

Laboratory Guide 2024



THE DOCTORS
LABORATORY

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The TDL Laboratory Guide Is designed to give you an easy-to-use reference for the most regularly requested services, pathology profiles and tests. If you are not able to find details of the tests and services you need, please contact the laboratory on **020 7307 7373** for advice and information.

For details about all services, please contact the laboratory on **020 7307 7373**, or visit **www.tdlpathology.com**

TDL services include:

- Comprehensive, multidisciplinary pathology services
- Specialist diagnostic analysis for other laboratories
- Pathology partnerships with NHS Trusts
- Support for CRO and pharmaceutical companies

Sonic Healthcare core values

Sonic Healthcare's core values were created by our staff more than 20 years ago, and act as guiding principles for how we conduct ourselves as an organisation.

Our core values set the standard for the collegiate and supportive way in which we behave towards one another, as well as the professionalism with which we conduct ourselves in our day-to-day duties. Individually, our core values articulate our commitment to medical excellence. Collectively, they empower our people to deliver exceptional medical services to doctors and patients.

Since their inception, Sonic Healthcare's core values have been embraced by Sonic Healthcare staff around the world as a unifying code of conduct.

Commit to service excellence

- To willingly serve all those with whom we deal, with unsurpassed excellence.

Treat each other with respect and honesty

- To grow a workplace where trust, team spirit and equity are an integral part of everything we do.

Demonstrate responsibility and accountability

- To set an example, to take ownership of each situation to the best of our ability and to seek help when needed.

Be enthusiastic about continuous improvement

- To never be complacent, to recognise limitations and opportunities for ourselves and processes and to learn through these.

Maintain confidentiality

- To keep all information pertaining to patients, as well as professional and commercial issues, in strict confidence.



Complaints policy

It is the aim of the company to maintain its core values. Two of these core values are:

- Commit to service excellence.
- Be enthusiastic about continuous improvement.

Where a doctor or patient needs to raise a complaint about service levels they should contact Cyril Taylor, Director of Laboratory Compliance, or Annette Wilkinson, Director of Service at **tldservice@tdlpathology.com** giving details of the complaint.

The information forwarded will be treated as confidential and investigated by the above persons. This process will link into Quality Management procedure for incident investigation. Corrective and preventative actions will be introduced where indicated.

Helpful information

**The Doctors Laboratory
The Halo Building, 1 Mabledon Place
London, WC1H 9AX, UK**

Tel: +44 (0)20 7307 7373 – 24 hour telephone
(Main switchboard/All services)

Email: tdl@tdlpathology.com

Laboratory times: 24 hours

Samples can be delivered at any time
to this location.

**Patients' samples cannot be taken
at The Halo Building. This service is
undertaken at 76 Wimpole Street,
London W1G 9RT**



SCAN ME

To download a location map
or to get directions visit:

**[www.tdlpathology.com/
about-us/locations/](http://www.tdlpathology.com/about-us/locations/)**

**TDL Manchester
Regents Place, 4 Windsor Street
Salford, M5 4HB, UK**

Tel: +44 (0)161 332 7181

Email: tdlmanchester@tdlpathology.com

Laboratory times: 24 hours

Samples can be delivered at any time
to this location.

**Patients' samples cannot be taken
at TDL Manchester.**

TDL Manchester Couriers

Direct Tel: +44 (0)161 332 7187

Email: couriersman@tdlpathology.com

TDL Manchester Supplies

Email: supplies@tdlpathology.com



Helpful information

Patient Reception/
Phlebotomy Services

Patient Reception provides a sample collection service for patients attending at the request of their doctor/clinic.

Patients, of all ages, are welcome to attend Patient Reception, 76 Wimpole Street, London W1G 9RT for their samples to be taken. Patients need to be referred by their clinic or doctor and are required to bring a request form or letter of referral.

Appointments are only necessary if a patient needs specialised investigations or care. Instructions can be telephoned or emailed ahead of the patient's attendance, if this is more convenient.

Sample-taking is undertaken by qualified phlebotomy staff for which a standard sample-taking fee of £60.00 is charged to patients. Doctors and clinics are charged £35.00 for each patient. Sample-taking services for Extended Tests and Drugs of Abuse with Chain of Custody, and semen analysis are routinely available.

Cervical cytology, HVS and cervical swabs are not taken at Patient Reception.

Patient Reception sample-taking services are not available in Manchester.

TDL Patient Reception
76 Wimpole Street,
London, W1G 9RT, UK

Tel: +44 (0)20 7307 7383

Email: patientreception@tdlpathology.com

Out of hours samples can be dropped off at this location. **Phlebotomy Services are only available at this location.** Patients' samples cannot be taken at the main laboratory.

Opening times

Monday to Friday 7.00am – 7.00pm

Saturday 7.00am – 1.00pm

Closed Sunday and bank holidays.



SCAN ME

To download a location map or to get directions visit:

www.tdlpathology.com/patients/patient-reception/



Helpful information

TDL Collect: specimen collection services by courier

TDL Collect provides a dedicated medical sample collection service (vans by arrangement) on a scheduled or ad hoc basis.

No charge is made for collections from practices within the M25. Courier collections from private addresses are not undertaken.

The courier collection service for Inner London postcodes operates on a 24/7 basis, as shown. Postcodes extending beyond to the M25 operate from 9.00am to 8.00pm. Outside the M25, and throughout the UK, sample collections are by arrangement and may incur courier charges.

TDL Collect Online Courier Booking is a time-saving option for arranging couriers for sample collection:
www.tdlpathology.com/services/tdl-collect/

Please contact **couriers@tdlpathology.com** for your practice's secure login and password.

High-risk samples should be clearly labelled and packed separately from other samples.

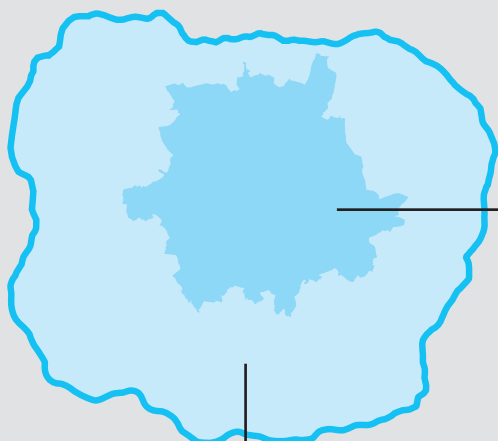
TDL's couriers cannot transport samples containing Hazard Group 4 Pathogens such as Ebola Fever or Haemorrhagic Fever.



SCAN ME

Use the TDL Collect Online Courier Booking service to arrange a courier for sample collection:

www.tdlpathology.com/services/tdl-collect/



Courier collection from postcodes extending beyond Inner London to within the M25 operate from 9.00am to 8.00pm

Courier collection from Inner London postcodes (see below) operates 24/7:

E1, E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E20

EC1, EC2, EC3, EC4

N1, N2, N3, N4, N5, N6, N7, N8, N9, N10, N11, N12, N13, N14, N15, N16, N17, N18, N19, N20, N21, N22

NW1, NW2, NW3, NW4, NW5, NW6, NW7, NW8, NW9, NW10, NW11

SE1, SE2, SE3, SE4, SE5, SE6, SE7, SE8, SE9, SE10, SE11, SE12, SE13, SE14, SE15, SE16, SE17, SE18, SE19, SE20, SE21, SE22, SE23, SE24, SE25, SE26, SE27, SE28

SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10, SW11, SW12, SW13, SW14, SW15, SW16, SW17, SW18, SW19, SW20

W1, W2, W3, W4, W5, W6, W7, W8, W9, W10, W11, W12, W13, W14

WC1, WC2

Semen Analysis

Semen samples need specialist and Immediate handling within the laboratory. For this reason, all requests for Semen Analysis must be made by appointment. Practices or patients can make an online appointment at www.tdlpathology.com/andrologybooking or call **020 7025 7940** to make appointments and confirm instructions for sample collection. There is an attendance fee of £50.00.

- Patients must abstain from ejaculation for at least 2 days but not longer than 5 days before the test. Instructions will be given to patients at the time of arranging their appointment.
- Semen samples should be produced at The Doctors Laboratory, 76 Wimpole Street, unless there are exceptional circumstances. If there are exceptional circumstances please contact **TDL Andrology** on **020 7025 7940** for special arrangements and instructions. Refer to Andrology, see page 63.

Semen Analysis services are not provided in Manchester.



SCAN ME

To make an appointment for Semen Analysis online please visit:

www.tdlpathology.com/andrologybooking

Patient request form

To comply with good clinical practice it is important that there is one request form for each patient's request, and specimens and form are correctly matched, fully labelled, and include three unique patient identifiers and other relevant Information.

