

Loss of whole blood volume in 24hrs or 50% of blood volume in 3hrs or 2-3mL/kg/min.

Consider problems when loss of Blood Volume at 50%, 40mls/kg of resus fluid given in previous hour, clinical signs of signs of shock / coagulopathy

Activate Massive Haemorrhage Protocol

Most senior clinician to co-ordinate contact with Blood Bank, to trigger *"Massive Haemorrhage Protocol"*

Contact Blood Bank to initiate activation on:
DRI – 07775 013348
BDGH – 07970 423121

STOP THE BLEEDING

RESUSCITATE
Airway
Breathing

Haemorrhage Control

- Direct pressure / tourniquet if appropriate
- Stabilise fractures
  - Surgical intervention consider damage control surgery
- Interventional radiology

Haemostatic Drugs

Tranexamic acid
IV/IO
15mg/kg over 10 mins
(max 1g)
2mg/kg/hr infusion

Other haemostatic agents discuss with Consultant

Cell salvage

If available & appropriate

Consider:

- DIC - Risk increases with acidosis and shock
- Volume Overload

MHP = Massive

Take bloods and send to lab:

XM, FBC, PT, APTT, Fib, U+E, LFT & Ca^{2+}

Collect MHP 1

Red cells*	20-40 mL/kg
FFP (*approx. 30 mins to thaw*)	10-20 mL/kg
Platelets	10-20 mL/kg

*Emergency group O blood or group specific blood or XM blood may be issued.

Give MHP 1

Reassess
Proceed or Stand down
Suspected continuing haemorrhage requiring further transfusion
Take repeat bloods as above and deliver to lab in exchange for MHP 2

MHP 2

Red cells	20-40 mL/kg
FFP	10-20 mL/kg
Platelets	10-20 mL/kg
Cryoprecipitate	5-10 mL/kg

Give MHP 2

Reassess
Proceed or Stand down
Suspected continuing haemorrhage requiring further transfusion
Take repeat bloods as above and deliver to lab in exchange for MHP

Give MHP 3

Continuous cardiac monitoring

Prevent Hypothermia

- Use fluid warming device

Low Calcium

Consider 0.14 mL/kg calcium chloride 14.7% (max 7mL)

Therapy Aims

Hb	80-100 g/L
Platelets	>75 x 109/L
APPT ratio	< 1.5
Fibrinogen	>1g/L
Ionised ca^{2+}	>1mmol/L
pH	>7.35(ABG)
pH	>7.25 (cap)
Temp	> 36 oC

monitor potassium

STAND DOWN

- Inform lab
- Return unused components
- Complete documentation

The table below suggests when intervention may be required and the volumes needed.
In cases of massive blood loss, the use of larger volumes of products in the early stages may be more beneficial but care must be taken with volume overload.
Treatment should be guided by laboratory results as early as possible and the advice of a senior haematologist sought. Where massive blood loss occurs treatment needs to proceed on clinical grounds.

Action	Treatment required when:	Volume for treatment and timescale	Comments
Red Blood Cells Emergency O RhD Negative/positive* (Not crossmatched) *RhD positive will be issued if appropriate Group specific Fully Crossmatched	Blood loss approaches 50% of blood volume	**40ml/kg** (3-4 ml/kg for 1g/dl) Immediate 20 mins if Group&Saved 30 mins if no Group&Save Immediate if in fridge 45 mins if no Group&Save 30 mins if Group&Saved	Aim Hb > 8-10 g/dl Located in blood bank issue fridge - Use only if group unknown or no time. Porters will collect urgently.
Platelets	Count reaches <75 x10^9/l Or 50% blood volume loss	**10 – 20ml/kg** Immediate if in stock or *2 hrs from NHSBT*	After replacement of approx. 1.5x blood volume *expect* platelet count of <50 x10^9/l Consider disseminated intravascular coagulopathy (DIC)
Fresh Frozen Plasma	Prolonged Prothrombin (PT) Activated partial thromboplastin time (APTT)	**20ml/kg** *25 minutes to defrost and prepare.*	After replacement of approx. 1.5x blood volume *expect* clotting factor deficiency Consider DIC
Cryoprecipitate	Fibrinogen <1g/l	**5-10ml/kg** *25 minutes to defrost and prepare.*	Fibrinogen <0.5g/l strongly associated with microvascular bleeding
Recombinant Factor VIIa **Tranexamic acid** **Vit K** and prothrombin complex concentrate (PCC)	For intractable non surgical bleeding. Patients on warfarin	**90 microgram/kg** bolus over 2 minutes 15 mg/kg over 10 mins (max 1g), then 2 mg/kg/hr continuous infusion	Guidelines on intranet Find under:-Haem&Onc No.920 'Factor seven recombinant activated' **Contact Haematology Consultant for advice on use of haemostatic drugs**

5. TRAINING/ SUPPORT

Role specific competencies are in place. Staff must have the relevant competencies to perform a transfusion related task / procedure e.g. venepucture, collection of blood products, administration of blood products and prescribing blood products. Competencies are recorded on OLM. Advice regarding the relevant competencies is available from the Transfusion Practitioner.

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

- The Hospital Transfusion Team will ensure that systematic audit and review of the transfusion process is undertaken and will report outcomes to the Hospital Transfusion Committee.

- This will include participation in the programme for national comparative audit of blood transfusion as well as local and regional audits.

- The Hospital Transfusion Committee will review all serious adverse transfusion events / reactions which must be notified direct to blood bank staff in addition to the Trust's incident reporting system; Datix.

7. DEFINITIONS

- Neonate – child less than 28 days
- Infant – greater than 28 days but less than 1 year
- Child – age 1 year and above

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment for All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 1)

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- PAT/PA 19 Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)
- PAT/PA 28 Privacy and Dignity Policy
- PAT/T 8 Specimen and Request Form Labelling Policy
- PAT/PS 7 Patient Identification Policy
- PAT/PA 2 Consent to Examination or Treatment Policy
- PAT/PA 24 Transfer of Patients and their Records

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

This policy is written in accordance with the following guidelines and policies: BSH Guidelines

- Transfusion for Fetuses, Neonates and Older Children 2016
- Use of Platelet Transfusions 2016
- Pre-transfusion Compatibility Procedures in Blood Transfusion Laboratories 2012
- Use of Irradiated Blood Components 2020
- Administration of Blood Components 2017
- Spectrum of Fresh-Frozen Plasma and Cryoprecipitate products 2018
- Haematological Management of Major Haemorrhage 2015

APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Blood Transfusion Policy – Transfusion of Neonates Infants and Children	Pathology	Gill Bell	New Policy	14.06.2021

1) Who is responsible for this policy? Name of Division/Directorate: Pathology

2) Describe the purpose of the service / function / policy / project/ strategy? The policy provides the Trust with local procedures for pre-administration of blood products.

3) Are there any associated objectives? Legislation, targets national expectation, standards – Yes compliance with BSQR 2005, BSH & NICE guidelines.

4) What factors contribute or detract from achieving intended outcomes? Lack of compliance

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

. If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation]

6) Is there any scope for new measures which would promote equality? [any actions to be taken

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4	

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form - see CORP/EMP 27.

Date for next review: June 2024

Checked by: Atchuta Bobbili Date: 14.06.2021

Doncaster and Bassetlaw Teaching Hospitals
NHS Foundation Trust

BLOOD TRANSFUSION POLICY
Jehovah's Witnesses and Refusal of Transfusion

This procedural document supersedes: PAT/T 2 v.6 – Blood Transfusion Policy

Did you print this document yourself?
The Trust discourages the retention of hard copies of policies and can only guarantee that the policy on the Trust website is the most up-to-date version. If, for exceptional reasons, you need to print a policy off, it is only valid for 24 hours.

Executive Sponsor:	Medical Director
Author/reviewer:	Gill Bell - Chief Biomedical Scientist
Date revised:	May 2021
Authorised by:	Atchuta Bobbili – Chair Hospital Transfusion Committee (HTC)
Approved by:	Hospital Transfusion Committee
Approval date:	14 June 2021
Date issued:	25 June 2021
Next review date:	June 2024
Target Audience:	Trust wide; all staff involved in the transfusion process

Amendment Form

Version	Date Issued	Brief Summary of Changes	Author
Version 1	25 June 2021	• This is a new procedural document, please read in full.	Gill Bell – Chief Biomedical Scientist

Contents Page

1. INTRODUCTION

A patient may refuse blood transfusion for a variety of reasons e.g. Jehovah's Witness. We need to ensure that individual's beliefs / preferences are acknowledged and respected and that relevant information is provided for the management of these patients.

2. PURPOSE

This policy is based on recognised guidelines and provides the Trust with local procedures for the management of patients refusing a blood transfusion.

3. DUTIES AND RESPONSIBILITIES

- All staff involved in the management of these patients must be aware of this policy.
- All staff involved should understand their role and responsibilities.
- Ensure alternatives have been explored.

4. PROCEDURE

Key Recommendations:

- A patient may refuse blood transfusion for a variety of reasons e.g. Jehovah's Witness (JW). We need to ensure that individual's beliefs / preferences are acknowledged and respected and that relevant information is provided for the management of these patients.
- The majority of JW's carry a "No Blood" card which is an "Advance Directive" absolutely refusing blood, which also releases clinicians from any liability arising from this refusal.

- It is the responsibility of the patient or attending relative to make sure their decision is drawn to the attention of healthcare professionals. If a patient decides to refuse blood products this should be clearly noted in the case notes. If an Advanced Decision is presented, a copy should be prominently placed in the patient's notes.

- If refusal is by a non-Jehovah's Witness is based on fear of transfusion transmitted infection, the risks should be clearly explained.

4.1. Jehovah's Witnesses (JW)

A patient may refuse blood transfusion for a variety of reasons e.g. Jehovah's Witness. We need to ensure that individual's beliefs / preferences are acknowledged and respected and that relevant information is provided for the management of these patients.
If refusal is by a non-Jehovah's Witness is based on fear of transfusion transmitted infection, the risks should be clearly explained.
Refusal of blood transfusion should be carefully documented in the patient's medical notes by the consultant / most senior doctor present, with the reasons given together with date, time and signature.

The use of whole blood and its four primary components, Red Cells, White Cells, Platelets and Plasma (FFP) are refused on religious grounds.

However there are no specific rules regarding the derivatives or fractions of primary blood components. Anti-D immunoglobulin and Cryoprecipitate may be accepted and should be offered where appropriate.
Each JW must "conscientiously decide for him/herself" (Watchtower, June 2000) if treatments offered are acceptable. The Jehovah's Witness Hospital Liaison Committee (HLC) is available 24 hours to help staff and patients with advice and guidance and clarification on these matters.

4.2. JW Acceptance / Non acceptance of blood products:

Not acceptable	May or may not be accepted (matter of personal choice)	Acceptable
Primary Blood Components: • White Cells • Red Cells • Platelets • Fresh Frozen Plasma (FFP)	Derivatives of Primary Blood Components: • Albumin • Immunoglobulin (Anti-D) • Coagulation Factors • Cryoprecipitate • Recombinant Clotting Factors e.g. FV11a or Beriplax (PCC)	Crystalloids, Synthetic Colloids etc: • Dextrans • Hydroxyethylstarch • Gelatins • EPO
Pre-deposited Autologous blood component donations	• All forms of intraoperative blood salvage (cell saver) • Acute normovolaemic haemodilution • Haemodialysis • Epidural Blood Patch • Diagnostic Procedures involving the patient's Own Blood • Stem Cell / Organ Transplant / Donation	

4.3. Advanced Decision to Refuse Specified Medical Treatment

It is a general principle of law and medical practice that people have a right to consent to or refuse treatment. The Courts have recognised that adults have the right to say in advance that they want to refuse treatment if they lose capacity in the future – even if this results in their death.
There is not a set form for written advance decisions. However, such a decision should be put in writing and it should include the following information:

- Full details of the person making the advanced decision including name, date of birth and home address.
- The name and address of the person's G.P.
- A clear statement of the decision, identifying the treatment to be refused and the circumstances in which the decision will apply, explicitly stating: even if life is at risk.
- The date the document was written (or reviewed).
- Signatures of the patient/patient advocate and the person witnessing the signature.

The majority of JW carry a "No Blood" card which is an "Advance Directive" absolutely refusing blood, which also releases clinicians from any liability arising from this refusal.

It is the responsibility of the patient or attending relative to make sure their decision is drawn to the attention of healthcare professionals. If a patient decides to refuse blood products this should be clearly noted in the case notes. If an Advanced Decision is presented, a copy should be prominently placed in the patient's notes.

4.4. Prior to Major elective surgery

In cases where blood loss of more than 500 mL is likely:

- Pre-assessment clinic at least 4 weeks prior to surgery, at this visit the FBC, Reticulocytes, Ferritin, B12 & folate must be checked.

- Liaison between surgeon, anaesthetist and consultant haematologist to consider strategies and get approval from the patient.

- It is important that the potential consequences of not receiving blood products and the risks associated with massive haemorrhage are explained to the patient. This discussion should be documented in the case notes.

- Clarify with the patient what forms of treatment they will actually accept, does the refusal include all types of blood product or specific types, will the patient accept cell salvage etc. Be quite clear as to what the patient's wishes are in the event of them being unconscious and suffering life threatening blood loss. A detailed record of the discussion must be documented in the case notes.

- Where appropriate the possible use of alternative blood conservation strategies should be discussed:
    - Tourniquets
    - Haemodilution
    - Antifibrinolytics - Tranexamic acid
    - Topical Haemostatic agents - Tissue sealants / adhesives

- Check what medication the patient is taking, especially aspirin, Clopidogrel, Warfarin and non-steroidal anti-inflammatory drugs; decide when / if these should be stopped / replaced.

- Make sure all clinical staff likely to be involved in the patient's treatment and Blood Bank is made aware of the patient's position with regard to refusal of blood products.

- Pre-operative Optimisation

In many cases without prior anaemia pre-operative Erythropoietin (EPO) therapy is unnecessary unless blood loss is likely to be in excess of 1000ml. In such patients post-operative iron and folate supplement will restore the lost red cells over a few weeks.
However, in cases where blood loss of more than 500 ml is likely, the following actions should be considered:
Pre-operative treatment with Erythropoietin
This will depend on obtaining funding for a specific case. It may take a significant amount of time to get approval.

- Preoperative Erythropoietin 40,000 units subcutaneously weekly for 3 weeks + 40,000 units post op day 1. This dosage is for an adult (55-80Kg), outside this range discuss with Consultant Haematologist.
- Start Erythropoietin 4 weeks prior to planned surgery – this date should not be changed once pre op treatment started due to its expense.
- Check FBC, reticulocytes & ferritin after 2 weeks of Erythropoietin therapy Iron & folate supplementation pre op and post op.
- Use of IV Iron may be preferable to oral iron. Folic acid should also be given orally at 5 mg daily.

Intra-operative cell salvage or Post-operative salvage

- Consider the use of intra-operative cell salvage or post-operative salvage from wound drains if acceptable to the patient. This should be documented on the patient consent form.

- Preoperative haemodilution is often acceptable to the JW patients and this possibility should be explored.

Tranexamic acid & Prothrombin Complex Concentrate (e.g. Beriplex)

- May be suitable interventions, and should be explored. Appropriate consent would be required. All plasma derivatives can be considered and consent to transfuse is a matter of personal choice for the individual patient.