- First name, Surname, Date of birth, Hospital/Clinic Number, Medical Record Number (MRN) are examples of patient identifiers
- Time and Date of collection of samples
- Type of sample and Anatomical site, where appropriate (e.g. swabs)
- Relevant clinical information
- Relevant details of medication
- High-Risk Samples should be clearly identified on the form and individually packed separately from other samples
- Known cases of Hazard Group 4 pathogens such as Ebola or Viral Haemorrhagic Fever must NOT be sent to the laboratory. If there is doubt about a patient's symptoms and presentation please contact the Imported Fever Service on 0844 778 8990 for advice before sending samples to TDL or any laboratory.

If additional tests are required for a sample already received please contact the laboratory on **020 7307 7373** with your request for specific further analysis. Samples are stored within timeframes according to their discipline. Laboratory staff will advise on the ability to undertake further testing from samples already received in the laboratory.



SCAN ME

Download TDL Request Forms from:

www.tdlpathology.com/tests/request-forms/

Helpful information

Emailed requests for add ons

The majority of samples received in the laboratory are kept for one week. If sample type and volume allow, further testing can be requested by telephone on **020 7307 7373** or by email to **addons@tdlpathology.com**. Please specify the details of the test(s) to be added.

If requests for **Add ons** are made by email, the **patient's details** and **Laboratory Number** need to be referenced.

Home visits

This service is available for patients who, for whatever reason, prefer samples to be taken at home or at locations other than a doctor's practice or TDL's Patient Reception at 76 Wimpole Street, London. This is a service that is used regularly to save time for both doctors and patients, and ensures that results can be made available before consultation is undertaken.

There is a visit fee from £150.00 to patients within the M25, and from £200.00 for children when two nurses need to attend. Home visits outside the M25, for weekends, bank holidays and night fees are by special arrangement. To arrange a home visit please telephone Patient Reception on **020 7307 7383** or email **homevisits@tdlpathology.com**.

Sample packing

Samples need to be packed and transported appropriately for subsequent processing and testing. Transport systems will be various and cover both long and short distances.

Samples need to be collected and packed into appropriate sample containers provided by the laboratory in order to maintain integrity. Attention needs to be given to temperature, special transport containers and time limitations. Each testing has a different sample requirement, which should be referenced prior to sample taking.

Clinics, practices and laboratories who are posting or transporting samples by air, sea, rail and road between local, regional and reference laboratories, or between laboratories in other countries, must adhere to a number of regulations. These regulations are designed to deal with transportation accidents and spills, reduce biohazards and keep samples intact for testing.

Regulations are given by several sources including:

- National transport regulations
- International air transport regulations
- Rail and road traffic agencies
- Postal services

Compliance is mandatory in order to reduce risk to couriers, carrier, laboratory staff and passengers.

Sample transport requirements are based on the category of samples being transported. Infectious substances are classified as Category A (for example a substance that causes viral haemorrhagic fevers or Category B).

TDL does not arrange for transport of Category A samples (infectious substances capable of causing permanent disability or life-threatening or fatal disease to humans or animals).

Instruction and packaging for Category B is provided, covering Biological Substances, UN3373.

Packaging requirements

There are specific labelling and triple packaging requirements for Category B samples such that it meets packaging instruction P650:

- Primary receptacle – tube or vial containing the sample which is placed in the secondary packaging.
- Secondary packaging – for example, a protective packaging case or ziplock bag with absorbent material.
- The outer packaging – intended to protect the entire contents.

Helpful information

- There may also be additional postal envelopes to place the entire package in for postal return. The external surface of the package must be labelled with UN3373 and clearly state BIOLOGICAL SUBSTANCE CATEGORY B.

There are additional packaging requirements for frozen samples requiring shipment using BioFreeze bottles or Dry Ice.

For information please contact the Referrals Dept (ReferralsOffice@tdlpathology.com).

Postal pathology

Postal pathology services should be considered by all practices in the UK who need a rapid delivery service to the laboratory as it is a quick and efficient method of sample return, which causes little to no disruption to the patient. Royal Mail require that ALL pathology postal packs are sent using Tracked 24 returns. This provides a particularly suitable method of transport for any healthcare organisation. Royal Mail postal pathology with Tracked 24 returns provides:

- Simple and convenient sample handling throughout the UK for most tests. It is not suitable for samples that need to be received within 24 hours of sample taking (e.g. coagulation, Quantiferon TBQ).
- Scope for large and small numbers of samples.
- Next morning delivery.
- Allows patients and practices to track samples to the Distribution Office through the Royal Mail system.
- Samples can be posted from any Royal Mail post box.
- There is a charge of £3.36 for each Royal Mail Tracked 24 pack. This charge will be itemised in monthly invoices to the practice or patient, as requested.

TDL website

The TDL website gives updated details of our tests – sample types, turnaround times and special instructions. The Specialities section provides a new way to find tests you need, and a Services section has additional information for TDL Collect, Postal Pathology and TestGuide app. Reference Ranges can be requested by emailing refranges@tdlpathology.com. Full details of our tests and profiles are also available in the TDL TestGuide app.



SCAN ME

Visit the TDL website at:
www.tdlpathology.com



Helpful information

DX System

DX is a well known next-day courier of Category B specimens – transporting biological samples in compliance with the industry's highest regulations. DX is compliant to IATA regulations, is audited independently by Dangerous Goods Safety Advisors. They work with a combination of large health organisations and smaller, independent laboratories to ensure the safe delivery of specimens every year.

TDL's DX Address is **DX 340201, St Pancras 90 WC**.

Pathology consumables / Request Forms / Postal packs

TDL Supplies Department provides all appropriate sample collection consumables required for sample collection. Orders will be dispatched on the same or next day and can be made by email to **supplies@tdlpathology.com**. A Supplies Order Form is available from the TDL website.



SCAN ME

Download TDL Request Forms from:

**[www.tdlpathology.com/
tests/request-forms/](http://www.tdlpathology.com/tests/request-forms/)**

Requesting and reporting options

We continually review and update our IT Services for receiving requests and reporting results electronically between practices and the laboratory. A number of innovative report formats are now available.

Encrypted Email

Results will be sent in encrypted format to any number of predetermined email addresses. Copy reports will be emailed automatically to email addresses on the system.

Link to Practice Management System

Bidirectional requests and results can be received and delivered electronically using a number of integrated practice systems. Practice software that accepts data in an HL7 format can be linked to securely receive results from the laboratory.

Security of information in TDL systems and processes is managed by our Information Security Management System, which is certified to the latest International Standard for Information Security ISO/IEC 27001:2013.

TDL eViewPlus

Provides the most accurate requesting option for clinics who don't have a practice management system. As well as producing QR coded forms to accompany samples to the laboratory, registered users of this secure Login/Password protected system can request self-collection kits to be sent directly to their patients.

eViewPlus users can also view their results online, with cumulative reporting, anytime, anywhere.

For information about eViewPlus please contact **eviewplus@tdlpathology.com**.

Printed Copy

Printed results will only be sent, as standard, if requested.

Emailed results incorporating your logo

If a practice or company receives results by email, and would like these to be personalised with the practice's logo, please email your company details and logo in GIF format to **logo@tdlpathology.com**.

Helpful information

Fees for pathology

Fees can be paid directly by patients or by the practice, clinic or requesting organisation. A payment instruction clearly identifying to whom invoices need to be sent must be given with each patient's request.

Patients are normally invoiced within 7 days to the address provided by the patient or practice. Their pathology fees include a standard credit/administration charge.

Receipts for insurance purposes are sent, if requested. Patients visiting Wimpole Street for sample-taking have the opportunity to settle their pathology fees at the time of their visit. A credit/administration fee is raised if invoices are sent to patients. All normal credit, debit or charge cards are accepted and payment can be made by following the telephone payment instructions given with each invoice.

The Terms and Conditions of Business appearing on pages 220-227 of this Laboratory Guide shall apply to the services we provide to you, unless otherwise agreed.

Protection of personally identifiable information

The General Data Protection (GDPR) and UK Data Protection Act 2018 came in to force in 2018 and have had significant impact upon the way that personal data is managed; placing legal requirements upon data processors and controllers to manage that information securely, maintain records of the processing that is carried out, and report when breaches of the regulation do occur.

This has impacted the way many businesses operate, and is not restricted to the healthcare sector.

TDL TestGuide app

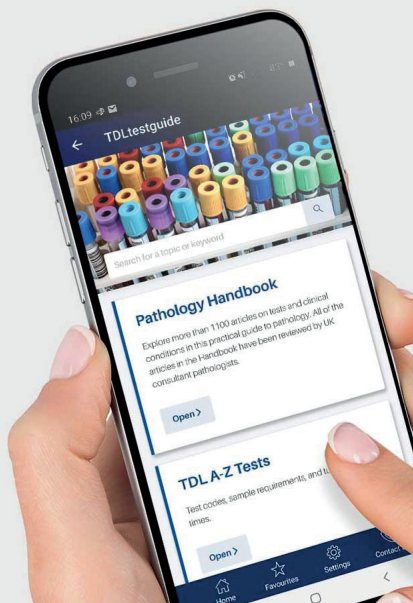
Available for iOS and Android, the TDL TestGuide app offers:

- Full details of TDL's tests and profiles
- The TDL Pathology Handbook, which provides information on more than 1000 pathology topics, reflecting our deep collective knowledge across all areas of pathology

The app can be downloaded from the Apple App Store or Google Play Store. To register for the app, you will just need your TDL Source Code and an email address.

Please contact testguide@tdlpathology.com if you need help with finding your Source Code.

Feedback for the TestGuide app is always welcome; please send suggestions and comments to tdl@tdlpathology.com.



Helpful information

At TDL, these requirements have been implemented within the context of a mature ISO 27001 Information Security Management System – the globally accepted standard by which information is secured.

This ensures that senior management have regular visibility of the threats to the confidentiality, availability and integrity of the information that we process, and are able to steer the efforts of their teams to provide an efficient service that places the confidentiality of our customers and their patients at the heart of everything we do.

In order to support our customers compliance with the regulation and as a part of a wider GDPR compliance project TDL has updated its standard terms and conditions to include revised data processing clauses, which are mandatory when providing personal data to another organisation.

Customers can find out more about how TDL protects their data by reading the TDL Privacy Notice at www.tdlpathology.com/about-us/corporate-information/tdl-group-privacy-notice.

TDL eViewPlus

Provides the most accurate requesting option for clinics who don't have a practice management system. As well as producing QR coded forms to accompany samples to the laboratory, registered users of this secure Login/Password protected system can request self-collection kits to be sent directly to their patients.

eViewPlus users can also view their results online, with cumulative reporting, anytime, anywhere.

For information about eViewPlus please contact **eviewplus@tdlpathology.com**.



Helpful information

Key contacts

24 HOUR TELEPHONE (MAIN SWITCHBOARD / ALL SERVICES): 020 7307 7373

CEO

David Byrne

david.byrne@tdlpathology.com

Group Commercial Director

Brian Madden

brian.madden@tdlpathology.com

Chief Medical Officer

Dr Rachael Liebmann OBE

rachael.liebmann@tdlpathology.com

Group Laboratory Director

Tim Herriman

tim.herriman@tdlpathology.com

Director of Sales/Service

Annette Wilkinson

annette.wilkinson@tdlpathology.com

Director of Genetics & Molecular Pathology

Dr Lisa Levett

lisa.levett@tdlpathology.com

Chief Information Officer (IT)

John Matthews

john.matthews@tdlpathology.com

Director of Group Laboratory Operations

Lisa Manze

lisa.manze@tdlpathology.com

Heads of Support Departments

Director of Laboratory Compliance

Cyril Taylor

Cyril.taylor@tdlpathology.com

Director of Governance

Emer Nestor

emer.nestor@tdlpathology.com

Credit Control Manager

William Howard

william.howard@tdlpathology.com

Logistics / Couriers

Steve Kettle

steve.kettle@tdlpathology.com

Patient Reception

Becca Gallagher

Becca.Gallagher@tdlpathology.com

patient.reception@tdlpathology.com

Call and Service Centre

Chris Tanalega

chris.tanalega@tdlpathology.com

IT Operations / Customer Service

Rochelle Fakhri

rochelle.fakhri@tdlpathology.com

Sample Reception

Chanaide Butler

chanaide.butler@tdlpathology.com

Referrals Department

Maulik Trivedi

maulik.trivedi@tdlpathology.com

Helpful information

Heads of Laboratory Departments (London)

Haem / Bio / Automated Pathology

Naina Chavda

naina.chavda@hslpathology.com

Microbiology / Infection Sciences

Alan Spratt

alan.spratt@tdlpathology.com

Andrology

Andrew Dawkins

andrew.dawkins@tdlpathology.com

Cervical Screening

Julie Smith

Julie.smith@tdlpathology.com

Immunology / Virology

Kushen Ramessur

kushen.ramessur@tdlpathology.com

Cytogenetics

Rebecca Watts

rebecca.watts@hslpathology.com

Molecular Genetics

Dr Stuart Liddle

stuart.liddle@tdlpathology.com

TDL Trials

Abraham Roodt

abraham.roodt@tdlpathology.com

TDL Manchester

Operational Site Lead

Diane Benson

diane.benson@tdlpathology.com

Deputy Site Lead

Andy Leeson

andy.leeson@tdlpathology.com

SRA and Kit Distribution Manager

Georgina Taylor

georgina.taylor@tdlpathology.com

Quality Manager

Carol Tonge

carol.tonge@tdlpathology.com

Courier Control

Marc Rennard

marc.rennard@tdlpathology.com

Quality assurance

The Doctors Laboratory is committed to providing doctors with pathology of the highest quality.

The quality of results is of fundamental importance, and the laboratory operates to stringent technical and administrative standards.

Internal quality assurance is achieved by strict adherence to standard operating procedures for all analytical processes. TDL participates in recognised National External Quality Assessment Schemes; these schemes are subscribed to by NHS and private laboratories. The United Kingdom Accreditation Service (UKAS) provides accreditation to the internationally recognised ISO 15189 Medical Laboratories: Requirements for Quality and Competence standard. Results are subjected to strict internal and external quality control.

Details of the laboratories to whom TDL refers specialist testing are available from TDL Referrals. These laboratories are UKAS accredited or of equal accreditation status.

Quality Assurance is administered by TDL's Quality Management Group (QMG), who also adhere to regulatory and accreditation requirements.

BIOCHEMISTRY

UKNEQAS, WEQAS, RIQAS, BIORAD

- ACE
- AFP/CEA & HCG
- Antibiotics (Gentamicin, Vancomycin and Amikacin)
- Anti-Hbs Detection
- Ammonia
- Autoimmune (RF and TPO)
- B2 Microglobulin
- Cardiac Markers
- Clinical Chemistry
- CMV IgG/IgM
- CRP & Ultra-Sensitive CRP
- CSF

- Cyclosporin and Tacrolimus
- DEQAS
- Diagnostic Serology Exanthem
- Diagnostic Serology Hepatitis
- Drugs of Abuse
- Ethanol
- Faecal Markers for Inflammation (Calprotectin)
- Free Beta HCG and PAPP-A
- GFR
- Glucose/Glucometer
- Glycated Haemoglobins
- Guildford Peptides
- Haematinics
- Healthcontrol Therapeutic Drugs Screen (TDM)
- Hepatitis A (with B and C)
- Hepatitis B Serology
- Hepatitis C Serology
- HIV Serology
- Homocysteine
- HTLV
- IGF-1
- Infectious Immunology
- Lipase
- Lipid Investigations
- NT-Pro BNP
- Paediatric Bilirubins
- Parasitology
- Peptide Hormones
- PSA, Free PSA
- PTH, ACTH and hCT
- QFIT
- Rubella IgG Serology
- Salicylate and Paracetamol
- Specific Proteins
- Steroid Hormones
- Syphilis Serology
- Thyroglobulin Surveys

Quality assurance

Thyroid Hormones
Total IgE
Tumour Markers
Toxoplasma IgM Serology
Toxoplasma IgG Serology
Trace Elements
Urine Chemistry
Vitamin D (25 OH)

HAEMATOLOGY

UKNEQAS

Automated Differential Leucocyte Count
Blood Film Morphology
Coagulation (Including PoCT Coagulation)
EBV Mononucleosis
ESR and NRBC (nucleated Rbc)
Flow Cytometry
 Leukaemia immunophenotyping
 Myeloperoxidase
 Iron stain
Full Blood Count
Haematology
Haematology Analysis
Malaria
Parasite Films
Reticulocyte
Sickle Screening
Thrombophilia Screening
Blood Transfusion Laboratory Practice Scheme (BTLP)

Special Coagulation

Von Willebrand (vWD) screen
Anti-Xa assays
Plasma viscosities
ADAMTS-13 activity
ADAMTS-13 antibody
Heparin/Platelet Factor 4

Induced Antibodies
Platelet function analysis (RCPA)
Lupus anticoagulant:
 Taipan Venom Time
 DRVVT assay