Sampling

- Consider the impact of blood sampling; are all the tests requested indicated? Could microtainers be used?

4.5. Jehovah's Witness Liaison Committee Contacts

Jehovah's Witnesses maintain a network of Hospital Liaison Committees that are available at any time to assist with the management of patients, either at the request of the patient or on behalf of the treating team.

Local Liaison Team Contact Details:

Richard Colley
Sheffield HLC
Mobile: 07598957852
richardcolley@sheffield-hlc.org.uk

Joe Nadin
Sheffield HLC
Mobile: 07984196169
joenadin@sheffield-hlc.org.uk

Alternatively contact:
Hospital Information Services for Jehovah's Witnesses
IBSA House,
The Ridgeway,
London
NW7 1RN

his@uk.jw.org

24-Hour Contact Number: (020) 8906 2211

Medical Website for the latest medical papers
www.jw.org/en/medical-library/

4.6. Treatment of Jehovah's Witnesses

Emergency Admissions

- A conscious competent adult - has the right to refuse, or choose alternative medical treatments.

  In an emergency, clinicians are obliged to provide care whilst respecting the patient's competently expressed views.

- For the unconscious patient – a signed and witnessed advanced decision card absolutely refusing blood / blood components and releasing the clinician from any liability for the possible consequences of refusal if found on the patient or produced by relatives must be respected.

  If an advanced decision is available a copy should be secured to the patient's notes. A clear signed, dated and timed entry outlining the patient's wishes must be documented in the notes accordingly.

  If no such advanced decision is readily available, the doctor must act in the best interest of the patient. Treatment necessary to preserve life, health or well-being may be given without consent, which may involve giving blood. It would be advisable to contact the local HLC as they may be able to get access to the patients advanced decision.

  Relatives or associates have no legal right to decline treatment on the patient's

behalf in the absence or a signed advanced decision. If a patient is unable to give an informed, rational opinion, and when an applicable advanced decision does not exist, the clinical judgement of a doctor should take precedence over the opinion of relatives or associates.
In the case of emergency patients identified as Jehovah's Witnesses but without documentation, every effort should be made to avoid the use of blood and blood products in the Perioperative period. However, in serious or life-threatening situations the use of blood and blood products should be based on the judgement of the clinician responsible for the patient. GMC [2013} guidance on patients who refuse treatment affirms this stating that: 'In an emergency, you can provide treatment that is immediately necessary to save life or prevent deterioration in health without consent'.

- Conscious patients with diminished mental capacities – should be treated in a similar manner to the unconscious patient in line with the Mental Capacity Act 2005.

  If somebody tells a healthcare professional that an advance decision exists for a patient who now lacks capacity to consent, they should make every reasonable effort to find out what the decision is. Reasonable efforts might include having discussions with relatives of the patient, looking in the patient's clinical notes held in the hospital or contacting the patient's GP.

- Children
  If a child is judged to be of sufficient age and maturity to fully understand the implications of their beliefs, they should be treated as previously stated.
  If however elective or emergency treatment of a child is required and this is against the parents or guardians wishes then the following questions should be addressed:

  - Has the Hospital Liaison Team been contacted and asked for assistance?
  - Have the parents / guardians been given the full details regarding the need for treatment?
  - Have ALL non-blood medical management options been fully explored?
  - Is there another hospital willing to treat without blood?

Once all these questions have been addressed and it is still felt that treatment is essential then a court order should be sought. The parents or guardians should be immediately notified of the intent to obtain such an order and invited to attend any case conference, which takes place. The support of a minimum of two practitioners of consultant status is required to seek the order and it should be limited to the immediate medical incident.

In an emergency situation the doctor can give lifesaving transfusions after taking a second opinion to a child despite parental refusal. He/she may face criminal prosecution if a child comes to harm because treatment was deliberately withheld.

Surgeons have a legal and ethical responsibility to ensure the wellbeing of the child under their care and this must always be their first consideration; however, every effort must be made to respect the beliefs of the family and avoid the use of blood or blood products wherever possible. [RCS, 2016]

Obstetric cases

Early risk assessments and management plans regarding the refusal of blood transfusion or blood products is essential, all discussions with the woman will be clearly documented in the woman's hospital and hand held records.
A care plan for women in labour refusing a blood transfusion will be completed in the antenatal period and filed in the woman's hospital records.

Note: For further information please refer to MSG 96 Guideline for Women who Refuse Blood Transfusion.

Medical Treatment:

- Abortion
  Deliberate abortion is unacceptable. If, at the time of birth a choice has to be made between the life of the mother and that of the child, it is up to the individuals concerned to make that decision.

- Cell Salvage
  Many Jehovah's Witnesses will accept cell salvage, providing the system used is constantly linked to the patient's circulatory system and there is no storage of the patient's blood. See AAGBI guidelines for treatment of witnesses 2018.
- Sampling
  Consider the impact of blood sampling; are all the tests requested indicated? Could microtainers be used?

- Proactive Patient Management
  Planning, good communication and documentation are essential. Proactive and responsive management of bleeds is critical.

- Blood Transfusion
  Jehovah's Witnesses believe that blood transfusion is forbidden by Biblical commands and therefore will refuse the transfusion of blood, FFP, white cells and platelets.
  However, these beliefs do not absolutely rule out the use of products plasma derivatives such as albumin, immunoglobulins and anti-haemophilic preparations. Each Witness will decide whether he / she will accept these products.

- Heart Bypass
  Some Witness patients permit the use of heart-lung machines when the pump is primed with non-blood fluids and blood is not stored in the process.

- Haemodialysis
  This is a matter for each witness patient to decide for him or herself. A closed circuit should be used with no blood prime or storage.

- Haemodilution
  Induced haemodilution is a matter for the witness patient to decide according to his / her conscience when a closed circuit is used and no blood storage is involved. Jehovah's Witnesses do not accept preoperative collection and storage of blood and its later transfusion (autologous).

- Plasma Derivatives
  Such as albumin, Anti-D immunoglobulin, Cryoprecipitate and anti-haemophilic preparations are not forbidden and should be offered, although some witnesses may conscientiously refuse them.

- Expanders
  Plasma volume expanders are acceptable e.g. Sodium Chloride 0.9%.

5. TRAINING/ SUPPORT

Support is available from the Hospital Team and the Jehovah's Witness Liaison Committee Contacts (see 4.5)

6. MONITORING COMPLIANCE WITH THE PROCEDURAL DOCUMENT

The Hospital Transfusion Committee will review all adverse incidents reported to the Trust's incident reporting system; Datix.

7. DEFINITIONS

All defined within the document.

8. EQUALITY IMPACT ASSESSMENT

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service, population and workforce, ensuring that none are disadvantaged over others. Our objectives and responsibilities relating to equality and diversity are outlined within our equality schemes. When considering the needs and assessing the impact of a procedural document any discriminatory factors must be identified.

An Equality Impact Assessment (EIA) has been conducted on this procedural document in line with the principles of the Equality Analysis Policy (CORP/EMP 27) and the Fair Treatment for All Policy (CORP/EMP 4).

The purpose of the EIA is to minimise and if possible remove any disproportionate impact on employees on the grounds of race, sex, disability, age, sexual orientation or religious belief. No detriment was identified. (See Appendix 1)

9. ASSOCIATED TRUST PROCEDURAL DOCUMENTS

- PAT/PA 19 Mental Capacity Act 2005 Policy and Guidance, including Deprivation of Liberty Safeguards (DoLS)
- PAT/PA 28 Privacy and Dignity Policy
- PAT/PA 2 Consent to Examination or Treatment Policy

10. DATA PROTECTION

Any personal data processing associated with this policy will be carried out under 'Current data protection legislation' as in the Data Protection Act 2018 and the UK General Data Protection Regulation (GDPR) 2021.

For further information on data processing carried out by the trust, please refer to our Privacy Notices and other information which you can find on the trust website: https://www.dbth.nhs.uk/about-us/our-publications/information-governance/

11. REFERENCES

- JW Medical Website for the latest medical papers www.jw.org/en/medical-library/
- Royal College of Surgeons (2016) Caring for patients refuse blood: a guide to good practice for surgical management of Jehovah's Witness and other patients who decline transfusion. https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/caring-for-patientswho-refuse-blood/
- Care Plan for Women in Labour who Refuse a Blood Transfusion (2013) Hospital information services for Jehovah's Witnesses HID.GB@jw.org
- Children Act 1989 (c.41), ISBN 0105441899. HMSO, London 1989
- Mental Capacity Act 2005 Code of Practice.
- Care Plan for Surgery in Jehovah's Witnesses (2015) Hospital information services for Jehovah's Witnesses HID.GB@jw.org
- Handbook of Transfusion Medicine (2015) 5th Edition.
- Clinical strategies for avoiding and controlling haemorrhage and anaemia without blood transfusion in obstetrics and Gynaecology (2013). Hospital information services for Jehovah's witnesses HID.GB@jw.org
- Caring for patients who refuse blood – A guide to surgical management of Jehovah's witnesses and other patient who decline transfusion (2016) Royal College of Surgeons
- GMC, 2013, Personal Beliefs and Medical Practice
- RCS, 2016, A Guide to Good Practice - Consent: Supported Decision-Making

APPENDIX 1 – EQUALITY IMPACT ASSESSMENT - PART 1 INITIAL SCREENING

Service/Function/Policy/Project/ Strategy	Division	Assessor (s)	New or Existing Service or Policy?	Date of Assessment
Blood Transfusion Policy – Jehovah's Witnesses and the Refusal of Transfusion	Pathology	Gill Bell	New Policy	14.06.2021

1) Who is responsible for this policy? Name of Division/Directorate: Pathology

2) Describe the purpose of the service / function / policy / project/ strategy? The policy provides the Trust with local procedures for pre-administration of blood products.

3) Are there any associated objectives? Legislation, targets national expectation, standards – Yes compliance with BSQR 2005, BSH & NICE guidelines.

4) What factors contribute or detract from achieving intended outcomes? Lack of compliance

5) Does the policy have an impact in terms of age, race, disability, gender, gender reassignment, sexual orientation, marriage/civil partnership, maternity/pregnancy and religion/belief? No

. If yes, please describe current or planned activities to address the impact [e.g. Monitoring, consultation]

6) Is there any scope for new measures which would promote equality? [any actions to be taken

7) Are any of the following groups adversely affected by the policy?

Protected Characteristics	Affected?	Impact
a) Age	No	
b) Disability	No	
c) Gender	No	
d) Gender Reassignment	No	
e) Marriage/Civil Partnership	No	
f) Maternity/Pregnancy	No	
g) Race	No	
h) Religion/Belief	No	
i) Sexual Orientation	No	

8) Provide the Equality Rating of the service / function /policy / project / strategy – tick (✓) outcome box

Outcome 1 ✓	Outcome 2	Outcome 3	Outcome 4	

**If you have rated the policy as having an outcome of 2, 3 or 4, it is necessary to carry out a detailed assessment and complete a* Detailed Equality Analysis form - see CORP/EMP 27.

Date for next review: June 2024

Checked by: Atchuta Bobbili Date: 14.06.2021

Timing of samples and interpretation for measurement of Carbamazepine.

KEY FACTS - Carbamazepine

Sample timing - Immediately before taking the dose, at least 5 days after initiation of treatment or a dose change.

Therapeutic range. Now reported in mass units as required by the national harmonization project (& with standardized range).

- 4 – 12 mg/L for single drug use. (in previous units was 20 - 50 umol/L)
- 4 – 8 mg/L when used in multidrug combination (Originally 17 - 34 umol/L)
- Results will be telephoned as a critical result if they are 25mg/L or higher.

Bioavailability of oral dose - Peak plasma concentration typically about 3 Hrs post dose (Highly variable).

Metabolism - Carbamazepine is metabolised almost completely to a variety of active & inactive metabolites by the hepatic mixed function oxidase system. Metabolism is induced by Carbamazepine itself, Phenytoin and Phenobarbitone. Initial elimination half time is about 35 Hrs decreasing to about 20 Hrs after a few weeks treatment.
Lamotrigine co-administration may inhibit metabolism & precipitate toxicity.

Distribution - Carbamazepine distributes rapidly with a volume of distribution of 0.8 - 1.9 L/Kg.
Protein binding - About 75% of circulating Carbamazepine and metabolites are bound to proteins, therefore there is potential for increase in the free fraction whenever other protein bound drugs are co-administered.

Elimination - Urinary excretion of metabolites and conjugated metabolites

Timing of Carbamazepine measurements after starting treatment or a dose change.

Carbamazepine is usually commenced gradually over three or four weeks to avoid initial adverse effects during equilibration. These occur because carbamazepine induces it's own metabolism. Initial dose is typically 1/4 to 1/3 the final maintenance dose, increasing by 1/4 or 1/3 the full dose per week. The main limitation in monitoring Carbamazepine is the need to ensure stable metabolic activity before measurements are taken this requires at least 5 days after the commencement or last dose change of either carbamazepine or other interacting drug.

Timing of Carbamazepine measurements relative to taking the dose.

Remember. Drug concentrations are not stable from dose to dose at any time after the dose unless the required time has elapsed since commencing treatment or the last dose change.

The concentration of Carbamazepine is most stable and correlates with therapeutic effects close to the time of taking the next dose. Values measured at this time have been used to derive the therapeutic range and this timing should also be used in taking samples to direct changes in dose. Specimens taken substantially before this timing will yield inappropriately high results due to incomplete distribution into peripheral tissues and may result in selection of an inappropriately low dose.

Interpretation of results for Carbamazepine.

Before interpreting a result check the specimen timing was correct

Due to combined effects on metabolism and competition for protein binding, Therapeutic range depends on whether Carbamazepine is used as a single drug or in combination with other drugs.

4 – 12 mg/L for single drug use. (20 - 50 umol/L)

4 – 8 mg/L when used in multidrug combination (17 - 34 umol/L)

Some patients may show adequate therapeutic effects at concentrations below 20 umol/l and there is no indication for increasing the dose in these individuals to achieve levels within the quoted ranges.

Toxicity can occur within these ranges in some individuals and can probably be avoided by maintaining Carbamazepine levels below 9.6mg/L (40 umol/L). Expect severe toxicity about 48 mg/L (200 umol/L).

1. British National Formulary (March 1995)
2. Therapeutic Drug Monitoring. (Hallworth and Capps). ACB Venture publications, London. ISBN 0 902429 05 1
3. Individualizing Drug Therapy. Gross, Townsend, Frank INC, New York. Library of Congress No 81-82052
4. Clinical pharmacokinetics of carbamazepine. Clinical Pharmacokinetics 3, 128 (1978)

Timing of samples and interpretation for measurement of Cyclosporin / Ciclosporin.

This page is divided into sections as follows:-

- *Timing of measurements after starting therapy or a dose change.*
- *Timing of measurements relative to taking the dose.*
- *Interpretation of results.*

KEY FACTS - Cyclosporin

- ***Cyclosporin is extensively metabolised & assays respond differently to the metabolites. Therapeutic ranges depend on the organ which was transplanted & the assay used & the practice of the transplant centre. All samples are sent to the hospital which was responsible for the original surgery. For new patients, please include details of the transplant centre with the request.***
- ***Specimens for monitoring treatment of autoimmune disease are sent to Northern General Hospital, Sheffield.***
- ***Many centers do not return results to us but advise on dose adjustments directly to the requesting physician or patient.***

Sample type - Requires whole blood due to cyclosporin accumulating in red cells. Anticoagulant is typically EDTA (Lavender top tube) but King's College Hospital require Li heparin (Green top).