GENETICS AND MOLECULAR VIROLOGY

Molecular genetics and Cytogenetics

Acquired array (CLL/MDS)
Acute Lymphoblastic Leukaemia (ALL)
 – G banding and FISH
BCR ABL1 and AML Translocation Identification
BCR ABL1 Kinase Domain Variant
BCR ABL1 Major Quantification
BCR ABL1 Minor Quantification
BoBs Rapid Aneuploidy detection
BRAF p.Val600Glu (V600E) Mutation
Status for Hairy Cell Leukaemia
Chlamydia & Gonorrhoea detection by PCR
Chronic Lymphocytic Leukaemia (CLL)
Constitutional Clinical Cytogenetics (Rounds for
Amniocentesis, CVS, Solid Tissue, Blood, Array CGH)
Cystic Fibrosis
Duchenne/Becker Muscular Dystrophy
FLT3 Mutation Status
Haematological Technical FISH
Hereditary Haemochromatosis
(C282Y+H63D) genotyping + reporting
HLA Class I (HLA-A, HLA-B, HLA-C)
Tissue Typing (low resolution)
HLA Class II (HLA-DRB1, HLA-DQB1)
Tissue Typing (low resolution)
HLA-B27 Genotyping
HLA-B57*01 Genotyping
HLA+ Disease Typing Cytochrome
P450 2C19 genotyping
Human Papillomavirus DNA
IG/TCR Clonality Status

Quality assurance

IGHV for CLL
Inborn Errors of Metabolism
JAK2 p.Val617Phe (V617F) Mutation Status
KIT p.Asp816Val (D816V) Mutation Status for Mast Cell Disease
Lymphoid Gene Panels
Lymphoma
Lymphoplasmacytic Lymphoma / Waldenstrom Macroglobulinaemia
Measurable Residual Disease for AML by Molecular Methods
Myeloid (AML/MDS/CML) – G-banding and FISH
Myeloid Gene Panels
Myeloma – sample FISH set up and analysis plus online
Myeloproliferative Neoplasms Diagnostic Testing
NGS AML gene panel
NGS Myeloid Target Panel
NIPT for aneuploidies and sexing
NMP1 Mutation Status
Paediatric Acute Leukaemia Translocations
Paternity Testing
Prader-Willi and Angelman Syndromes
QF-PCR Aneuploidy Detection
Sexually Transmitted Diseases (CT/NG/MGEN/TV/UU/UP)
Spinal Muscular Atrophy
Thrombophilia (Factor II, V, MTHFR)
TP53 for CLL
Y Microdeletion PCR Assay

Molecular virology

Adenovirus DNA Viral load and Qualitative PCR
Bacterial 16S
B19 virus DNA Viral load
BK virus DNA Viral load
CMV DBS (dried blood spots)
CMV DNA Plasma Viral load
CMV DNA Whole Blood Viral load

CMV Resistance
EBV DNA Plasma Viral load
EBV DNA Whole Blood Viral load
Enterovirus RNA
Gastroenteritis Virus Panel
Hepatitis B Genotyping
Hepatitis B Drug Resistance Typing
Hepatitis B Viral Load
Hepatitis C Genotyping
Hepatitis C Resistance genome detection (NS5a & b)
Hepatitis C Resistance Typing (NS3 & NS5a)
Hepatitis C Viral Load
Hepatitis D Virus Viral load and Qualitative PCR
Hepatitis E Virus Viral load and Qualitative PCR
HIV-1 Drug Resistance (Pol)
HIV-1 Drug Resistance (Integrase)
HIV-1 RNA Viral load and Qualitative PCR
HIV-1 DNA Genome Detection
HIV-1 Tropism Genome Detection
HSV 1&2 DNA
HSV 1&2 DNA HSV Drug Resistance
HIV-2 Viral Load
Human Herpes virus 6 DNA
Human Herpes Virus 8 Viral load and Qualitative PCR
Influenza Haemagglutinin typing
JC Virus DNA
Measles and Mumps PCR
MERS Coronavirus
Parechovirus RNA
Respiratory panel I
Respiratory panel II
SARS-CoV-2 (COVID-19) PCR/NAAT
SARS-CoV-2 Variants of Concern (VOC) sequencing
Syphilis PCR
Transplantation Virus Panel
VZV DNA

Quality assurance

MICROBIOLOGY

Laboratory Quality Scheme

Helicobacter pylori antigen from faeces
Polarising crystal microscopy from synovial fluid
Streptococcus pyogenes (Group A)
detection in pharyngeal samples
Surveillance for multi drug resistant bacteria
Blood culture and gram stain
Candida PCR
Mycoplasma PCR
Aspergillus PCR

UKNEQAS

Clostridium difficile detection and toxin testing
Faecal parasites
General bacteriology
Genital pathogens
MRSA screening
Microbial susceptibilities
Mycobacterial microscopy
Mycobacterial culture and molecular detection
Antifungal assays
Antifungal susceptibilities
Cryptococcal antigen
Fungal culture
Fungal biomarkers
Urinary antigen

WEQAS POCT

Urinalysis

QCMD

Dermatophyte PCR
PCP PCR
Atypical pneumoniae PCR

IMMUNOLOGY

UKNEQAS – General Immunology

Allergen Component Testing
Autoimmune Serology ANCA/GBM Antibodies
Bullous Dermatositis Antibodies
Allergen Specific IgE Antibodies
General Autoimmune Serology
Anti-Phospholipid Antibodies (B2GP)
Nuclear and Related Antigens
IGRA (Interferon gamma release assay)
Intrinsic Factor Antibodies
Diabetic Marker (Islet Cell Antibodies)
Myositis Associated Antibodies
Specific Microbial Antibodies
Syphilis (THPA and RPR)
Lyme (IgG + IgM)
Hepatitis E (IgG and IgM)
Coeliac Disease
(Endomysium, Tissue transglutaminase)
Triptase
Covid 19 Antibodies
Faecal Markers (Calprotectin)

UKNEQAS – Infectious Immunology

Anti-Hbs Detection
CMV IgG/IgM
Diagnostic Serology Hepatitis
Helicobacter pylori antigen from faeces
Hepatitis B Serology
Hepatitis C Serology
HIV Serology/ POCT
HTLV
Measles and Mumps Serology
Parasite Serology
Parvovirus and Rubella Serology
Syphilis Serology
Toxoplasma IgM Serology
Toxoplasma IgG Serology

Quality assurance

RCPAQAP Scheme

Legionella (IgG) Serology
Striated Muscle Antibodies
Chlamydia Serology

INSTAND Scheme

Adrenal Antibodies
HDV Serology and Functional Complement
Hepatitis E Serology

CSCQ Scheme

Lyme Borrelia Serology

Laboratory Quality Scheme

Herpes Simplex 1 & 2 Antibodies
Cytomegalovirus Antibodies
Antistreptolysin O Titre
Helicobacter Pylori IgG Antibodies
RNA Polymerase III
Euroimmun ifQ-Lubeck (Liver)
Autoimmune Disease Scheme
Measles Serology
Mumps Serology
Mycoplasma Serology
VZV Serology
EBV Serology

ENDOCRINOLOGY

UKNEQAS

Steroid Hormones
Peptide Schemes 1 to 4
Thyroid Scheme
Allergens Scheme
SHBG
Prostate Specific Antigen
Tumour Markers
PTH

Specific IgE/Total IgE
AFP/CEA

CERVICAL SCREENING

PHE

Gynaecological Cytopathology EQA Scheme (GEQA)
National EQA Scheme for the Preparation and Staining of Cervical Liquid Based Cytology Samples (TEQA)

HOLOGIC

ThinPrep Stain EQA

UKNEQAS for Microbiology

Molecular Detection of HPV

DIAGNOSTIC CYTOLOGY

UKNEQAS for CPT

Stained Non-Gynaecological Cytology Module.
All non-gynaecological (diagnostic cytology), including Urine Cytology, are referred to a UKAS accredited laboratory for reporting.

ANDROLOGY

UKNEQAS

Semen Analysis Scheme

INFORMATION SECURITY

Accredited by British Standards
Institute ISO/IEC 27001:2013

Links to the UKAS Schedules of Accreditation

HSL Blood Sciences (8169)

https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/8169-Medical-Single.pdf

HSL Infection Sciences (8860)

https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/8860-Medical-Single.pdf

HSL Molecular Pathology and Genetics (8059)

https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/8059-Medical-Single.pdf

TDL Manchester (8812)

https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/8812-Medical-Multiple.pdf

TDL Andrology (10199)

https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/10199-Medical-Single.pdf

HSL Cervical Screening (8511)

https://www.ukas.com/wp-content/uploads/schedule_uploads/00007/8511-Medical-Single.pdf

Measurement Uncertainty

Medical laboratories are responsible for ensuring that test results are fit for clinical application by defining analytical performance goals and selecting appropriate measurement procedures. All types of measurement have some inaccuracy due to bias and imprecision; therefore measurement results can only be estimates of the values of the quantities being measured. To properly use such results, medical laboratories and their clinical users need some knowledge of the accuracy of such estimates.

The complete result of a measurement is a value, a unit and an estimate of uncertainty. This estimate of uncertainty is conventionally referred to as Measurement Uncertainty (MU) and incorporates the cumulative range of factors involved in the testing procedure itself in addition to consideration of the inter-individual and intra-individual biological variation which will potentially influence the overall test result. Evaluating measurement uncertainty is an ISO 15189:2012 accreditation requirement.

In terms of MU determined by the TDL/HSL group of laboratories, it should be noted all assays are performed in strict accordance with the manufacturers' instructions. MU, which has been estimated for each assay during the verification procedure, is reviewed at regular intervals to ensure that MU values do not exceed the pre-defined maximum allowable uncertainty for each assay.

Overall assay performance is also regularly monitored through internal quality control (IQC) and external quality assessment (EQA) schemes and incorporated in test result interpretation. MU for individual assays is available upon request.

Sample rejection criteria

Sometimes tests cannot be performed in the laboratory if samples fall short of the quality, volume or other eligibility criteria such as clear sample labelling. In these cases, the potential risk to the patient management is that the laboratory may need to reject the samples, and not carry out processing. Sometimes the laboratory can rectify a situation where a sample falls short of the sample acceptance criteria though in this case the risk to the patient management may be a breach of stated turnaround time and a delay to provision of the result. In order to reduce the risk of sample rejection or delay to provision of results, please ensure all sample taking criteria are met.

Summary list for sample rejection

- Incorrect sample types received:
 - Basic incorrect blood tube/other sample.
 - Samples without the appropriate preservative (e.g. acidified urine samples).
 - Samples that are received ambient, when a frozen sample is required.
 - Samples that are received unprotected from light, when they are required to be covered at the point of venepuncture.
- Samples in incorrect containers (e.g. cervical cytology must be a ThinPrep vial; urine cytology must be in a uricite container).
- Insufficient sample received.
- No sample received.
- Labelling or form issues (mislabelled/unlabelled/no forms/no clinical information).
- Clotted/haemolysed/lipaemic/icteric samples.
- Sample is broken or has leaked in transit.
- Stability time has been exceeded. Stability time is test dependant, and also refers to tests that can only be carried out on certain days of the week.
- Sample contamination (e.g. being in the same bag as a leaking sample).
- Samples are high risk or infectious.

- Samples that are received in expired tubes.
- Discontinued tests.

Department specific

- Sample Reception will not accept samples packaged with needles of any kind.
- Haematology cannot accept frozen whole blood for testing.
- Coagulation cannot accept over or under filled samples for testing.
- Coagulation cannot accept previously frozen samples that have thawed in transit.
- Biochemistry cannot accept previously frozen samples that have thawed in transit.
- Biochemistry cannot accept samples that display antibody interference.
- Biochemistry cannot accept samples that have had separation delays/un-centrifuged samples that have been stored in the fridge.
- Biochemistry cannot accept paraprotein resulting in viscous samples.
- Biochemistry cannot accept CSF protein that is blood stained.
- Immunology cannot accept TBQ kits that:
 - Do not contain all of the appropriate tubes.
 - Are incubated for more than the specified 16 hours.
 - Have passed the incubation time period.
 - Are over or under filled.
- Microbiology cannot accept samples in non-sterile containers or in formalin.
- Referrals cannot accept samples without three points of identification for DRP testing.
- Referrals cannot accept samples that are not labelled by hand for blood group testing.
- Molecular Pathology cannot accept samples for Haemophilia testing without informed consent.
- Cervical Cytology cannot accept over or under filled samples for testing.

Quality assurance

- Cervical Cytology cannot accept samples received within three months of the previous test in order to allow epithelial cells to regenerate.
- Cervical Cytology cannot accept samples containing a sample broom.
- Cervical Cytology can only accept samples received in a Hologic ThinPrep Vial.
- Urine cytology cannot accept delayed samples unless they have been refrigerated.

Samples deemed to be PRECIOUS (e.g. CSF, fluid, tissue, bone marrow and paediatric samples) will not be discarded by the laboratory. Results will include a comment relating to the condition of the sample (e.g. sample unlabelled).

Consultant advice and opinion

Each department in the laboratory is consultant led. The TDL Consultants listed below have defined advice or professional support, TDL consultants can be contacted via the laboratory.

TDL Lead Consultants

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Special Coagulation

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Virology

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Dr Colin Graham Fink

MB, ChB, FRCPATH


Special instructions for samples

- 1 Contact the laboratory for special sample tubes/containers/instructions.
- 2 Confirmation of not negative drug screens by LCMS/MS may take up to 5 days.
- 3 Clinical history essential and protect from light.
- 4 Send to the laboratory same day.
- 5 Do not send sample to the laboratory between Friday noon and Monday morning.
- 6 Contact the Referrals Department before taking and sending sample to the laboratory.
- 7 Sample should be separated and frozen if sending overnight.
- 8 DRP Form required. DRP Form can be found at the back of the guide.
- 9 Clinical history must be provided.
- 10 Contact the laboratory for special stability tubes for lymphocyte subsets – or take an EDTA sample and ensure same day delivery to the laboratory, Monday to Friday noon (do not send sample between Friday noon and Monday morning).
- 11 Patient consent required. Consent Form can be found at the back of this guide.
- 12 Please provide one sample for each person being tested.
- 13 Protect from light.
- 14 Provide details of travel history.
- 15 Ammonia

Sample: EDTA plasma only. Full tubes and tightly stoppered. On ice, centrifuged and analysed 20-30 mins post venepuncture (or plasma can be frozen). If haemolysed gives falsely high results.

Patient: Fasting. Avoid smoking.

Profile panel information

Profile name	Coagulation Profile 1
Profile content	Prothrombin Time APTT Fibrinogen
Turnaround time	TAT: 4 hours
Code	CLPF
Sample requirements	 18 — Special instructions for samples (see above)

- 16 Lactate
Sample: Fluoride oxalate plasma only. On ice and separate from cells 15-30 mins, analyse promptly. Handle with care as sweat contains large amounts of lactate. No tourniquet.
Patient: Rest 30 mins prior to test.
- 17 Homocysteine
Should be spun and separated within 1 hour of venepuncture.
- 18 Citrate Samples
Samples should be double spun and separated and frozen within 4-8 hours of sample taking, if a delay is expected with transportation to the laboratory, samples must be transported as frozen.
- 19 Must include patient's age, height and weight.
- 21 Urine cytology container, ideally first catch, mid-morning specimen.
- 22 Must be fresh.
- 30 Collect sample at end of exposure.
- 33 Sample must be labelled by hand with first name, family name, gender and date of birth detailed on sample and form. Do not use labels other than the tube label.
- 34 Samples must arrive in the laboratory on the same day of sample taking or contact the laboratory.
- 35 Patient should be fasting and resting for 30 mins before sample taking. Samples need handling urgently.
- 36 Renin: Sample collected either upright/active or resting/supine (3 hours lying). EDTA Plasma must be frozen within 2 hours.
- 37 Provide sample time and date of collection.
- 38 EDTA sample should not be separated: send whole blood.
- 40 Informed Consent is required for these tests.
- 41 Recommendation for patient to attend Patient Reception for sample taking.
- 42 LGV can be added to a positive chlamydia sample using the same swab if requested within 4 days of receipt of result.
- 43 Please contact lisa.leve@tdlpathology.com for details for referring samples to the laboratory for sequencing testing.

TDL Screening Profiles DL1-DL12

DL1 Biochemistry Profile

Urea and Electrolytes: Sodium, Potassium, Chloride, Bicarbonate, Urea, Creatinine, eGFR

Liver Function Tests: Bilirubin, Alk Phosphate, AST, ALT, Gamma GT, Total Protein, Albumin, Globulin

Cardiac/Muscle Enzymes: LDH, CK

Bone Markers: Calcium, Phosphate, Uric Acid
Glucose
Triglycerides
Cholesterol
Iron (TIBC included)

TAT: 4 hours

DL1

DL1L
plus HDL Cholesterol, LDL Cholesterol, Non-HDL Cholesterol

B G

DL5 Biochemistry & Haematology Postal Profile

AS DL4
DL5/DL5L do not include ESR and Phosphate as these results may be more affected by overnight transit times.