Sample timing - Immediately before taking the dose, at least 1 week after initiation of treatment or dose change.

Therapeutic range - Depends on the assay used, time since transplantation & organ transplanted.
Toxic & therapeutic effects are not well correlated with concentration.

Bioavailability of oral dose - 10 - 60% Peak values typically 1 - 8 Hrs post dose. Absorbtion is affected by intestinal motility, particularly diarrhea which can cause marked decline in absorbtion. Reduced bile flow also slows absorbtion.

Metabolism - Cyclosporin is metabolised in the liver by the mixed function oxidase system. More than 30 metabolites, some of which are active. Metabolism highly variable with some evidence of diurnal rhythm. Typical elimination half life is 6 Hrs.
Metabolites are excreted in bile (less than 1% in urine) and may be re-absorbed. Cyclosporin metabolism is therefore altered by liver disfunction.

Distribution - 1.0 - 13.0 l/Kg Extensively distributed, mainly in lipid rich tissues.

Timing of Cyclosporin measurements after starting treatment or a dose change.

Due to the extensive distribution into fatty tissues steady state is reached after about 1 week in most patients. Some individuals may require longer if particularly obese.

Timing of Cyclosporin measurements relative to taking the dose.

Remember. Drug concentrations are not stable from dose to dose at any time after the dose unless the required time has elapsed since commencing treatment or the last dose change.
Due to the variability in absorbtion both between patients and between doses in the same patient, the concentration of Cyclosporin is most stable close to the time of taking the next dose. Values

measured at this time have been used to derive the therapeutic range and this timing should also be used in taking samples to direct changes in dose. Specimens taken substantially before this timing will yield inappropriately high results due to incomplete distribution into peripheral tissues and may result in selection

of an inappropriately low dose.
To avoid the effects of diurnal variation repeat samples should be taken at the same time of day if possible.

Interpretation of results for Cyclosporin.

Most centres advise on dose adjustments directly on the requesting clinician or patient. This is based on the assumption that specimen timing is correct. Therefore it is **essential that those taking the sample use the correct timings**

Specimens for monitoring treatment of autoimmune disease are sent to Northern General Hospital, Sheffield.

Their target concentrations are

- 155 ug/L Ulcerative colitis
- 100 ug/L for renal transplants.
- Cardiac transplant - Initially 300 ug/L decreasing to 200 ug/L.

For new patients, it is essential that details of the transplant centre are included with the request.

References

1. British National Formulary (March 1995)
2. Therapeutic Drug Monitoring. (Hallworth and Capps). ACB Venture publications, London. ISBN 0 902429 05 1
3. Individualizing Drug Therapy. Gross, Townsend, Frank INC, New York. Library of Congress No 81-82052
4. NGH target range data was a personal communication by Dr Gray, NGH clinical chemistry Dept. 29/1/1998.

Timing of samples and interpretation for measurement of Digoxin.

This page is divided into sections as follows: -

- *Common indications for measurement.*
- *Timing of measurements after start of treatment or a dose change.*
- *Timing of measurements relative to taking the dose.*
- *Interpretation of results.*
- *Symptoms, Actions and future measurements in the event of OVERDOSE.*

You may also want to review the *Pharmacy formulary site page about Digoxin* and the page about *Importance of specimen timing in therapeutic drug monitoring.*

KEY FACTS - Digoxin

Sample timing - At least 6 hours post dose (IV or Oral dosing) and at least1 week after initiation of treatment or dose change (Longer if renal function is abnormal) Can also be measured after 1st maintenance dose if IV loading dose used.

Therapeutic range – 0.5 – 2.0 ug/L (Previously reported as 1.0 - 2.6 nmol/L)

Almost always get toxic effects at or above 2.3 ug/L (3.0 nmol/L). Results will be telephoned if they are >2.5 ug/L and are correctly timed relative to the dose as will samples with K< 2.5 mmol/L and digoxin > 0.78 ug/L.

Bioavailability of oral dose - 40 - 75% from tablets depending on preparation Up to 80% for Elixir. Lowered by co-administration of drugs which affect GI motility (E.g. Metoclopramide), Malabsorbtion syndromes lower bioavailability. Either may result in sub therapeutic effects from a previously adequate dose.

Metabolism - Most patients metabolize less than 20% of dose. About 10% of individuals metabolize significant proportion of dose, yielding active metabolites, which may not be measured. **This can be a cause of toxicity despite a 'therapeutic range' result.**

Distribution - Effectively two compartments - central (Blood, kidney, liver) - Peripheral (Skeletal and cardiac muscle) At equilibrium, peripheral compartment has 15 - 30 times central concentration therefore very significant errors are possible due to sampling too early after dose.

Elimination - Excretion via kidneys. Half-life typically 40 hours. Deterioration in renal function leads to increased Half life (up to 100 hrs or more) and is a common cause of toxicity.

Creatinine clearance (Measured or e-GFR)	Elimination half life	Time to steady state
90 ml/min	1.6 days	6 days
60 ml/min	2 days	8 days
35 ml/min	2.5 days	10 days
15 ml/min	3 days	12 days
5 ml/min	3.2 days	13 days.

Common indications for measurement of DIGOXIN.

Monitoring of Digoxin is not indicated in the majority of patients on maintenance treatment when a clear therapeutic effect has been obtained.

Monitoring is valuable in the following circumstances-

- **Poor initial response.** Measurement indicates whether the patient is compliant, what concentration the current dose is achieving and indicates how much of an increase in dose is likely to be safe.
- **Poor response after initial good response.** Measurement indicates whether the patient is compliant and may indicate the need for an increased dose.
- **To decide if continued therapy is required.** A patient on long-term digoxin treatment with concentrations less than 0.5 ug/L (1.0 nmol/L) is unlikely to deteriorate if digoxin is stopped.
- **When changing dose of interacting drugs.** Adding or removing interacting drugs will alter the therapeutic efficacy of a constant digoxin dose, monitoring will indicate the required dose change to maintain therapeutic benefit. E.g. Diuretics, Quinidine, Metaclopromide.

- **When renal function is changing.** Deteriorating renal function is a common cause of toxicity. Monitoring will result in early warning of changing concentrations and allows appropriate dose adjustment.
- **Suspected toxicity.** Monitoring digoxin may confirm the presence of a toxic level but should be accompanied by investigations (K, Ca, Mg, Creatinine and Thyroid functions) to exclude alterations in tissue sensitivity.

Timing of DIGOXIN measurements after start of treatment or a dose change.
Treatment is usually commenced using the 'Maintenance dose' of digoxin in patients with mild cardiac symptoms. Where rapid onset of symptom control is essential, there will be an initial 'loading dose' (0.75 to 1.0 mg) usually given as an IV infusion over several hours. This achieves the steady state condition very rapidly. The first 'Maintenance dose' is given the appropriate time later and monitoring can commence after this dose. In treatment with 'Maintenance' doses (Typically 125 - 250 micrograms twice daily), the elimination half-life of digoxin regulates the accumulation between doses.

If there is no loading dose, between three and five half lives are required before the difference between current and 'steady state' concentrations becomes less than the assay imprecision (Typically 5 - 10% CV). In normal individuals the half-life is 40 hours and therefore a period of at least1 week should be allowed before checking the concentrations achieved.

Caution Renal function leads to increased half-life (100 hrs or more in Anuria) which can prevent steady state being achieved within a practical time.

Creatinine clearance	Elimination half life	Time to steady state
90 ml/min	1.6 days	6 days
60 ml/min	2 days	8 days
35 ml/min	2.5 days	10 days
15 ml/min	3 days	12 days
5 ml/min	3.2 days	13 days

This timing limitation applies equally to both increases and decreases in dose so monitoring in renal failure patients can be problematical.

Timing of DIGOXIN measurements relative to taking the dose.
Digoxin distribution after an IV dose closely matches a two compartment mathematical model. The central compartment represents rapidly equilibrating tissues with good blood supply (Blood, kidney, liver) while the peripheral compartment represents less well perfused tissues (Skeletal and cardiac muscle). We are taking the sample from the central compartment whereas the response to digoxin occurs in the other compartment; therefore the concentrations in the two compartments must reach equilibrium before the sample is taken. This is essentially complete by 6 hours after the dose (Oral or IV) and therefore the sample can be taken any time between 6 hours and the next dose. Digoxin is rapidly absorbed and therefore the kinetics of oral dosing is similar to IV. The Distribution phase of digoxin imposes the limitation on sample timing after the doses.

Caution
At equilibrium, the peripheral compartment has 15 - 30 times the central concentration therefore very significantly increased concentrations will occur due to sampling too early after dose. Any dose

change based on these measurements could result in sub therapeutic concentration and return of the patient's original symptoms.

Interpretation of results for DIGOXIN.

- **-Before interpreting a result check the specimen timing was correc**t
- **-**Therapeutic ranges for Digoxin are poorly defined. The concentration does correlate well with certain measurable cardiac parameters (ECG results and systolic time intervals) but these do not relate closely to overall therapeutic outcome.
  Little or no therapeutic effect is seen at digoxin levels of less than 0.5 ug/L (1.0 nmol/L).
  Toxicity almost always occurs above 2.3 ug/L (3.0 nmol/L).
  The generally accepted 'Therapeutic target' is 0.5 – 2.0 ug/L (1.0 - 2.6 nmol/L).
  Some patients may benefit from carefully increasing the dose to give concentrations above 2.0 ug/L if no adverse effects become evident.

- The sensitivity of myocardium to digoxin is altered by several co-existing factors, which hamper the interpretation of digoxin levels.
  1. Potassium Hypokalaemia is associated with an enhanced response and is the commonest cause of toxic symptoms. Potassium should always be measured when toxicity is suspected and any hypokalaemia corrected prior to adjusting the digoxin dose. this may resolve the apparent toxicity. Digoxin levels cannot be interpreted in the presence of hypokalaemia.
  2. Calcium and Magnesium Hypercalcaemia and hypomagnesaemia are also associated with increased sensitivity and should be corrected prior to monitoring digoxin.
  3. Thyroid function Hypothyroidism increases sensitivity to digoxin and Hyperthyroidism decreases it, making interpretation difficult in patients with thyroid disease.
  4. Age. Elderly patients are more sensitive to digoxin than young patients.

- **Caution - Pregnancy, Renal failure and liver failure.**
- There are a number of 'Digoxin like factors' which accumulate in these conditions. These may cross react in some assays (But not all) and can produce apparently therapeutic values on patients who are not taking digoxin or 'Toxic' concentrations in a well controlled patient without toxic symptoms. The identity of these factors is not well known and a particular digoxin assay may be affected by any combination of the conditions. Concentrations must be carefully interpreted in conjunction with clinical assessment of the patient's symptoms

Causes, Symptoms and Treatment in the event of OVERDOSE.

- **Causes of Digoxin OVERDOSE.**
- Toxic effects are common and can be Severe or Fatal. Diagnosis should depend on a careful clinical examination and should not be entirely based on digoxin measurement as toxic symptoms may occur within the therapeutic range and a few patients may require apparently 'Toxic' concentrations for optimal symptom relief. Common causes of toxicity include: -
  - Metabolic abnormalities.
  - Renal failure (Especially gradual onset).
  - Effects of other drugs.

Metabolic abnormalities.
Response to a fixed digoxin concentration is dependent on other biochemical parameters including Potassium, Calcium and Magnesium. Symptoms of toxicity may appear or be exacerbated when the patient has co-existing hypokalaemia, Hypercalcaemia, Hypomagnesaemia or hypothyroidism. All of these conditions increase the sensitivity of the myocardium to digoxin. This can result in 'Toxic' symptoms when the digoxin concentration is within the 'Therapeutic' range. Treatment with non potassium sparing diuretics is probably the most common cause of toxicity in a previously stable patient. In most patients with increased sensitivity to digoxin, the underlying abnormality can be treated rapidly and the 'Digoxin toxicity' will resolve without requiring a dose change.

Renal failure.
Renal excretion of digoxin is the main elimination route for parent drug and active metabolites. In normal individuals the half life is 40 hours and the individual dose is likely to have been established under these conditions. Any significant deterioration in renal function will extend the elimination half-life resulting in clearance of less of each dose before the next dose is taken.

Creatinine clearance	Elimination half life	Time to steady state
90 ml/min	1.6 days	6 days
60 ml/min	2 days	8 days
35 ml/min	2.5 days	10 days
15 ml/min	3 days	12 days
5 ml/min	3.2 days	13 days

Therefore failing renal function leads to a gradual increase in digoxin concentration throughout the dose - dose cycle. Large doses are commonly divided into a twice daily regimen to minimize the occurrence of toxic symptoms therefore the initial onset of extra symptoms will be gradual and will be observed for a progressively longer period after each dose. These become continual as the renal failure (and concentration increase) becomes more severe. By the time the patient becomes anuric, the elimination half life will be increased to 100 hrs or more producing a several fold increase in the digoxin concentrations at all times and there may be a very large excess of digoxin accumulated in the tissues. Renal failure also introduces a potential confounding effect as there are a number of 'Digoxin like factors' which accumulate in renal failure (Also found in pregnancy and liver failure). These may cross react in some assays (But not all) and can produce apparently 'Toxic' concentrations in a well controlled patient without toxic symptoms.

Caution
Symptoms may be exacerbated where the patient is also treated with non potassium sparing diuretics as this can result in hypokalaemia and increased sensitivity of the myocardium to digoxin. This can result in 'Toxic' symptoms when the digoxin concentration is within the 'Therapeutic' range. Most treatments which resolve the renal failure and / or rectify the resulting metabolic disturbances will be highly effective in reducing the toxicity of digoxin by improving the clearance. Resolution of the renal failure will rapidly correct the toxicity allowing the patient to continue on the previous dose, however a dose reduction will often be required until adequate renal function can be restored. Haemodialysis is effective in treating moderate toxicity due to renal failure but it mainly acts by ensuring normal tissue sensitivity via avoiding or correcting Hypokalaemia, Hypercalcaemia and Hypomagnesaemia. It is not possible to remove significant amounts of digoxin by dialysis due to the relatively large amounts of digoxin contained in the extravascular compartment (Volume of distribution is 4 - 10 L/Kg).

Effects of other drugs.
A number of drugs alter the handling of digoxin by changing absorption and excretion of the parent compound. Treatment with or changes in dose of these drugs may result in alterations in availability of digoxin with potentially 'Toxic' concentrations resulting.

1. Starting diuretics (Non-K sparing).
2. Starting Antimalarials (e.g. Quinine, Chloroquine),NSAIDs, Anti arrhthmics (e.g. Amiodarone, Quinidine) etc
3. Stopping drugs, which increase GI motility/prevent absorption. (e.g.. Metaclopramide, Cholestyramine).

Giving conventional therapeutic doses of drugs in these categories can result in doubling or greater increase in digoxin concentrations with potentially toxic effect.

In these situations monitoring of digoxin after the change (or before and after) may enable alteration in the dose of digoxin to maintain the previous symptom control despite the alteration in digoxin handling.

Symptoms of Digoxin OVERDOSE.

- Loss of appetite, Anorexia (Experienced by 60% of individuals with toxic levels), Nausea (60%) and vomiting (50%). 'Maintenance' doses are often given twice daily to minimize these symptoms.
- Giddiness.
- Visual disturbance including colour distortion to green / yellow (Less than 15%).

- Increased Urine / Faecal frequency (6%).
- Cardiac Arrhythmia / Conduction defects (70 -95% of toxic individuals). Sinus bradicardia, Ventricular extrasystole, First / Second degree AV block are common. Ventricular / Atrial tachicardia less common.

Treatment of Digoxin OVERDOSE.
The most common causes of 'Toxic' symptoms are readily correctable metabolic abnormalities including Hypokalaemia, Hypercalcaemia, Hypomagnesaemia and Hypothyroidism. Where these conditions exist, the fastest treatment for digoxin toxicity is to correct the metabolic abnormality. The symptoms will normally resolve rapidly and the patient can continue with the previous digoxin dose.

Treatment of chronic digoxin overload is more difficult due to the fairly high volume of distribution (4 - 10 L/Kg depending on renal function), therefore the majority of the digoxin is located in the peripheral tissues. This makes it difficult to remove substantial amounts using Haemofiltration, Haemoperfusion or dialysis. Patients with mild symptoms can often be treated by cessation of the digoxin dose, correction of any electrolyte abnormalities and allowing the excretion of the excess via the kidneys. In the event of massive accumulation of digoxin requiring rapid treatment, there is a specific antidote. 'Digibind' is a fragment of an antibody raised against digoxin, this remains in the circulation and binds all of the free digoxin. This results in a blood free digoxin concentration of 0 and promotes rapid movement of digoxin out of the tissues. The digoxin recovered in this way is then rapidly excreted via the kidneys. There are several problems with this therapy

1. Cost.
2. The dose must be carefully calculated according to the amount of digoxin in the patient. Monitoring may be required prior to giving the dose.
3. Digibind persists in the patient for a considerable time. This makes it difficult to re-establish digoxin therapy.
4. Digibind in the sample prevents measurement of digoxin using most assays (Depending on the method, results range from 0 up to 100 fold the normal). This makes it impossible to monitor the treatment and difficult to re-establish digoxin treatment. Please indicate any Digibind treatment on the clinical details section of the request forms.
5. Digibind administration may also result in the patient producing antibodies against Sheep proteins, these could produce immunological problems if second treatments were required and have the potential to interfere in other immunoassays.

Interpretation of results for DIGOXIN.

Therapeutic ranges are poorly defined. The concentration does correlate well with certain measurable cardiac parameters (ECG results and systolic time intervals) but these do not relate closely to overall therapeutic outcome.

Little or no therapeutic effect is seen at digoxin levels of less than 0.5 ug/L and toxicity almost always occurs above 2.3 ug/L. The generally accepted 'Therapeutic target' is 0.5 - 2.0 ug/L although some patients may benefit from carefully increasing the dose to give concentrations above 2.0 ug/L if no adverse effects become evident. The sensitivity of myocardium to digoxin is altered by several co-existing factors, which hamper the interpretation of digoxin levels.

1. Potassium Hypokalaemia is associated with an enhanced response and is the commonest cause of toxic symptoms. Potassium should always be measured when toxicity is suspected and any hypokalaemia corrected prior to adjusting the digoxin dose. this may resolve the toxicity. Digoxin levels cannot be interpreted in the presence of hypokalaemia.
2. Calcium and Magnesium Hypercalcaemia and hypomagnesaemia are also associated with increased sensitivity.
3. Thyroid function Hypothyroidism increases sensitivity to digoxin and Hyperthyroidism decreases it, making interpretation difficult in patients with thyroid disease.
4. Age Elderly patients are more sensitive to digoxin than young patients.

Caution
- Pregnancy, Renal failure and liver failure. There are a number of 'Digoxin like factors' which accumulate in these conditions. These may cross react in some assays (But not all) and can produce apparently therapeutic values on patients who are not taking digoxin or 'Toxic' concentrations in a well controlled patient without toxic symptoms. The identity of these factors is not well known and a particular digoxin assay may be affected by any combination of the conditions. Concentrations must be carefully interpreted in conjunction with clinical assessment of the patient's symptoms.

References

1. British National Formulary (March 1995)
2. Therapeutic Drug Monitoring. (Hallworth and Capps). ACB Venture publications, London. ISBN 0 902429 05 1
3. Digoxin., by - P. Keys. In - Individualizing Drug Therapy. Vol. 3. (Taylor, W.J. and Finn, A.L. Editors) Gross Townsend, Frank INC, New York. Library of Congress No 81-82052

Timing of samples and interpretation for measurement of Lamotrigine.

This page is divided into sections as follows:-

- *Timing of measurements after starting therapy or a dose change.*
- *Timing of measurements relative to taking the dose.*
- *Interpretation of results.*

You may also want to review the *Pharmacy formulary site page about anticonvulsants* and the page about *Importance of specimen timing in therapeutic drug monitoring.*

KEY FACTS - Lamotrigine

Samples are sent to an external reference laboratory so take some time to return. Any queries should be directed to the laboratory performing the analysis.

Sample timing - Immediately before taking the dose, at least 5 days after initiation of treatment or dose change (Normal individual on Lamotrigine only).
15 days if co-administered with Valproate.

Therapeutic range – 1.0 – 15 mg/L (Previously reported as 3.9 - 15.6 umol/L) Levels much higher than this are often required for adequate control and are generally well tolerated.

Bioavailability of oral dose - > 95% absorbed. Volume of distribution 1.2 L/Kg.
Peak concentrations about 3 Hrs post dose.
Metabolism - >90% dose metabolised by conjugation. Follows first order kinetics with half life around 24 Hrs. Enzyme inducing drugs (eg Phenytoin & Carbamazepine) reduce the half life to about 15 Hrs. Valproate extends to about 60 Hrs. Lamotrigine may precipitate Carbamazepine toxicity by inhibiting metabolism.

Timing of Lamotrigine measurements after starting treatment or a dose change.
The half life of elimination of lamotrigine is normally 24 Hrs so a period of 5 days should be allowed between commencing treatment or changing dose before any monitoring of levels is attempted. In the case of co-treatment with Valproate, this time must be extended to 15 days because of the prolonged elimination time. Co-administration with both inhibitory & stimulatory drugs gives half life about 24 Hrs. Withdrawal of the inducing drug from such a mix results in marked increases in Lamotrigine & Valproate. **Unless checking for potentially toxic levels, the same timing criteria must be applied to routine monitoring of any other anticonvulsants in the regimen.**

Timing of Lamotrigine measurements relative to taking the dose.
Remember: Drug concentrations are not stable from dose to dose at any time after the dose unless the *required time* has elapsed since commencing treatment or the last dose change, this may be a considerable time where multiple drugs are co-administered and must be determined based on the longest half life of the co-administered drugs.
The concentration of Lamotrigine and other anticonvulsants is most stable and correlates with therapeutic effects close to the time of taking the next dose. Values measured at this time have been used to derive therapeutic ranges and this timing should also be used in taking samples to direct changes in dose. Specimens taken substantially before this timing will yield inappropriately high results due to incomplete distribution into peripheral tissues and may result in selection of an inappropriately low dose.

Interpretation of results for Lamotrigine.

Before interpreting a result check the specimen timing was correct

Remember: Drug concentrations are not stable from dose to dose at any time after the dose unless the *required time* has elapsed since commencing treatment or the last dose change.

The concentration of Lamotrigine is most stable and correlates with therapeutic effects close to the time of taking the next dose. Values measured at this time have been used to derive the therapeutic range and this

timing should also be used in taking samples to direct changes in dose. Specimens taken substantially before this timing will yield inappropriately high results due to incomplete distribution into peripheral tissues and may result in selection of an inappropriately low dose.

The use of lamotrigine as adjunctive therapy means that levels & clinical effects may be influenced by other anticonvulsants. All anticonvulsants in the regimen should be monitored at the same time and all results used in any decision about dose adjustment.

Therapeutic range - 1.0 – 15 mg/L (Previously reported as 3.9 - 15.6 umol/L)

Levels much higher than this are often required for adequate control. Levels of 50 - 100 umol/L have been encountered in patients with refractory seizures without documented adverse effects.

There is no good trial data supporting lamotrigine therapeutic range. This is partially due to the difficulty in defining adequate seizure control due to lamotrigine when used as adjunctive therapy (Often with more than 1 other anticonvulsant) in patients who have proven difficult to control with other drugs.
There is little evidence of correlation of side effects with any particular lamotrigine concentrations.

References

1. British National Formulary (March 1995)
2. Therapeutic Drug Monitoring. (Hallworth and Capps). ACB Venture publications, London. ISBN 0 902429 05 1
3. Individualizing Drug Therapy. Gross, Townsend, Frank INC, New York. Library of Congress No 81-82052
4. Rambeck & Wolf. Lamotrigine clinical pharmacokinetics. Clin. Pharmacokinet 1993, 25; 433 - 443.
5. Brodie. Lamotrigine. Lancet 339: 1397 - 1400. 1992.
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Timing of samples and interpretation for measurement of Lithium.

This information page is divided into sections as follows:-

- *Timing of measurements relative to taking the dose.*
- *Interpretation of results.*
- *Symptoms, Actions and future measurements in the event of OVERDOSE.*

You may also want to review the *Pharmacy formulary site* page about Lithium and the page about *Importance of specimen timing in therapeutic drug monitoring*.
Department of Psychiatry Guidelines which cover Lithium use.

KEY FACTS - Lithium.

Sample timing - At least 12 hours post dose. At least 5 days to 2 weeks after initiation of treatment or dose change, Longer time for older patients (Assumes Normal renal function).

Therapeutic range - 0.5 - 1.0 mmol/L
Results will be telephoned as a critical result at 1.5 mmol/L or higher unless the specimen timing is obviously inappropriate.

Bioavailability of oral dose - 100% within 2 Hrs from conventional preparations.
Massive doses of sustained release preparations can result in recurrent toxicity over several days due to continued absorbtion.
Metabolism - Lithium is not metabolised.
Distribution - Lithium distributes into total body water (0.6 L/Kg) reaching equilibrium within 24 hours after the first dose.
Elimination - Excretion via kidneys. About 80% filtered in glomerulus and reabsorbed in proximal tubule. Half life ranges from 18 hours in young patients to 36 Hrs in older patients with intact renal function. Clearance depends on GFR and proximal tubule reabsorbtion. Handling is similar to Sodium therefore reclamation is increased in dehydration or sodium depletion. At toxic levels, Li can induce nephrogenic diabetes insipidus, resulting in increased free water loss and dehydration. This induces a vicious circle of decreased Li clearance, increased free water loss & worsening dehydration. Non-steroidal anti inflammatory drugs, Thiazide and loop diuretics can reduce Li excretion precipitating toxicity.

There are specific guidelines issued by the department of Psychiatry which cover *Lithium use.* These should be consulted **before commencing therapy** as they include pre-treatment assessments, *contraindications* to lithium therapy, *actions in the event of side effects* and long term monitoring arrangements.

Timing of Lithium measurements after commencing treatment or a dose change.

Between three and five half lives are required before the difference between current and 'steady state' concentrations is less than the assay imprecision (Typically 5 - 10% CV). In normal individuals the half life is 18 to 36 hours and therefore a period of 5 days to 2 weeks should be allowed after commencement of treatment or a substantial dose change before checking the concentrations achieved.

Timing of Lithium measurements relative to taking the dose.

Li levels are relatively stable by 12 hours after the dose (Effectively trough concentrations). This timing was used in deriving the therapeutic ranges and it is essential that dose adjustments are made with the same timing relative to the dose. Samples taken less than 12 hours after the dose will have inappropriately high results due to incomplete distribution into peripheral tissues. Adjustment of patient doses using such values may result in lower than optimum dose for that particular patient and possible earlier treatment failure.

Interpretation of results for Lithium.
Before interpreting a result check the specimen timing was correct

Ranges were originally derived for treatment of acute mania and then adopted for maintenance. A variety of therapeutic ranges have been suggested because the effectiveness is better at higher concentrations (longer 'survival' without relapse) but does not correlate very well with concentration. Similarly Side effects are more troublesome at high concentrations so the upper limit has gradually decreased with time as the balance is re-asessed. In 1985 the National Institutes of Mental Health consensus development conference recommended 0.6 - 0.8 mmol/L. We previously used use the range which Baastrup (1980) found to be effective in 80% of patients 0.5 – 1.0 mmol/L) and have now moved to the national harmonization range which is mandated for electronic result transmission.

Therapeutic range - 0.4 - 1.0 mmol/L
As is suggested by the lack of consensus in the literature, an individual patient's levels should probably be decided according to severity of side effects rather than strict concentration values.
Apparently toxic results are commonly due to sampling too early after an increase in dose or too soon after the dose.

Common side effects	Recommended actions
Tremor Weight gain	*Review indications for Lithium Therapy*
Polyuria Fatigue	*Check 12 hour level, U & Es, TFTs*
Polydipsia Aggravated Psoriasis	*Adjust dose accordingly*
Nausea or Acne	*Omit Lithium if diarrhea persists*
Diarrhea	
Hypothyroidism	

Before interpreting a result check the specimen timing was correct.

Causes, Symptoms and Treatment in the event of OVERDOSE.

Toxic effects are commonly caused by chronic over dosage as a consequence of alterations in renal excretion. Toxic symptoms relate loosely to Li concentration as there appears to be an effect of duration of elevation in Li level on severity. Creatinine clearance and other renal function indicators are usually abnormal in chronic overdose. Deliberate self poisoning is relatively uncommon and toxicity is normally milder than chronic overdose with similar Li levels.

Clinical Grade	Typical Li mmol/L	Symptoms
O	0.4 - 1.3	No symptoms / Anxiety.
I	1.5 - 2.5	Nausea, vomiting, diarrheoa, tremors, muscle weakness,agitation, lethargy, blurred vision, confusion, fasiculations, myoclonic twitches, hyperreflexia, ataxia, blurred vision.
II	2.5 - 3.5	Stupor, rigidity, Parkinsonism, hypotension.
III	>3.5	Convulsions, coma, circulatory collapse.

Individual patients may display symptoms which do not correlate with the tabulated symptoms particularly in acute overdose. One acute overdose patient is reported with Li results of 2.7 mmol/L with no symptoms whereas another patient died after presenting with a level of 1.2 mmol/L after having had toxic symptoms for 8 days.

Signs of Toxicity	Action
Apathy Ataxia	*Obtain urgent level (must be absolute level)*

Muscle Weakness Nystagmus	*Check U & Es urgently*
Restlessness Coarse Tremor	*IV fluids*
Confusion Fits	*Referral for general medical care*
Vomiting Renal Failure	*Renal specialist unit if renal failure develops*
Diarrhoea Coma	*Discontinue Lithium immediately.*

Lithium should be stopped immediately if the above toxic symptoms are experienced. It may be necessary to admit the patient for medical observation if lithium toxicity is suspected. If hyper-reflexia and hyper-extension of limbs, convulsions, toxic psychosis, syncope oliguria, circulatory failure or coma occur, then this is an emergency and the patient should be admitted urgently for further medical care.

Treatment of Lithium OVERDOSE.