TAT: 4 hours

DL5

DL5L
plus HDL Cholesterol, LDL Cholesterol, Non-HDL Cholesterol

A B G

DL2 Biochemistry (24 Parameters) & Haematology Profile

HAEMATOLOGY
FBC, ESR

BIOCHEMISTRY
Urea and Electrolytes: Sodium, Potassium, Chloride, Bicarbonate, Urea, Creatinine, eGFR

Liver Function Tests: Bilirubin, Alk Phosphate, AST, ALT, Gamma GT, Total Protein, Albumin, Globulin

Cardiac/Muscle Enzymes: LDH, CK

Bone Markers: Calcium, Phosphate, Uric Acid
Glucose
Triglycerides
Cholesterol
Iron (TIBC included)

TAT: 4 hours

DL2

DL2L
plus HDL Cholesterol, LDL Cholesterol, Non-HDL Cholesterol

A B G

DL6 General Well Person Profile

DL2
FT4/TSH
Ferritin

TAT: 4 hours

DL6

DL6L
plus HDL Cholesterol, LDL Cholesterol, Non-HDL Cholesterol

A B G

DL3 Haematology Profile

FBC
ESR

TAT: 4 hours

DL3

A

DL4 Biochemistry (16 Parameters) & Haematology Profile

HAEMATOLOGY
FBC, ESR

BIOCHEMISTRY
Renal Function: Urea, Creatinine, eGFR

Liver Function Tests: Bilirubin, Alk Phosphate, AST, ALT, Gamma GT, Total Protein, Albumin, Globulin

Bone Markers: Calcium, Phosphate, Uric Acid
Glucose
Triglycerides
Cholesterol

TAT: 4 hours

DL4

DL4L
plus HDL Cholesterol, LDL Cholesterol, Non-HDL Cholesterol

A B G

TDL Screening Profiles DL1-DL12

DL7 Well Man Profile

DL2
FT4/TSH
Ferritin
Prostate Profile

TAT: 4 hours

DL7

DL7L
plus HDL Cholesterol, LDL Cholesterol, Non-HDL Cholesterol

A B G

DL8 Well Person Profile

DL2
FT4/TSH
Ferritin
Vitamin D

TAT: 4 hours

DL8

DL8L
plus HDL Cholesterol, LDL Cholesterol, Non-HDL Cholesterol

A B G

DL9F Senior Female Profile 60+

DL2
HDL/LDL Cholesterol
HbA1C
FT4/TSH
CRP
Ferritin
MSU
Vitamin D (25 OH)
HE4
Lp-PLA2 (PLAC) Test

TAT: 2 days

DL9F

A B B G RU⁴

DL9M Senior Male Profile 60+

DL2
HDL/LDL Cholesterol
HbA1C
FT4/TSH
Prostate Profile
CRP
Ferritin
MSU
Vitamin D (25 OH)
Lp-PLA2 (PLAC) Test

TAT: 2 days

DL9M

A B B G RU⁴

DL10 Cardiovascular Risk Profile 1

Cholesterol
Triglycerides
HDL Cholesterol
LDL Cholesterol
Non-HDL Cholesterol
Apolipoprotein A1
Apolipoprotein B
Lipoprotein (a)
hsCRP
Lp-PLA2 (PLAC) Test

TAT: 3 days

DL10

B B

DL11 Cardiovascular Risk Profile 2

Cholesterol
Triglycerides
HDL Cholesterol
LDL Cholesterol
Non-HDL Cholesterol
Apolipoprotein A1
Apolipoprotein B
Lipoprotein (a)
Fibrinogen
hsCRP
Lp-PLA2 (PLAC) Test
Homocysteine

TAT: 3 days

DL11

B B B C³⁴

DL12 7 STI Profile by PCR (7 PCR Tests from 1 Sample)

Chlamydia trachomatis
Mycoplasma genitalium
Trichomonas vaginalis
Herpes Simplex I/II
Neisseria gonorrhoea
Ureaplasma species
Gardnerella vaginali

All tests can be requested individually

TAT: 2 days

DL12

FCRU / PCR Swab / TPV or Aptima urine or multisite swab

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Biochemistry

TEST	CODE	SAMPLE REQS	TAT
5 HIAA	RU5H	PU (collect on acid) ¹	5 days
5' Nucleotidase	5NT	B	5 days
6-Thioguanine Nucleotides	TGN	A A	2 weeks
21 Hydroxylase Ab's	21HA	B (Frozen)	10 days
Acetylcholine Receptor Autoantibodies	ACRA	B ⁴	5 days
Acid Phosphatase – Total	APT	B	5 days
Adenosine Deaminase	AD	A / B / Fluid	3 weeks
Adiponectin	ADIP	B	2 weeks
Albumin	ALB	B	4 hours
Alcohol (Medical) [Do not use alcohol swab prior to sample taking]	ALCO	G ¹	4 hours
Alcohol (Urine)	UALC	RU	4 hours
Aldolase	ALDO	B	5 days
Alkaline Phosphatase	ALP	B	4 hours
Alkaline Phosphatase Isoenzymes	APIE	B	5 days
Alpha-1-Antitrypsin (Serum)	A1AT	B	1 day
Alpha-1-Antitrypsin (Stool)	A1AF	RF	10 days
Alpha-1-Antitrypsin Genotype – PI*M, PI*S, PI*Z	GENE	A ⁹	5 weeks
Requires patient informed consent.			
Alpha-1-Glycoprotein	OROS	B (Frozen)	5 days
Alpha-1-Microglobulin	A1MG	RU ^{1,22}	10 days
Alpha-2-Macroglobulins	A2MG	B	5 days
Alpha-Fetoprotein	AFP	B	4 hours
ALT (Alanine Aminotransferase) (SGPT)	ALT	B	4 hours
Aluminium (Blood)	ALUM	K	7 days
Amino Acid (EDTA Plasma)	AMIN	A (Frozen EDTA Plasma)	7 days
Amino Acid Quantitative (Urine)	UAAQ	RU (Frozen)	7 days
Aminolevulinic Acid (Urine)	RUAL	100mls PU	5 days
Ammonia	AMMO	A (Frozen) ¹⁵	4 hours
Amylase (Urine)	UAMY	CU	4 hours
Amylase (Venous/Self-collect)	AMY	B / B (TDL Tiny)	4 hours / 1 day
Amylase Isoenzymes	AMYI	B	5 days
Amyloidosis (Amyloid A Protein)	SAA	B	5 days
Androstanediol Glucuronide	ANDG	B	3 weeks

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Biochemistry

TEST	CODE	SAMPLE REQ	TAT
Angiotensin II	ANG2	A (Frozen plasma)	2 weeks
Angiotensin Converting Enzyme	ACE	B	4 hours
Angiotensin Converting Enzyme – CSF	ACEF	CSF (Frozen)	2 weeks
Antimony (Urine)	ANTI	RU ³⁰	10 days
Antimullerian Hormone (AMH) (Venous / Self-collect)	AMH	B / B (TDL Tiny)	4 hours / 1 day
AP50 Alternative Hemolytic Complement	AP50	B (Frozen)	2 weeks
Apolipoprotein A1	APOA	B	3 days
Apolipoprotein B	APOB	B	3 days
Apolipoprotein C	APOC	B	3 months
Apolipoprotein E (12 hours fasting)	APOE	B (fasting)	5 days
Arsenic (Blood)	ARS	A or H	5 days
Arsenic (Urine)	ARSE	RU ³⁰	5 days
Arylsulphatase A	ARYL	H ^{5,6}	8 weeks
Aspartate Transaminase (AST) (SGOT)	AST	B	4 hours
Bence-Jones Protein	RBJP	RU or CU	5 days
Beta 2 Microglobulin (Serum)	B2MG	B	2 days
Beta 2 Microglobulin (Urine)	UB2M	RU	3 days
Beta-Glucuronidase (Sly Disease)	BGLU	H H ^{9,4}	8 weeks
Bicarbonate	HC03	B	4 hours
Bile Acids – Serum	BILE	B	4 hours
Bilirubin (Direct)	DBIL	B	4 hours
Bilirubin (Total)	BILI	B	4 hours
Bilirubin (Urine)	UBIL	RU	1 day
Biotinidase	BIOT	H (Frozen plasma) ⁴	3 weeks
Bismuth	BISM	B	5 days
BNP (NT-pro BNP)	BNP	B	4 hours
Bone Alkaline Phosphatase	BALP	B (Frozen)	2 weeks
Bone Screen	BONE	B CU	4 hours
Bone Screen (Bloods only)	BON2	B	4 hours
BUN (Blood Urea Nitrogen)	BUN	B	4 hours
C Reactive Protein (Venous / Self-collect)	CRP	B / B (TDL Tiny)	4 hours / 1 day
C Reactive Protein (High Sensitivity) (Venous / Self-collect)	HCRP	B / B (TDL Tiny)	4 hours / 1 day
C1 Esterase: Function & Total	FC1E	C C (Plasma Frozen) ^{4,18}	10 days

Biochemistry

TEST	CODE	SAMPLE REQS	TAT
C1q Binding Immune Complex	IMCP	B	5 days
Cadmium (Blood)	CADM	A or H	5 days
Cadmium (Urine)	URCD	RU ³⁰	5 days
Calcium (24 hour Urine)	UCA	PU or acid urine	4 hours
Calcium (Venous/Self-collect) Sample integrity of self-collected samples may be compromised on received samples older than 2 days.	CA	B / B (TDL Tiny)	4 hours / 1 day
Calcium + Vitamin D (Venous/Self-collect) Sample integrity of self-collected samples may be compromised on received samples older than 2 days.	CALD	B / B (TDL Tiny)	1 day
Calcium/Creatinine Ratio	CACR	RU B	4 hours
Carbohydrate Deficient Glycoprotein	CDG	B	2 weeks
Carbohydrate Deficient Transferrin (CDT) (Venous/Self-collect)	CDT	B / B (TDL Tiny) ⁴	3 days
Cardiovascular Risk Profile 1	PP10	B B	3 days
Cardiovascular Risk Profile 2	PP11	B B B C ³⁴	3 days
Caeruloplasmin	CERU	B	1 day
Chest Pain Profile	CPP	B	STAT
Chloride	CL	B	4 hours
Cholesterol	CHO	B	4 hours
Cholesterol (Familial Hypercholesterolaemia) Requires patient informed consent.	GENE	A A ⁹	7 weeks
Cholinesterase (Serum/Pseudo)	CHPS	B	4 hours
Chromium (Blood)	CHRO	A	5 days
Chromium (Urine)	URCR	RU ³⁰	4 weeks
Chromogranin A	CGA	B	5 days
Chromogranin A & B	MTAB	A (Frozen Plasma)	3 weeks
Citrate (Blood)	CITR	B	5 days
Citrate (Urine)	UCIT	CU (Frozen)	5 days
CK (MB Fraction)	CKMB	B	4 hours
CK Isoenzymes	CKIE	B	5 days
Cobalt (Blood)	COB	A	5 days
Cobalt (Urine)	COBA	RU ³⁰	5 days
Coenzyme Q10	CQ10	B	2 weeks
Cold Agglutinin	CAGG	J ¹	5 days
Collagen (Type I, II, IV) Antibodies	COAB	B	10 days

Biochemistry

TEST	CODE	SAMPLE REQ	TAT
Collagen Type 1 Cross-Linked N-Telopeptide – NTX	NTX	2nd EMU	2 weeks
Complement C1q	C1Q	B	5 days
Complement C2	C2	B	10 days
Complement C5	C5A	B	2 weeks
Complement C6 * Separate and freeze within 2 hours after collection.	C6	B (Frozen)*	5 weeks
Complement C7 * Separate and freeze within 2 hours after collection.	C7	B (Frozen)*	5 weeks
Complement C8 * Separate and freeze within 2 hours after collection.	C8	B (Frozen)*	5 weeks
Complement C9 * Separate and freeze within 2 hours after collection.	C9	B (Frozen)*	5 weeks
Complement Factor H	FACH	B	3 weeks
Copper (Serum)	COPP	B or K	5 days
Copper (Urine)	URCU	CU	5 days
Cortisol Binding Globulin	CBG	B (Frozen)	1 month
Cotinine (Urine)	COTT	RU	2 days
Creatine Kinase (CK, CPK)	CKNA	B	4 hours
Creatinine (including eGFR) (Venous / Self-collect)	CREA	B / B (TDL Tiny)	4 hours / 1 day
Creatinine (Urine)	UCR	CU	4 hours
Creatinine Clearance	CRCL	B CU	4 hours
Crosslaps (Serum DPD)	SDPD	B (Freeze within 24 hours)	4 days
Cryoglobulins	CRYO	J ⁶	10 days
Cyclosporin	CYCL	A	1 day
Cystatin C	CYCC	B	5 days
Cystine – Quantitative (Beta-CTX)	QCYS	PU	5 days
Deoxypyridinoline (DPD) – Serum	SDPD	B (Freeze within 24 hours)	4 days
Deoxypyridinoline (DPD) – Urine	DPD	EMU	4 days
Diabetic Profile 1	DIAB	A G	8 hours
Diabetic Profile 2	DIA2	A G RU	2 days
Diamine Oxidase Activity	DIAM	B	2 weeks
Elastase (RF / Self-collect) *5 day stability time ambient.	ELAS	RF * / Stool/faecal container*	5 days
Electrolytes	ELEC	B	4 hours

Biochemistry

TEST	CODE	SAMPLE REQS	TAT
Electrolytes (Urine)	UELE	CU	4 hours
ELF/Enhanced Liver Fibrosis	ELF	B	5 days
Eosinophil Cationic Protein	ECP	B	7 days
Faecal Fat (1 day collection)	TFFA	LF ⁶	5 days
Faecal Fat (3 day)	FFAT	LF ⁶	5 days
Faecal Lactoferrin	FLAC	RF	5 days
Faecal Sugar Chromatography	FCRO	RF (Frozen)	3 weeks
Ferritin (Venous /Self-collect)	FERR	B / B (TDL Tiny)	4 hours / 1 day
Fibrotest (Liver Fibrosis)	FIBT	B	2 weeks
Fluoride (Urine)	UFL	RU	5 days
Folate (Red Cell)	RBCF	A	2 days
Folate (Serum)	FOLA	B	1 day
Free Fatty Acids	FFA	B (Frozen) ¹	10 days
Fructosamine	FRUC	B	1 day
Galactose-1-Phosphate Uridyltransferase	GAL1	H ^{5,6}	2 weeks
Galactosidase – Alpha*	GALA	J*	6 weeks
*Sample must reach TDL Referrals Dept. urgently, to be tested within 24 hours of collection. Monday–Thursday only. Referrals to send Immediately.			
Gall Stone Analysis	RSTA	STONE	10 days
Gamma GT	GGT	B	4 hours
Gastrin	GAST	A (Plasma)	5 days
Globulin	GLOB	B	4 hours
Glucagon	GLUG	A (Plasma)	10 days
Glucose	RBG	G	4 hours
Haemochromatosis – HFE common variants C282Y + H63D	HMD	A ⁹	3 days
Haemosiderin (Urine)	HSID	EMU	2 weeks
Haptoglobin	HAPT	B	5 days
HbA1c (Venous / Self-collect)	GHB	A / A (TDL Tiny)	6 hours / 1 day
HDL Cholesterol	HDL	B	4 hours
Homocysteine (Quantitative)	HOMO	B ¹⁷ or A (Plasma)	1 day
Homocysteine (Urine)	HCYS	CU	2 weeks
Homovanillic Acid (HVA)	HVA	PU	5 days
Hyaluronic Acid	AHT	B	1 week
Hydroxybutyrate Dehydrogenase	HBD	B (Frozen)	1 week
Hydroxyprolene	UHYD	CU	2 weeks

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Biochemistry

TEST	CODE	SAMPLE REQS	TAT
IgG Subclasses	IGSC	B	5 days
Immunoglobulin A	IGA	B	4 hours
Immunoglobulin D	IGD	B	5 days
Immunoglobulin E – Total	IGE	B	1 day
Immunoglobulin G	IGG	B	4 hours
Immunoglobulin M	IGM	B	4 hours
Immunoglobulins (IgG, IgM, IgA)	IMM	B	4 hours
Insulin-Like Growth Factor 2	IGF2	B ⁶	1 month
Iodide – Urine	UIOD	RU	1 week
Iodine – Serum	IODI	B	1 week
Ionised Calcium	ICPA	B	5 days
Iron (TIBC included) (Venous/Self-collect)	FE	B / B (TDL Tiny)	4 hours / 1 day
Iron Overload Profile	IOP	A B ⁹	3 days
Iron Status Profile (Venous/Self-collect)	ISP	B / B (TDL Tiny)	4 hours / 1 day
Lactate (Plasma)	LACT	G ¹⁶	1 day
Lactate Dehydrogenase (LDH)	LDH	B	4 hours
Lactate Pyruvate Ratio	LPR	J ¹	4-6 weeks
Lactose Tolerance Test Collection timings and sample requirements: Contact 020 7307 7383 (Phlebotomy)	LTT	By appointment only	1 day
LDL7 Subfractions	LDL7	B	10 days
Lead (Blood)	LEAD	A	5 days
Lead (Urine)	URPB	RU	5 days
Leptin	LEPT	B (height and weight required) ¹⁹	5 days
Lipase (Venous/Self-collect)	LIPA	B / B (TDL Tiny)	4 hours / 1 day
Lipid Profile (Venous/Self-collect)	LIPP	B / B (TDL Tiny)	4 hours / 1 day
Lipoprotein (a) (Venous/Self-collect)	LPOA	B / B (TDL Tiny)	4 hours / 1 day
Lipoprotein Electrophoresis	LEL	B	5 days
Lithium (take 12 hours after dose)	LITH	B	4 hours
Liver Fibrosis (Enhanced Liver Fibrosis ELF)	ELF	B	5 days
Liver Fibrosis Fibrotest	FIBT	B	2 weeks
Liver Function Tests (Venous/Self-collect)	LFT / TLFT	B / B (TDL Tiny)	4 hours / 1 day
Lp-PLA2 (PLAC) Test	PLA2	B	2 days
Lysosomal Enzyme Screen	LE	J ¹	2 months
Lysozyme	LYSO	B	5 days