1. IV Rehydration is often recommended because of dehydration in chronic intoxication. This will increase Li excretion if the initial problem was due to hypovolaemia and low GFR. This does not increase fractional Li excretion and may take a long time to effectively clear accumulated Li. This is only suitable for mild intoxication and response should be monitored using serial Li measurements. More aggressive treatment is required if the level will not fall below 0.6 mmol/L within 36 hours.
2. Lithium is effectively cleared by dialysis (about 5 fold greater clearance than by rehydration alone) but Li levels will rebound after cessation of dialysis due to the slow re-equilibration of tissue Li into circulation. Measurement of Li 6 hours post cessation is recommended to assess the need for repeat dialysis. Indications for dialysis include:
    - *Presence of Grade III symptoms.*
    - *Li levels exceeding 4.0 mmol/L.*
    - *Chronic intoxication with levels exceeding 2.5 mmol/L and serious cardiac / CNS manifestations.*
    - *Serial levels predict that Li will not be < 0.6 mmol/L within 36 Hrs despite IV rehydration.*

References

1. British National Formulary (March 1995)
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Timing of samples and interpretation for measurement of Phenobarbitone

This page is divided into sections as follows:-

- *Timing of measurements after starting therapy or a dose change.*
- *Timing of measurements relative to taking the dose.*
- *Interpretation of results.*

You may also want to review the *Pharmacy formulary site* page about anticonvulsants and the page about *Importance of specimen timing in therapeutic drug monitoring.*

KEY FACTS - Phenobarbitone

Sample timing - Typical dose 60 - 180 mg taken once per day. The dose frequency is less than the elimination half life therefore there is a considerable delay between commencing treatment or changing dose and achieving steady state conditions.

For routine dose changes or initiation of treatment with maintenance doses allow 21 days after initiation of treatment or dose change.

A single loading dose of 3 to 4 times the maintenance dose may be used to reach equilibrium concentrations rapidly. Monitoring can begin immediately before the second maintenance dose.

Samples should be taken immediately before taking the dose.

Therapeutic range - 10 – 40 mg/L (Previously given as 80 - 160 umol/L).
Results of 70mg/L or above will be telephoned as critical results if the specimen timing is not obviously incorrect.

Phenobarbitone may be effective in preventing seizures at concentrations well below the therapeutic range in some patients (Particularly after long term treatment). Sub therapeutic levels are not necessarily an indication for a dose increase or withdrawing the drug in patients with good control.

Bioavailability of oral dose - Peak concentration 50 - 100 hours post dose.
Metabolism - Phenobarbitone is metabolised by the liver to inactive metabolites.
Half life of elimination ranges from 50 to 120 Hrs in adults and 40 - 70 Hrs in children. This long half life necessitates long waiting times between commencing treatment or changes in dose & monitoring.

Caution Phenobarbitine levels may increase sharply if Valproate is added to the drug regimen. Phenobarbitone (or Primidone) dose must be reduced accordingly and monitoring of valproate & phenobarbitone may be required.

Distribution - Volume of distribution is 0.7 - 1.0 L/Kg

Timing of Phenobarbitone measurements after starting treatment or a dose change.

Elimination half-life is variable (At least 40 Hours) and can be very long in some patients (up to 5 days), therefore the delay required between dose adjustments and monitoring can exceed three weeks. Monitoring prior to this may be acceptable in many patients but results should be interpreted cautiously as further increase may occur.

Interpretation of results.
Before interpreting a result according to the therapeutic range, check the specimen timing was correct

Therapeutic range - 10 – 40 mg/L (Previously given as 80 - 160 umol/L).

CAUTION Levels correlate poorly with side effects. New patients may show marked drowsiness at levels as low as 20 umol/L whereas long term patients may tolerate up to 260 umol/L with no ill effects.
Expect severe toxicity about 450 umol/L.
Results **must** be interpreted relative to clinical symptom rather than levels alone.
Phenobarbitone may be effective in preventing seizures at concentrations well below the therapeutic range in some patients (Particularly after long term treatment). Sub therapeutic levels are not necessarily an indication for a dose increase or withdrawal of the drug in patients with good control.

Timing of Phenobarbitone measurements relative to taking the dose.

Remember: Drug concentrations are not stable from dose to dose at any time after the dose unless the required time has elapsed since commencing treatment or the last dose change.
The concentration of Phenobarbitone is most stable and correlates with therapeutic effects close to the time of taking the next dose. Values measured at this time have been used to derive the therapeutic range and this timing should also be used in taking samples to direct changes in dose. Specimens taken substantially before this timing will yield inappropriately high results due to incomplete distribution into peripheral tissues and may result in selection of an inappropriately low dose.

References:

1. British National Formulary (March 1995)
2. Therapeutic Drug Monitoring. (Hallworth and Capps). ACB Venture publications, London. ISBN 0 902429 05 1
3. Individualizing Drug Therapy. Gross, Townsend, Frank INC, New York. Library of Congress No 81-82052

Timing of samples and interpretation for measurement of PHENYTOIN.

This page is divided into sections as follows:-
Common indications for measurement.
Timing of measurements after start of treatment.
Timing of measurements after a dose change.
Timing of measurements relative to taking the dose.
Interpretation of results.
Symptoms, Actions and future measurements in the event of OVERDOSE.
You may also want to review the *Pharmacy formulary site* page about anticonvulsants and the page about *Importance of specimen timing in therapeutic drug monitoring.*

KEY FACTS - PHENYTOIN
Sample timing - Trough level (Immediately before next dose) at least 11 days after initiation of treatment with 'maintenance' dose.
Alternatively 2 - 4 hours post loading dose. (Requires 2 - 4 weeks to reach appropriate enzyme induction therefore levels will fall despite initial demonstration of adequate dose) .

After initial induction, further monitoring must be at least 4 weeks post dose change.

Therapeutic range
Total phenytoin 5 – 20 mg/L (Single drug) (Previously reported as 40 - 80 micro mol/L) For more details see Interpretation. (Free phenytoin 3.5 - 7.5 micro mol/L)

Toxic effects are likely above 20 mg/L (80 micro mol/L) including 'Paradoxical' seizures. Results of 25 mg/L or above will be telephoned as critical results unless the timing relative to dose is obviously inappropriate. Some patients require high levels to achieve adequate control.

Bioavailability of oral dose -
Typically 90% but may vary significantly with formulation.
Take care when changing formulation as large concentration changes may occur with apparently constant dose.

Metabolism - Hepatic oxidation. This system is saturable at drug concentrations within the target range. Dose and blood levels are not linearly related. Phenytoin (and other drugs) also induces the enzymes so metabolism depends on drug history.
Protein binding - about 90% protein bound but displaced by other drugs (e.g. Valproate) leading to decrease in total phenytoin in blood but increased 'Free' phenytoin. Also lowered in pregnancy, renal disease, hepatic disease and in Neonates. In these situations, measurement of 'Free' phenytoin may be indicated.
Elimination - Hepatic metabolism and Excretion via kidneys. Saturation of hepatic metabolism makes elimination dependent on concentration and highly variable between individuals.
Effective half lives vary with age and drug therapy history. Typically values -

- 75 Hrs in pre-term neonate. 21 Hrs in term neonate.
- 7.5 Hrs in infants / children.
- 9 - 22 Hrs for adults taking single dose.
- 20 - 40 Hrs for adults on chronic therapy.
- May be up to 100 Hrs on high doses.

Deterioration in renal function may lead to increased levels of metabolite which is measured by some assays and give misleading results.

Timing of PHENYTION measurements after a dose change.

Treatment is usually commenced using the 'Maintenance dose' of Phenytoin. In 'Status Epilepticus', rapid onset of symptom control is essential and there will be an initial 'loading dose' usually given as an IV infusion over several hours. This achieves the steady state distribution very rapidly. The first 'Maintenance dose' is given the appropriate time later and monitoring can commence after this dose.

In treatment with 'Maintenance' doses (Starting at 3 - 4 mg/Kg (Typically 150 - 300 micrograms) either as a once a day dose or divided into two), the elimination half-life of Phenytoin regulates the accumulation between doses. Between three and five half-lives are required before the difference between current and 'steady state' concentrations is less than the assay imprecision (Typically 5 - 10% CV). In normal individuals the half life is between 20 and 40 hours and therefore a period of 11 days should be allowed before checking the concentrations achieved. The dose is then gradually increased to achieve adequate relief from symptoms (Typical final doses about 300 mg per day).

Timing of PHENYTOIN measurements relative to taking the dose.

Trough levels (Just before the next dose) are the most stable. These are used in defining the target range.

Interpretation of results for PHENYTOIN.

Before interpreting a result check the specimen timing was correct

Target range depends on the indication for phenytoin administration and the other drugs co-administered. The range given in the laboratory computer relates to treatment of Epilepsy using phenytoin alone. See later in this section for other indications and multi-drug therapy.
Single drug therapy for epilepsy or Trigeminal neuralgia

- Therapeutic range - Total phenytoin 5 – 20 mg/L (Single drug) - (previously reported as 40 - 80 micro mol/L)
- Toxic effects are likely above 20 mg/L including 'Paradoxical' seizures.
- Some patients may benefit from **carefully** increasing the dose if no adverse effects become evident.

Notes

1. The dose and plasma concentration are not linearly related in a given patient and small dose adjustments can lead to disproportionately large increases in levels. Monitoring is required with each change in dose.
2. Addition, Cessation or dose adjustment of other drugs will require alterations in the dose of phenytoin and necessitates monitoring phenytoin and all interacting anticonvulsants to adjust the doses appropriately. (Remember that any induction / de-induction of metabolism requires up to 4 weeks to complete, Do not adjust the dose using results from drug monitoring before this is completed.

Multi-drug therapy for epilepsy.

1. Due to drug interactions the dose of phenytoin may require alteration whenever an interacting drug is started, stopped or the dose is changed.
2. **Take great care in deciding the timing of the samples,** all interacting drugs should have reached steady state before monitoring is commenced. This requires 3 to 5 times the half-life of the slowest drug to reach steady state. In addition the 4 weeks delay for changes in metabolic induction must be remembered.

Free phenytoin 3.5 - 7.5 micro mol/L

Causes, Symptoms and Treatment in the event of OVERDOSE.

Causes of Phenytoin OVERDOSE.
Diagnosis should depend on a careful clinical examination and should not be entirely based on Phenytoin measurement as toxic symptoms may occur within the therapeutic range and a few patients may require apparently 'Toxic' concentrations for optimal symptom relief.

Common causes of toxicity include :-

- Too large a dose increase. In many individuals a small dose increase can lead to disproportionate concentration increases with 'toxic' symptoms becoming evident.

  Changes in dose of / addition of drugs which interact due to common metabolic pathway or protein binding.

References

1. British National Formulary (March 1995)
2. Therapeutic Drug Monitoring. (Hallworth and Capps). ACB Venture publications, London. ISBN 0 902429 05 1
3. Individualizing Drug Therapy. Gross, Townsend, Frank INC, New York. Library of Congress No 81-82052

Timing of samples and interpretation for measurement of Valproate.

This page is divided into sections as follows:-

- *Timing of measurements after starting therapy or a dose change.*
- *Timing of measurements relative to taking the dose.*
- *Interpretation of results.*

You may also want to review the *Pharmacy formulary* site page about anticonvulsants and the page about *Importance of specimen timing in therapeutic drug monitoring* to see why the kinetic variability of Valproate makes therapeutic monitoring impractical.

KEY FACTS - Valproate

Monitoring of Valproate for therapeutic adjustment is contraindicated

Valproate levels are not useful in adjusting therapeutic doses as it is impossible to derive an adequately defined therapeutic range for use with a single measured level.
The only indication is in therapeutic failure where elevated results indicate that an alternative anticonvulsant should be used.

Sample timing - Immediately before taking the dose, at least 3 days after initiation of treatment or dose change. 15 days when co-administered with Lamotrigine.
Therapeutic range - A range is not well established due to poor correlation between levels and effect. Toxic effects do not correlate with concentration.

Bioavailability of oral dose - Peak concentration about 2 Hrs post dose. **Metabolism** - Hepatic oxidation & conjugation to yield active metabolites with long half lives. Onset of therapeutic effects is delayed compared to plasma level reaching 'therapeutic' levels & persists after complete clearance of parent drug. Valproate co-administration extends the elimination half time for Lamotrigine due to competition for metabolism.
Distribution - Volume of distribution is small (0.1 - 0.4 l/Kg).
Protein binding is concentration dependent leading to non-linear relationship between dose & free drug concentration. Valproate is displaced from binding by free fatty acids so binding (& elimination kinetics) vary between fasted & fed states. Valproate levels may vary as much as 100% over the dose interval.
Levels are not reproducible even the same stage of successive twice daily doses.
Elimination - Half life ranges from 7 - 16 Hrs.
Both hepatic oxidation & renal excretion are highly variable and are effected by other anticonvulsants (notably Phenytoin & Phenobarbitone).

Timing of Valproate measurements after starting treatment or a dose change.

In large groups of patients the apparent half life of elimination is between 7 and 16 hours therefore leaving 3 days after a dose change should lead to steady state concentrations of the parent drug. The validity of this half life is minimal because most of the activity derives from active metabolites and therapeutic effects require considerably longer than this to establish. Similarly therapeutic effects persist well after the parent drug is eliminated from circulation.

Timing of Valproate measurements relative to taking the dose.

Remember: Valproate concentrations are not stable from dose to dose at any time after the dose due to the effects of diurnal variation, Fed/Fasted state and interactions with other anticonvulsants. Valproate levels may vary as much as 100% over a single dose interval and are not reproducible even at the same stage of successive twice daily doses.
Trough levels (Just before the dose) are traditionally used for clinical convenience and the attempts at deriving therapeutic ranges all use this timing.

Interpretation of results for Valproate.

Before interpreting a result check the specimen timing was correct

Therapeutic range – None quoted.

A range has not been well established due to poor correlation between levels and effect. Toxic effects do not correlate with concentration.

References:

1. British National Formulary (March 1995)
2. Therapeutic Drug Monitoring. (Hallworth and Capps). ACB Venture publications, London. ISBN 0 902429 05 1
3. Individualizing Drug Therapy. Gross, Townsend, Frank INC, New York. Library of Congress No 81-82052

Timing of samples for measurement of Therapeutic Drugs.

Why is correct timing of the sample important ?

For a drug measurement to be of any use at all it must be answering a specific clinical question, this often implied rather than consciously asked. Common questions include -

1. Is the dose of drug sufficient to have a therapeutic effect?
2. Is the dose of drug excessive and causing unwanted effects?
3. Is there some interaction with other drugs causing unusual behavior of the drug?
4. Has a change in the patient's condition altered drug handling and changed the therapeutic effect?
5. Is the patient taking the drug at all?

In all but the last case the answer depends to some extent on our understanding of the relationship between dose administered, blood concentrations achieved at a certain time after the dose and the therapeutic actions of the drug.

The blood concentration of all drugs varies with the time after each individual dose, this is dependent on two or three processes depending on the route of administration. The concentration initially rises as drug arrives in circulation then reaches a plateau and subsequently declines until the drug is entirely removed from circulation or another dose is given. Where several doses are given the concentrations achieved after each dose will be influenced by the drug remaining from prior doses and the drug will tend to accumulate until a steady state is reached after which each new dose will behave essentially the same.

Depending on the route of administration, either two or three processes control the rates of change of drug concentration. Each of these processes acts simultaneously on the circulating drug although a single process is usually the dominant determinant of concentration at any time after the dose.

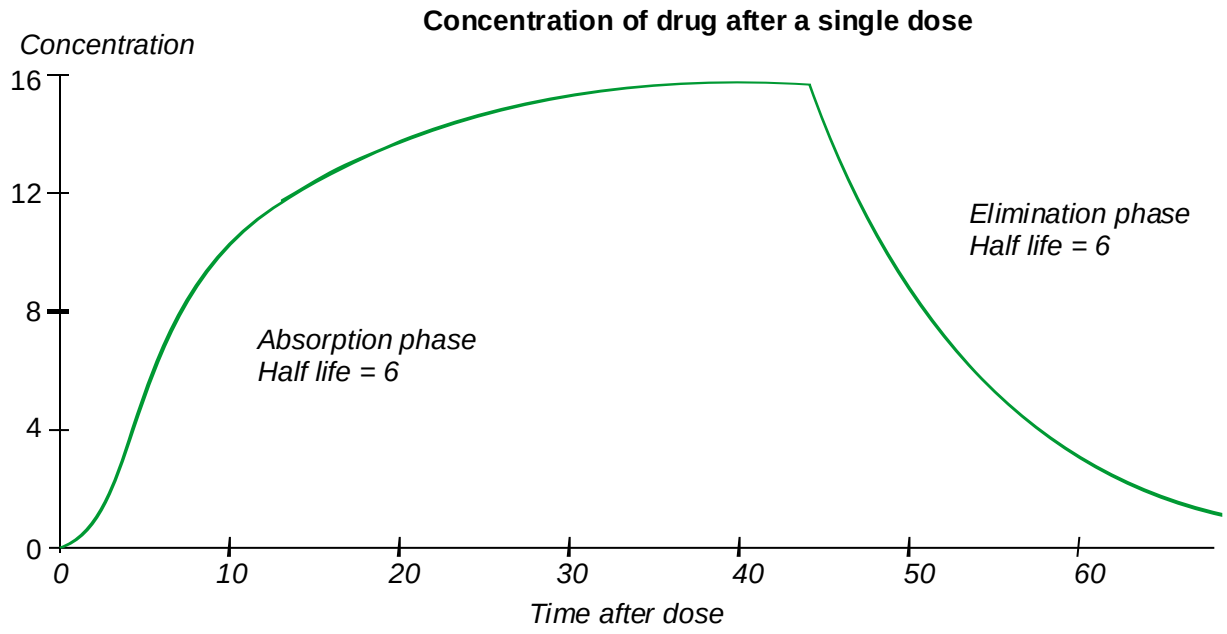
1. **Drugs given orally** have an initial absorption phase during which the dose (or a fraction of the dose) is absorbed from the intestines. The timing and extent of absorption depends on the site of absorption of a particular drug, rate of passage through the gut and possibly the nature and relative timing of recent meals. These influences may result in large differences in handling of a drug between individuals and between days within the same individual. Oral doses are absorbed and immediately presented to the liver for possible metabolism (First pass metabolism) before reaching the systemic circulation. The precise behavior of drugs given by the oral route may be affected by coexisting medical conditions including diseases of the GI tract, Liver and Pancreas as well as the administration of other drugs.
2. **Drugs given as a timed IV infusion** have a highly predictable absorption phase and are immediately available in circulation without being presented to the liver. Therefore the distribution of metabolites in circulation (and hence therapeutic effects) may be very different from those obtained for the same drug given orally.
3. **Drugs given as an IV bolus** do not have an absorption phase and are immediately available in circulation.
4. **Drugs given as an IM bolus** have an absorption phase which depends on the rate of transport away from the immediate site of administration which may vary considerably according to site and local blood flow. This route also avoids first pass metabolism of the drug.

Once in circulation the drug is available for **distribution** into the various tissues. The extent of distribution into particular tissues depends on several factors including the extent of protein binding, lipid solubility and active uptake by particular tissues (eg. Hepatocytes). The extent and rate of distribution of a drug in an individual may be affected by the proportion of body mass composed of adipose tissue (Generally a higher proportion of total body weight in females than males and also altered by physical training and obesity.). Disease processes and other drugs may affect the distribution phase by altering protein binding or active transport processes. This process is also important in delivering active drug molecules to the sites of action which are rarely directly accessible by molecules in the blood. The same processes act in reverse direction during periods of declining drug concentration although the transport processes and rate of movement may be different.

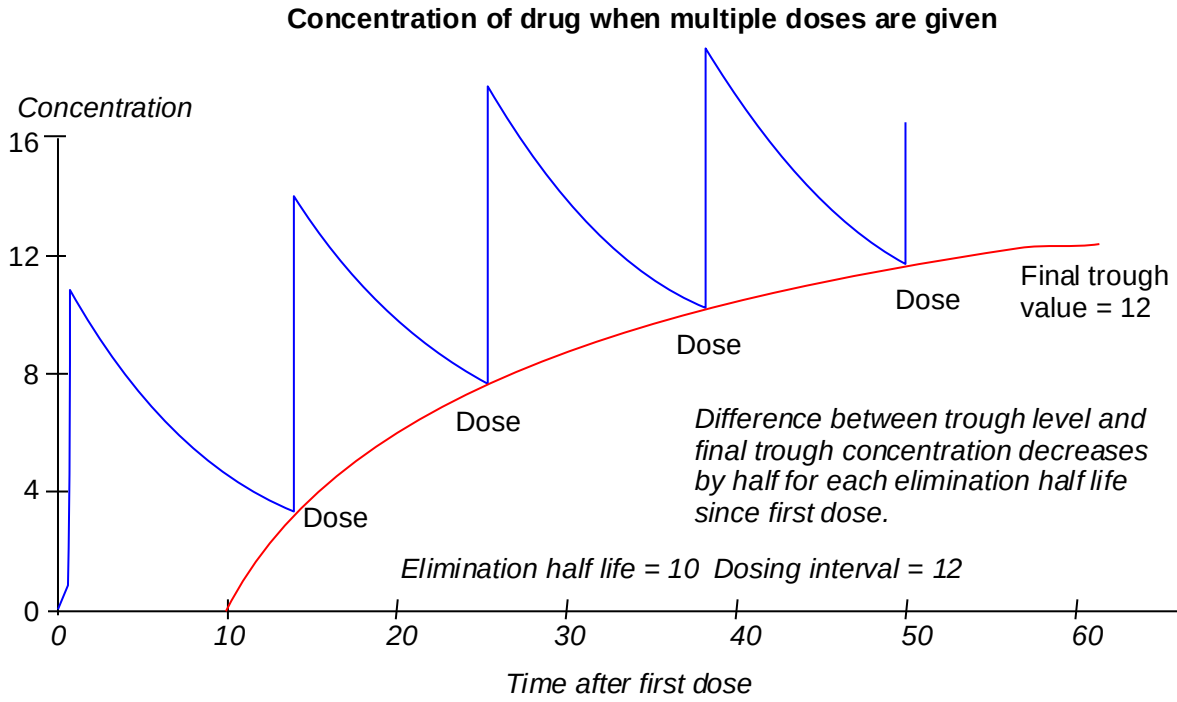
Elimination of the drug from circulation depends on the presentation of drug molecules to sites of metabolic alteration (Mainly hepatic but other sites may be important in specific drugs) and excretion (Mainly renal via urine and hepatic via bile but other routes are significant in some drugs e.g. sweat, milk etc.)

Although some drugs are metabolized by processes which have fixed maximum rates or are not concentration dependant, usually each process contributes or removes drug molecules according to first

order kinetics (rate of removal or delivery is proportional to concentration). This results in an exponential increase in blood concentration after an oral dose which is followed by an exponential fall. This is usually not due to a single process but the differing routes of distribution and elimination can be thought of as a sequence of exponential processes. At any time after the dose there is usually a single dominant process and the decline can be represented by a single half life of accumulation immediately after the dose and a single half life of decline. This is often termed the 'elimination' half life although it may not be entirely due to a single excretion or metabolic process.



When multiple doses are given more frequently than about 5 elimination half lives apart, clearance is not completed before the next dose is taken. Most drugs which require monitoring have an elimination half-life similar to or shorter than the dosing interval and so drug metabolism eventually reaches steady state when the concentrations are consistent at any particular time after the dose.



At any fixed time after the dose the drug levels behave as if they increase with a doubling time identical to the elimination half life, therefore results become stable after between 3 and 5 elimination half lives. After

this time any further change in concentration is less than the variability in results for replicate measurements (Typically 5 - 10 % Coefficient of variation between replicates of the same sample).

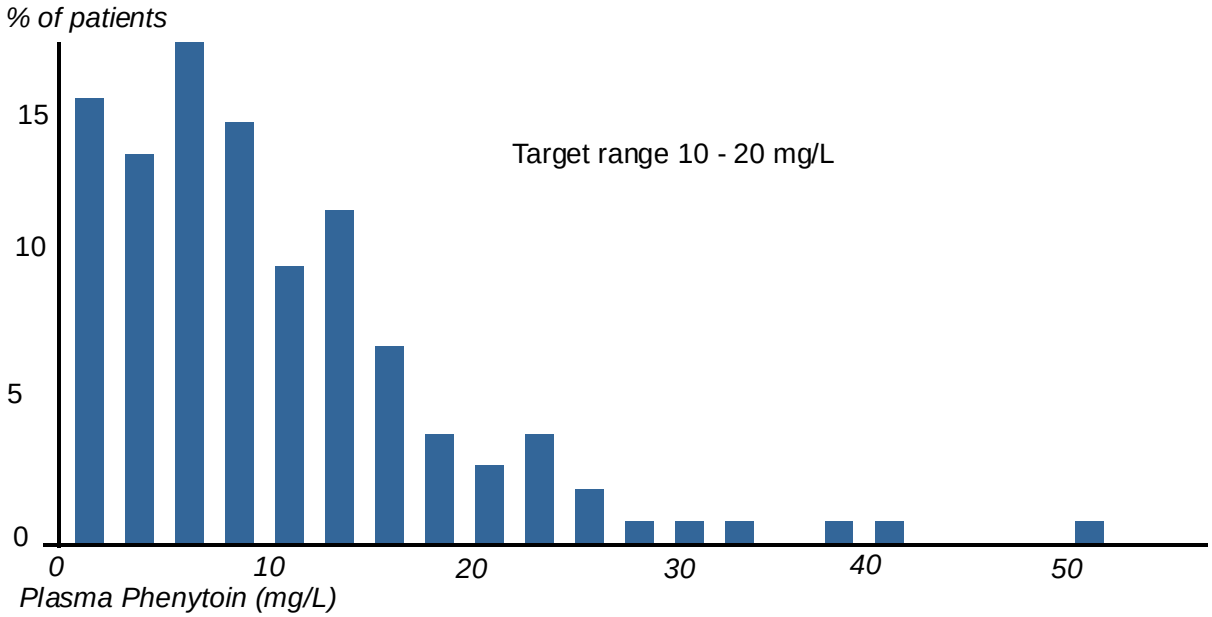
Why do we only measure certain drugs.
For many drugs there is a wide margin of error between the dose at which the effects are 'Therapeutic' and those at which 'Toxic' effects predominate or become clinically obvious due to unmistakable symptoms. Other drugs have a narrow range of therapeutic concentrations but the toxic effects are clinically evident and the relationship between the dose taken and its effects is consistent. Drugs with these characteristics can be given at a standard initial dose and the dose adjusted progressively according to clinical response. These drugs do not require concentration monitoring to ensure safety or adequate therapeutic action unless there is some form of interaction between drugs.

Drugs which have a narrow therapeutic range in combination with one or more of the following properties will require concentration monitoring to achieve safe levels.

- Large intra-individual variability in metabolic handling.
- Non-linear dose/response effects such as saturable metabolism.
- Poorly predictable effects of concurrent illness e.g. renal function, jaundice, electrolyte abnormalities.
- Interactions with other drugs which are co-administered.
- Absence of clinical signs of sub therapeutic or toxic concentrations (or no difference between the signs).

The degree of variability may be sufficient to make an otherwise safe drug unpredictable under certain conditions and concentration monitoring may be useful. As an example of the variability in individual handling of a drug the following graph shows the concentrations achieved after a standard dose of phenytoin.

Concentration of Phenytoin in 200 individuals taking 300 mg per day



Requirements for therapeutic drug measurements to be clinically useful. There are several basic requirements which must be met before therapeutic monitoring can be usefully undertaken, these mainly relate to the practicalities of obtaining a result which can be interpreted, these questions usually require the study of large numbers of individuals to determine the suitability for monitoring.

1. **Timing.** There must be some time after the dose where the intra-individual variability, disease effects and drug interactions allow a relatively steady drug concentration to be achieved. This results in greater stability for the therapeutic ranges. This is often the 'Trough level' just before the next dose or a 'Peak level' some time after the dose where the absorption and distribution phases are complete but extensive elimination has not yet occurred. In situations where there are effects of

other drugs given at the same time, the implications for sampling times should be considered and sample timing modified if necessary.

2. **Sample.** Blood (or other sample) concentration must correlate with clinical effect. For the concentration to be useful it must be possible to define a target range which is associated with therapeutic effects. This is only possible if the blood concentration closely correlates with that at the active site of the drug. For example the total concentration of a drug which is extensively protein bound in serum may be affected by changes in protein content and fail to indicate the available amount at the receptor (In this case the free drug may be a better measurement). Similarly the concentration within the blood may be unrepresentative of that in a particular body compartment e.g. CSF and therefore may not indicate therapeutic effect. Failure to achieve this correlation makes it impossible to accurately define a target range for therapeutic effect.
3. **Assay.** There must be a readily available assay which measures the parent drug and / or appropriate metabolites. The identity of the assay will determine the target range to be used. It is particularly important to use the appropriate ranges where there are multiple metabolites as certain molecules may be detected by one method but not another. The characteristics of the assay may also determine how long it takes to return results and whether monitoring is available daily, weekly or only by prior arrangement. This may alter the situations in which a drug measurement is useful. For example, determining the next dose of a drug to be given is practical using an automated immunoassay which is available 24 hours a day and returns results within 30 minutes but not with a manual HPLC method which takes the whole day to get a result.
4. **Interpretive information** There must be a well defined target range determined for a large number of individuals treated with the drug of interest and determined using the assay method in the laboratory (Or one which measures the same metabolites). Where there are confounding factors such as effects of other drugs, this should be investigated and alternative target ranges determined.

Timing of measurements after start of treatment.

From the previous section it should be apparent that drug handling by the individual patient should be at or close to the steady state condition before monitoring will produce a result which can be usefully interpreted. The difference between the current and steady state drug concentration halves for each elimination half life which passes since the drug was started. For the results to be interpretable the likely error in determining the drug concentration should be of similar magnitude or greater than any error due to failure to achieve steady state. Therefore monitoring of most drugs should not be started until at least 3 half lives after starting the drug administration. Taking the sample during a dose cycle prior to steady state will usually result in a falsely low result as the drug has not yet fully accumulated in the patient. For some drugs, however, the result will be falsely high as the drug is not yet fully distributed into the tissues. Either of these circumstances would lead to an inappropriate decision that the patient is likely to be adequately treated or that a dose change is required.

The only exception to this general timing rule is for drugs where a loading dose is given. In this situation a large initial dose is given to achieve therapeutic effects rapidly. This dose is calculated so that it will distribute through the tissues to achieve the same concentrations as would result at steady state, thus achieving therapeutic concentrations several elimination half lives earlier than with multiple 'Maintenance doses' of the drug. The first 'Maintenance dose' is then given after an equilibration time (Which may be longer than the normal time between maintenance doses). In this situation it is valid to check the concentration is 'Therapeutic' prior to giving the first maintenance dose.

The actual timing of the first dose cycle available for monitoring a particular drug is given in the timing details available from that particular analysis page.

Timing of measurements after a dose change.

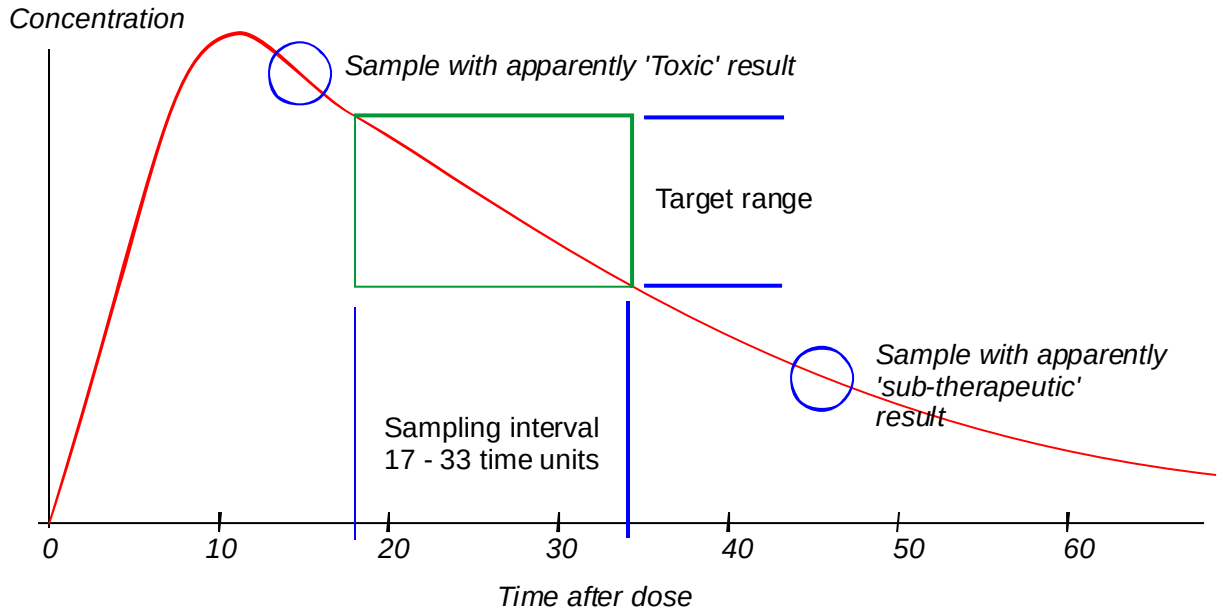
The rationale in determining when to monitor after a dose change is identical to that for initiation of therapy except that there is already some drug accumulated in the system. The difference between the current and steady state drug concentration halves for each elimination half life which passes since the dose was changed. For the results to be interpretable the likely error in determining the drug concentration should be of similar magnitude or greater than any error due to failure to achieve steady state. Therefore monitoring of most drugs should not be started until at least 3 half lives. Taking the sample during a dose cycle prior to

re-establishing steady state will usually result in a falsely low result which could lead to an inappropriate decision that a further dose change is required.
The actual timing for monitoring a particular drug is given in the timing details available from that particular analysis page.

Timing of measurements relative to taking the dose.

From the previous section it should be apparent that the drug concentration should be at a relatively constant level in the particular patient before monitoring and that the timing should be the same as that used to produce the 'Target range' data. Very large errors can occur if the sample timing is not within the optimum period as the concentration may be changing rapidly. For example a sample taken two hours late may fall on a steep exponential fall in concentration rather than the plateau and could produce a low concentration leading to an inappropriate decision to increase the dose. Similarly, a sample taken two hours early may fall in a period of rapid absorption with little distribution and the actual timing of samples relative to the dose is given in the timing details available from the analysis page for each drug.

Effects of sampling at an appropriate time relative to the dose



Information required on the request form for drug measurements.
Certain information must be accurately recorded to enable the clinician to be able to interpret the results and the laboratory to attach appropriate interpretative ranges. The absolute minimum information on the request form is as follows:-

- Date of last change in drug dose.
- Date and time of last dose of drug.
- Date and time sample was taken (This must be within the specified time range after the last dose. About 10% of samples for some determinations are taken too early!)
- Dose of drug and frequency of administration.
- Name of drug administered (Especially where there are several formulations e.g. fast acting, slow release etc.)
- Names of other drugs which are co-administered (These may alter the interpretation of a result if the drugs interfere in the metabolism of the drug being measured).
- Which drug is to be measured (We often get a long list of drugs in the clinical details box and no clear request for measurement, your request may be ignored!).
- Reason for the request plus relevant clinical details.

Interpretation of results.

Interpretation of the results of therapeutic drug monitoring requires a combination of judgment about the patient's clinical state, the analytical result and the 'Target range'. It must be remembered that the

'Therapeutic range ' is only a guide, individual patients may have differences in drug distribution or transport which alter drug availability at the receptor. As a consequence of these differences –

- Some patients achieve adequate relief of symptoms before the results are in the range (And will have 'Toxic' symptoms within the target range), in these individuals levels below the 'Therapeutic range' do not indicate that a dose increase is required.
- Other patients may require **cautious** increase in dose producing results in the apparently 'Toxic' region before adequate symptom control is achieved.

Before making a decision based on the results, it is essential to consider the following data to ensure that the appropriate sample timing limitations are complied with and that the appropriate target range is being used:

- Current dose of drug, formulation (e.g. Slow release tablet, or liquid) and frequency of administration.
- Drugs which are co-administered (These may alter the interpretation of a result if the drugs interfere in the metabolism of the drug being measured).
- Date of last change in drug dose (Check relative sample timing !).
- Date and time of last dose of drug.(Check relative sample timing !).
- Date and time sample was taken

Therapeutic ranges and details of sample timing restrictions are given in the timing details available from the analysis page for each drug. The ranges given on the laboratory computer system and the main page for each drug are appropriate to single drug treatment using the conventional formulation and normal sample timings. The specimen timing page may have additional information about target ranges and specimen timing for other formulations and multi drug therapy. **Take care to check that you are using the most appropriate range for the individual patient.**

Drug Toxicity.

Most 'Toxic' effects are related to drug concentration in the same way as therapeutic effects and have a threshold at which they become noticeable, The site of action for toxic effects may be different from that for therapeutic and therefore there may be a completely different set of distribution and elimination processes, however for most drugs the blood levels are as good at predicting toxicity as therapeutic effects. In some cases the reason for monitoring the drug is related only to it's potential toxicity as the levels achieved are not correlated well with therapeutic outcome (For example many antibiotics are potentially toxic but are used at blood levels far in excess of the minimum inhibitory concentration).

The majority of drugs are metabolized at a rate which is concentration dependent therefore concentrations change gradually. In these drugs the final concentration is linearly related to the dose and quite large dose increases can be tolerated. The onset of toxicity due to an increased dose will be gradual as will toxic effects precipitated by a metabolic change such as renal failure or hypokalemia.

In mild overdose, symptoms are most likely to occur during the period of peak drug concentration.
As the degree of excess increases, the concentration becomes 'Toxic' earlier after the dose and remains high for a longer time, additional symptoms may also occur as the peak concentration increases.

Drugs with saturatable metabolism do not show a linear relationship between dose and concentration. Drug concentrations can increase several fold after a small dose increase if it causes the delivered amount of drug to exceed the metabolic capacity. An increase of several fold may be caused by a small fractional dose increase. These drugs (e.g. Phenytoin, Carbamazepine) may cause continual, severe symptoms a short time after the first inappropriately high dose. Similarly the symptoms may persist for a long period after stopping the drug while the excess is cleared.

Code of Practice for Visitors to Pathology
(HS-SOP-002)

- Due to the nature of the work involved in diagnostic laboratories and the hazardous substances/ agents in use, the following regulations must be adhered to at all times during your visit to Pathology.

- Visitors must be accompanied at all times by an experienced member of staff.

- Please comply with any instructions issued by your host during your time in Pathology.

- Wear protective clothing if it is provided and find out where you should discard it after use.

- Cover all open cuts, abrasions etc. using waterproof dressings.

- Do NOT eat, drink, smoke, apply cosmetics or chew gum during your visit and avoid hand to mouth contact in laboratory areas.

- Do NOT touch working areas or equipment unless you are told it is safe to do so and ensure long hair is tied back.

- Before leaving the laboratory wash your hands thoroughly. (Always ensure you wash your hands before meal breaks).

- Any accidents or incidents involving visitors must be reported immediately to the accompanying member off staff and subsequently to the Departmental Safety Officer who will complete an accident form if necessary.

- On hearing the fire alarm, you must stay with your host who will escort you to safety.

Laboratory Safety

Normally, whilst on site you will be accompanied by your host or another member of staff or you will have been given instructions on how to reach a department and to whom you should report. Whilst in a department should you, for any reason, be left on your own, do not enter any other areas unaccompanied. Laboratories by their very nature contain many potential hazards. Entering them without being aware of these may expose you to some risk. Please ensure you wash your hands before leaving a laboratory area.

The Trust accepts no responsibility for any loss or damage to personal property on the Trust site. If you suffer any loss or damge, please report it to your host.

Fire Safety

The laboratories are well equipped with fire alarm systems. However, these may vary depending upon the laboratory you are visiting.
Your host will inform you of the evacuation procedure and the assembly point. Should the alarm sound, please leave the building with your host and do not go to collect personal belongings. If you are alone and the alarm sounds leave the building by the nearest emergency exit.
Once outside proceed to the assembly point with the other staff. Please ask a member of staff if they can contact your host to inform them that you are out of the building.
You may re-enter the building only on instruction from your host once they have been given the all clear.

Compliance with these simple instructions will assist us in maintaining standards of safety and reduction of risk. They will also help to ensure that your stay is in no way marred by an accident. Please note: Smoking is not permitted in any area within the laboratories complex.

Pathology Services encompass the Departments of Clinical Biochemistry, Haematology, Histopathology, Cytology, Morbid Anatomy, Microbiology, Virology and Immunology.

Pathology laboratories are situated on the Doncaster Royal Infirmary and Bassetlaw District General Hospital sites. Phlebotomy services are also available on the Montagu site.

OPENING HOURS
The laboratories are generally open from 0900 - 1700 Monday to Friday.
Please see Laboratory Handbook department sections for precise opening hours.

NO SMOKING

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust operates a no smoking policy on all of its premises

SAMPLES - HEALTH & SAFETY

- ✓ Never eat, drink or smoke when transporting specimens and wash your hands frequently.
- ✓ Carry all specimens in the approved specimen container - not in your pockets.
- ✓ If there is a specimen breakage and spillage, isolate the area to prevent access. If you have an accident involving contamination with a specimen, contact a senior member of staff in the clinical or laboratory area.
- ✓ The tissue fixative for routine histology specimens is 10% formalin (a 4% solution of formaldehyde). This is a hazardous chemical, which should be handled with care. The laboratory can advise on storage handling and substance monitoring.
- ✓ *Please refer to Trust Standard Precautions policy PAT/IC19 available on the website.*

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

Pathology Services

Safety information for laboratory visitors

Welcome

We would like to welcome you to Pathology Services and wish your visit to be safe and successful.
On arrival you must ensure that you have signed the visitor's book to record your presence in one of the buildings. You will be issued with a temporary visitor's badge whilst on the premises. Please also ensure that you sign out when you leave and return the visitor's badge to the office. Your host will be able to guide you through this procedure.
Whilst waiting we ask you to carefully read the information in this leaflet. Its purpose is to ensure that the high standards of safety are extended to you and that your safety is not compromised during your visit.

Site Safety

Pathology Services is committed to fulfilling its legal requirements under the Health and Safety at Work Act (1974) and all other pertinent regulations. Therefore, you have a legal requirement to follow any signs or instructions. You must not risk the safety and welfare of any person on the site including yourself. If you see any process or practice which you consider unsafe please report it to your host. In order to minimise any risk of infection you must not eat, including gum or sweets, drink or apply cosmetics except in designated areas.
Your host will clarify any safety matter about which you may be unclear. In the unlikely event of an accident, or something that might contribute towards an accident, please inform your host.

www.dbh.nhs.uk

Sample Storage

Specimen Type	Tests	Sample Stability			Transport requirements
		Short term	Time Limit	Longer term	
Blood gas syringe		Transport on Ice	10 mins	Not possible	Do not use air transport tube
Blood EDTA	FBC, Film Blood Bank	Ambient	4 - 6 hrs	4 - 10° C	
	HbA1c	Ambient		Ambient	
Blood EDTA (require own sample)	PTH	Ambient	4 - 6 hrs	Not possible	
	ACTH	Pre-Chilled Tube On Ice	10 - 15 mins	Not possible	On Ice
Blood SST	Electrolytes	Ambient	4 - 6 hrs	Available	
	Other Tests	Ambient		4 - 10° C	
Blood Heparin	See Tube Guide	Ambient		Ambient	
Blood Sodium Citrate 1:9	See Tube Guide	Ambient	8 hrs max	Not possible	
Blood Fluoride Oxalate	Glucose, Alcohol	Ambient		Ambient	
	Lactate	Transport on Ice	10 mins	Not possible	On Ice
Blood Culture bottles	Culture & Sensitivity	Ambient Send to lab ASAP	Overnight	37° C	Do not use air transport tube
Urine Universal	Biochemistry	Ambient	4 - 6 hrs	4 - 10° C	Do not use air transport tube
	Culture & Sensitivity	4 - 10° C	Overnight	Specimens over 24 hrs will be rejected	Do not use air transport tube
24Hr Urine Collection	Biochemistry	Ambient	12 hrs	Specimens over 12 hrs may be rejected	
Swabs	Culture & Sensitivity	4 - 10° C	Overnight		

All samples should be transported to the laboratory as soon as possible

HIGH RISK CASES

All specimens and request forms from patients known or suspected of having Hepatitis B, Hepatitis C, HIV or other known blood borne virus MUST be identified with "DANGER OF INFECTION" labels. Other "high risk" infectious agents which should be notified are listed in the Microbiology section of the Laboratory Handbook.

Sample Tube Guide

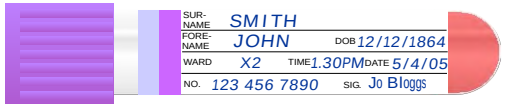
Draw tubes in the order given

SODIUM CITRATE 1:9 *Fill to line essential*	Coagulation Screen, Prothrombin Time (INR), APTT, Thrombophilia Screen, Lupus Anticoagulant Screen
PLAIN (No Additive)	Procollagen, Lamotrigine
SST	All Biochemistry Tests not mentioned elsewhere (1 Tube), Microbiology Tests (1 Tube), Immunology Tests
HEPARIN	hsTroponin I, Chromosome Studies, Lead, Amino Acids, Synovial fluids for Crystals
EDTA	FBC, Reticulocytes, Sickle Screen, Haemoglobinopathy Screen, G6PD, GF Test, PV, Malarial Parasites, RBC Folate, Marker Studies, Lead, Complement, HbA1c, PCR Tests, HIV / CMV Viral loads, HLA B27, Kleihauer
EDTA (X-Match)	Blood Group, Save Serum, Crossmatch, Blood Group Antibodies, Cord Blood Samples
FLUORIDE OXALATE	Glucose, Ethanol (Alcohol), Lactate
PLAIN (Trace Elements)	Copper, Selenium, Zinc

Sample Labelling

Wherever possible use ICE to request & label Pathology tests

Follow the Trust policy (PAT/T8) and avoid mistakes by labelling all types of samples correctly with the full name,date of birth and ID number



Note - Transfusion samples must have all details & be signed

Doncaster and Bassetlaw Teaching Hospitals NHS
NHS Foundation Trust

Pathology Services
Laboratory Quick Reference

Pathology services encompass the departments of

Clinical Laboratory Sciences -	*Blood Transfusion, Clinical Biochemistry, Haematology, Immunology*
Histopathology -	*Histology, Morbid Anatomy*
Microbiology -	*Microbiology, Virology*
Phlebotomy	

Laboratories and Phlebotomy are situated on the Doncaster Royal Infirmary and Bassetlaw District General Hospital sites. Phlebotomy is also available on the Montagu site.

Opening Hours

All laboratories are open routinely from 9.00 am - 5.00pm Monday to Friday. Microbiology offer a restricted service from 17:00 to 22:00 and at weekends, and an on-call service after 22:00. Clinical Laboratory Sciences staff work a shift style system on a 24/7 basis. For urgent requests after 20:00 contact the Biomedical Scientists via the Switchboard.

Pathology Enquiries

Please refer to Pathology Telephone Results Policy (PAT/T61)

Direct 01302 642870 Internal 642870

This document summarises detail from the Pathology Handbook. This is available on the DBTH Intranet, Trust website, via ICE or on the QR code link

Laboratory Handbook

PATH-SOP-54 Version 8 - 31st March 2018
Document Approver - Peter Taylor

Phlebotomy Service

In Patient Service

A morning phlebotomy service is available to the majority of wards at BDGH and DRI seven days per week. Please note that National Guidelines will be followed and any patient not wearing the appropriate wristband will not be bled.

Monday to Friday

Each ward is visited by a member of the phlebotomy team who bleeds patients as required. The phlebotomist WILL NOT return to the ward after the morning visit.

Saturday, Sunday and Public Holidays

A limited service is available and requests should be kept to those tests that are necessary for immediate patient management only. The requests should be available from 07:00. The phlebotomist WILL NOT return to any ward after the initial visit.

Out Patient Service

A phlebotomy service is provided in the outpatient departments at BDGH, DRI and MMH Monday to Friday. The opening times for all hospital sites are 08:00 to 17:00. This service is for the venepuncture of outpatient and General Practitioner patients. It is not necessary to make an appointment for blood tests with the exception of Glucose Tolerance Tests, when appointments must be made by phoning Pathology enquiries.

Urgent / Fast Track

With the exception of Histology, a sample will only be accepted as urgent (or "fast track") if the department receives a telephone call BEFORE the sample is received. Work will be analysed as routine if there is no phone call or if the sample is already in the laboratory when the phone call is received.

Protocol

Telephone Pathology:

Blood Transfusion requests -	*DRI x 644044, BDGH x 572452*
Microbiology requests -	*DRI x 642835 (Bacteriology)*
	DRI x 642840 (Virology)
All other requests -	*DRI x 642870, BDGH x 572450*

Provide the following information:

Your name and location
Patient's name
Test(s) required and the reason for the urgent request
Details of route for result (Phone No./Bleep No./on ICE)

Send the sample to Pathology Reception either via the Tube system, a service assistant or GP transport route.

Ensure all specimens are labelled immediately after taking sample whilst at the patient's bedside.

Abnormal Results

Markedly abnormal results which require urgent clinical action will be telephoned to the requesting source (see Policy PAT/T61). It is therefore important that the request form is completed with the requesting doctor ID (including bleep number).

Making a Request

All requests, with the exception of Histology and Blood Transfusion, should be made using the ICE system. For Histology and Blood Transfusion, and if ICE is not available, complete the appropriate Pathology request form. All requests must be fully completed with all relevant information and all samples appropriately labelled (see Policy PAT/T8). Bag the samples up as directed by ICE and send to the laboratory either via the tube system, a service assistant or GP transport route. If using a hand written request form please ensure that individual forms are used for Microbiology or Virology requests and a separate blood sample is sent for Virology.

Microbiology samples sent after 22:00 must be brought to the laboratory and stored in the specimen reception refrigerator or incubator:

Blood Cultures - Incubator
Urines, Swabs, all other Microbiology samples - Refrigerator

Clinical Biochemistry Profiles

BLOOD GAS PROFILE
Anaerobic Heparin Arterial Blood - Gas Syringe
pO_2, pCO_2, pH, Total hydrogen ion, Base excess/deficit, Standard bicarbonate

BONE PROFILE *SST*
Total Protein, Albumin, Globulin, Alkaline Phosphatase, Calcium, Adjusted Calcium, Phosphate

LIVER PROFILE *SST*
Total Protein, Albumin, Globulin, Alkaline Phosphatase, ALT, Total Bilirubin,
Conjugated Bilirubin measured if total bilirubin >50µl/L

UREA & ELECTROLYTES PROFILE *SST*
Creatinine, Urea, Sodium, Potassium
Chloride & Bicarbonate available by specific request only

LIPID PROFILE *SST*
Triglyceride, Cholesterol, HDL-Cholesterol, Calculated LDL-Cholesterol, Non HDL-Cholesterol, Cholesterol / HDL-Cholesterol ratio

THYROID FUNCTION TEST *SST*
TSH, Free Thyroxine (FT4)

Samples - Health & Safety

✓ Never eat, drink or smoke when transporting specimens & wash your hands frequently.

✓ Carry all specimens in the approved specimen container - not in your pockets.

✓ If there is a specimen breakage and spillage, isolate the area to prevent access and if you have an accident involving contamination with a specimen, contact a senior member of staff in the clinical or laboratory area.

✓ The tissue fixative for routine histology specimens is 10% formalin (a 4% solution of formaldehyde). This is a hazardous chemical, which should be handled with care. The laboratory can advise on storage, handling and substance monitoring.

✓ *Please refer to Trust Standard Precautions policy PAT/IC19 available on the intranet.*

Point of Care Testing

Point of care testing (POCT) is defined as any form of diagnostic testing undertaken outside of an accredited laboratory environment. There are increasing expressions of interest in the use of POCT equipment outside the laboratory, particularly by general practitioners. The use of POCT equipment within the Trust is currently mainly limited to blood gas analysis on specific wards, glucose analysis throughout the hospital and the use of urine dipstix and pregnancy tests.

Pathology has overall responsibility for the point of care use of the blood gas analysers and glucose meters.

The Trust established a multidisciplinary Point of Care Testing Governance Committee in September 2003 and is chaired by Miss Katherine Wright Consultant Biochemist.

It is recommended that the need for POCT is always discussed with the relevant pathology laboratory in the first instance. A Trust Policy and Guidelines for Point of Care Testing (CORP/RISK8) has been produced and can be accessed from the Trust website.
For other information contact our POCT Co-ordinator on 644038 (DRI)

Pathology Report Delivery

Pathology results are available electronically via ICE and the GP electronic links. Hard copies are returned to the requesting location daily Monday - Friday within the Trust and other locations which do not have electronic links.

Laboratory Links

Pathology results are available to the majority of users in electronic format. Whilst the Pathology makes every effort to ensure the timeliness and accuracy of its reporting, there are times when the systems fail. If you are not able to receive results electronically or if you have any enquiries with regard to electronic issue of results, please contact the Pathology IT manager on 01302 642826 or email *peter.j.taylor@nhs.net.*

Transfusion Practitioner

The Trust has a Specialist Practitioner of Transfusion (SPOT) team. They can be contacted via switchboard on pager
Monday to Friday 09:00 to 17:00. They are available for advice on all aspects of transfusion. and alternatives to transfusion. They are sensitive to religious and cultural issues surrounding transfusion of blood and products.

Quality Assurance

All departments aim to give the very highest quality of service with the minimum of delay. To ensure this, all departments participate in recognised external quality assurance schemes. There are also extensive internal quality control checks.
Any problems regarding the quality of the service should be brought to the attention of the Pathology Quality Manager on 01302 642820 or email *fiona.dunn2@nhs.net*

Pathology Services

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

➔Transport of Pathology samples

Sender

The **sender** must ensure that the samples are in the correct container for transportation and that the patient's confidentiality is maintained by ensuring the form is not visible to the person transporting it.
Samples sent from Pathology department are normally taken by Transport department and it is the senders' responsibility to organise this.

Bassetlaw District General Hospital

Weekdays 9.00am - 5.00pm

All samples should be taken to Pathology Specimen Reception.

All other times

All samples should be taken to Pathology Specimen Reception.
Please ring the bell located on the entry keypad to inform staff that samples are being delivered.

Doncaster Royal Infirmary

Weekdays 9.00am - 5.00pm

Blood Bank samples
- Take directly to Blood Bank

Histology samples
- Take directly to Histopathology department

All other samples
- All samples should be taken to Pathology Specimen Reception.

All other times

All samples should be taken to Pathology Specimen Reception.
Please ring the bell at reception to inform on call Biomedical Scientist and leave the samples in the green basket attached to the shutter, **not on the floor or just outside the Blood bank door.**

Mexborough Montagu Hospital

Weekdays 9.00am - 5.00pm

All samples should be taken to the laboratory at Mexborough for transportation to DRI at 10:45, 12:45 and 15:30. There is an additional transport run at 17:00 from Barnburgh ward, so all samples for that run should be sent there by the person requesting the tests.

All other times

All samples should be taken to Barnburgh or Adwick ward for pick up by the driver and it is the responsibility of the person requesting the test to arrange suitable transport.

Conditions

- Do not open the box
- Do not place the box in sunlight or next to the heater outlet
- Ensure the box is secure and unable to move around
- If there is a delay in transportation due to traffic difficulties etc, the driver must contact the transport department immediately or as soon as it is safe to do so 01909 572424. If this defaults to an answer machine the driver must contact the BMS on call in Haematology via switchboard immediately 01302 642870 or 01909 572450.

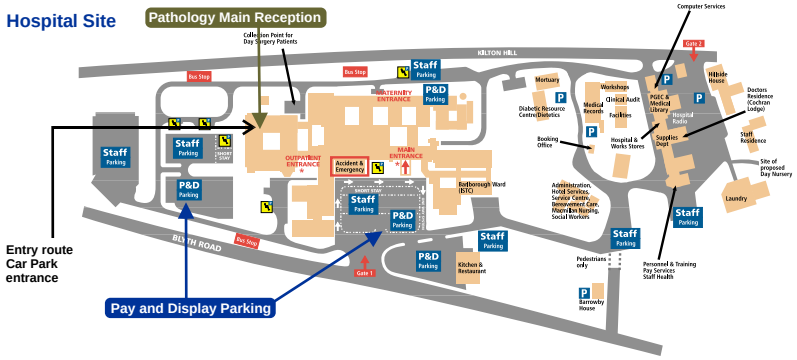
Formalin

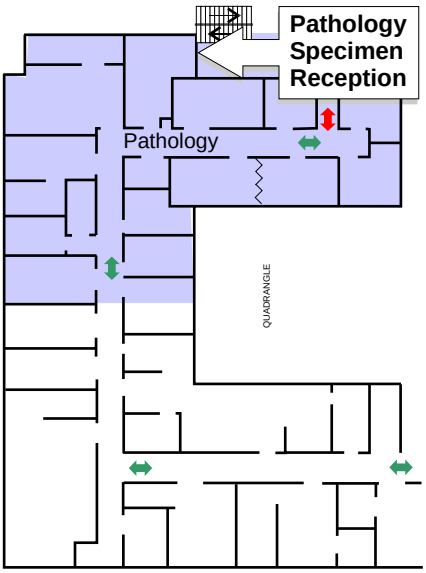
Specimen pots for histology samples will be in a chemical fixative solution called formalin (also known as formaldehyde) which can be hazardous if transported inappropriately. Drivers should have relevant health and safety guidance and instruction in what to do in the event of a spillage of the formalin chemical.

Bassetlaw District General Hospital

Main Reception

At Clinical Therapyentrance go up stairs / lift to second floor, Pathology Laboratory reception is slightly to the left and across from you as you come out of the stairs.

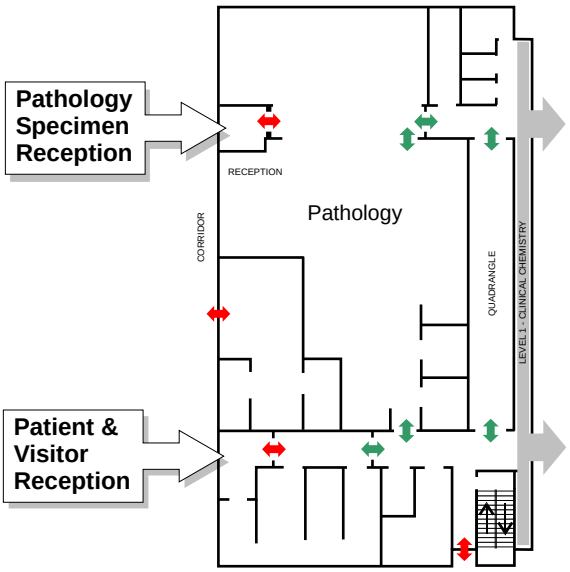




Doncaster Royal Infirmary

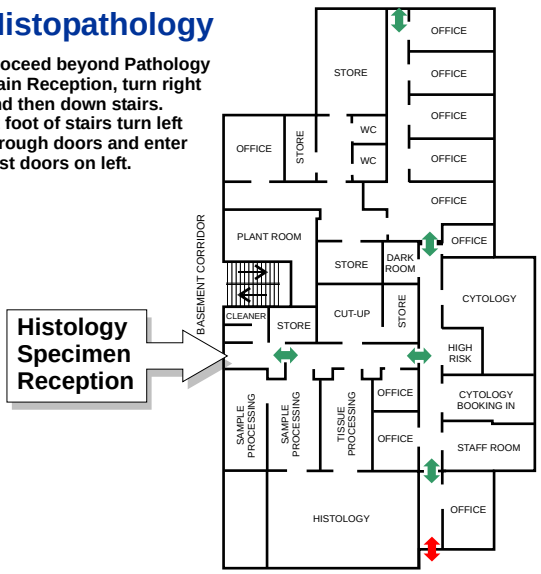
Main Reception

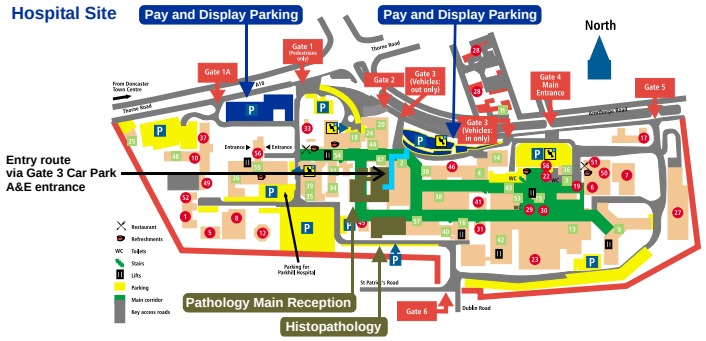
Enter at Accident and Emergency Entrance. Turn immediately right and then left along corridor.



Histopathology

Proceed beyond Pathology Main Reception, turn right and then down stairs. At foot of stairs turn left through doors and enter first doors on left.





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