Biochemistry

TEST	CODE	SAMPLE REQS	TAT
Magnesium (Serum)	MG	B	4 hours
Magnesium (Urine)	URMG	PU	1 day
Manganese (Serum)	MANG	B	5 days
Mercury (Blood)	MERC	A or H	5 days
Mercury (Urine)	URHG	RU ¹	5 days
Methaqualone	METQ	RU	5 days
Methylmalonic Acid – Serum	MMAS	B	5 days
Methylmalonic Acid – Urine	MMA	CU	2 weeks
Mucopolysaccharides	MPS	RU (Frozen)	3 weeks
Myeloma Screen	MYEL	A B G RU	5 days
Myoglobin (Serum)	SMYO	B	4 hours
Myoglobin (Urine)	UMYO	RU	5-10 days
Newborn Screening Panel	GUTH	J ¹	2 weeks
Nickel (Serum)	NICK	B	5 days
Nickel (Urine)	NICU	RU	4 weeks
Oligosaccharides	UOLI	RU	6 weeks
Orosomucoid (A1AG – Alpha 1 Glycoprotein)	OROS	B (Frozen)	5 days
Osmolality (Serum)	OSMO	B	1 day
Osmolality (Urine)	ROSM	RU	1 day
Osteoporosis Screen	OPS	B B	4 days
Oxalate (Plasma)	POXA	A (Frozen)	7 days
Oxalate (Urine)	UOXA	PU	5 days
Pancreatic Peptide	PP	J	4 weeks
Parathyroid Related Peptide	PTRP	2ml A Plasma frozen (Freeze immediately) ¹	2 weeks
PEth (Phosphatidylethanol) (Venous / Self-collect)	PETH	A ³⁸ / A (TDL Tiny) ³⁸	5-7 days
Phencyclidine (PCP)	DUST	RU	5 days
Phosphate	PHOS	B	4 hours
Phosphate (24 hour Urine)	UPH	PU	4 hours
PLAC Test (Lp-PLA2) (Venous / Self-collect)	PLA2	B / B (TDL Tiny)	2 days
Plasminogen	PLAS	C (Frozen plasma) ⁴	5 days
Plasminogen Activator Inhibitor – 1	PAI1	C (Frozen plasma)	2 weeks
Porphyrin (Blood)	PORP	A ³	15 days
Porphyrin (Stool)	FPOR	RF ³	3 weeks
Porphyrin (Urine)	RPOR	RU ³	3 weeks

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Biochemistry

TEST	CODE	SAMPLE REQS	TAT
Porphyrin Full Screen (Total: Urine, Stool, Blood)	PORS	A RU, RF ³	3 weeks
Potassium	K	B	4 hours
Pregnancy (Serum) [Quantitative]	QHCG	B	4 hours
Pregnancy Test (Urine)	PREG	RU	4 hours
Procalcitonin	PCAL	B (Frozen) ^{4,7}	1 day
Procollagen 1 Peptide N-Terminal (NTX)	P1NP	B	5 days
Procollagen 3 Peptide	PRCO	B	5 days
Propoxyphene	DPRO	RU	5 days
Prostatic Acid Phosphatase	PACP	B (Frozen)	3 days
Protein (Urine)	UPRT	CU	4 hours
Protein 14.3.3 (Creutzfeldt–Jakob Disease)	CJD	J	5 weeks
Protein Electrophoresis incl. immunoglobulin	PRTE	B	5 days
Protein Total (Blood)	PROT	B	4 hours
Protein/Creatinine Ratio (Urine)	UCPR	RU	4 hours
Renal Calculi Screen (Metabolic)	RSPR	J ⁶	5 days
Renal Stone Analysis	RSTA	STONE	10 days
Retinol Binding Protein	RBP	B	3 days
Salicylates	SALI	B	4 hours
Selenium (Serum) (Venous/Self-collect)	SELE	B / B (TDL Tiny)	4 days
Serum Free Light Chains	SLC	B	5 days
Silver (Blood)	SILV	B	5 days
Silver (Urine)	USIL	RU	5 days
Sodium	NA	B	4 hours
Superoxide Dismutase Inhibitor	SODI	A / H	5 days
Thiopurine Methyl Transferase	TPMT	A ⁵	5 days
Tissue Polypeptide Antigen	TPA	B	1 week
Total Acid Phosphatase	APT	B	5 days
Total Bile Acid/Bile Salts	BILS	B	1 week
Total IgE	IGE	B	1 day
Transferrin	TRAN	B	1 day
Transferrin Electrophoresis	TREL	B	2 weeks
Triglycerides	TRI	B	4 hours
Trimethylaminuria (Fish Odour Syndrome)	FOS	J	6 weeks
Troponin T (High sensitive)	TROT	B	4 hours

Biochemistry

TEST	CODE	SAMPLE REQS	TAT
Tryptase	STRY	B	2 days
Tumour Necrosis Factor – Alpha	TNF	B (Frozen) ⁴	2 weeks
Urate (Uric acid)	UA	B	4 hours
Urea (Venous / Self-collect)	UREA	B / B (TDL Tiny)	4 hours / 1 day
Urea (Urine)	UURE	CU	4 hours
Urea and Electrolytes	U/E	B	4 hours
Urea Electrolytes (Urine)	UELE	CU	4 hours
Urea/Creatinine/eGFR (Self-collect)	TCU	B (TDL Tiny)	1 day
Uric Acid (Serum)	UA	B	4 hours
Uric Acid (Urine)	UURI	CU	4 hours
Urinary Bladder Cancer Antigen ** It is recommended to collect mid-stream urine. Do not use first morning urine. Collection of urine specimen before any surgical intervention or treatment or 1–2 weeks after specimen shall not be collected with an instrument e.g. catheter.	UBC	RU (Freeze within 48 hours)**	5 days
Urine Microalbumin/Creatinine Ratio	UMA	RU	4 hours
Urine Organic Acids	UORG	RU (Frozen)	3 weeks
Urine Steroid Screen (Steroid Hormones)	USTE	CU ⁹	2 weeks
Urine Sugar Chromatography	UCRO	RU (Frozen)	3 weeks
Very Long Chain Fatty Acids	VLCF	A or H (Frozen) ⁹	4-6 weeks
Vitamin B12 (Active) (Venous / Self-collect)	B12	B / B (TDL Tiny)	1 day
Vitamin B12 (Active)/Red Cell Folate	B12F	A B	2 days
Vitamin B12 (Total)	TB12	B	1 day
Vitamin D (25-OH) (Venous / Self-collect)	VITD	B / B (TDL Tiny)	4 hours / 1 day
VLDL Cholesterol	VLDL	B ¹³	1 week
VMA	UVMA	PU ¹	5 days

Bone Screen

Calcium (24 hour Urine)
Phosphate (24 hour Urine)
Urea and Electrolytes
Alkaline Phosphatase
Total Protein
Albumin
Globulin
Calcium

TAT: 4 hours

BONE

B CU

**Bone Screen
(Bloods only)**

Urea and Electrolytes
LFTs
Calcium
Phosphate
Vitamin D (25 OH)

TAT: 4 hours

BON2

B

Chest Pain Profile

Myoglobin
CK MB Fraction
Troponin T

TAT: STAT

CPP

B

**Cardiovascular
Risk Profile 1**

Lipid Profile (Cholesterol,
Triglycerides, HDL Cholesterol,
LDL Cholesterol,
Non-HDL Cholesterol)
Apolipoprotein A1
Apolipoprotein B
Lipoprotein (a)
hsCRP
Lp-PLA2 (PLAC) Test

TAT: 3 days

PP10

B B

**Cardiovascular
Risk Profile 2**

Lipid Profile (Cholesterol,
Triglycerides, HDL Cholesterol,
LDL Cholesterol,
Non-HDL Cholesterol)
Apolipoprotein A1
Apolipoprotein B
Lipoprotein (a)
Fibrinogen
hsCRP
Lp-PLA2 (PLAC) Test
Homocysteine

TAT: 3 days

PP11

B B B C ³⁴

Diabetic Profile 1

Glucose
HbA1c

TAT: 8 hours

DIAB

A G

Diabetic Profile 2

Glucose
HbA1c
Microalbumin

TAT: 2 days

DIA2

A G RU

Iron Overload Profile

Iron (TIBC included)
Ferritin
Transferrin Saturation
Haemochromatosis C282Y, H63D

TAT: 3 days

IOP

A B ⁹

**Iron Status Profile
(Venous / Self-collect)**

Iron (TIBC included)
Ferritin
Transferrin Saturation

TAT: 4 hours / 1 day

ISP

B / B (TDL Tiny)

Lipid Profile (Venous / Self-collect)

Triglycerides
Cholesterol
HDL Cholesterol
LDL Cholesterol
Non-HDL Cholesterol

TAT: 4 hours / 1 day

LIPP

B / B (TDL Tiny)

Liver Function Tests (Venous / Self-collect)

ALT (Venous only)
AST (Venous only)
Bilirubin
Total Protein
Alkaline Phos
Albumin
Globulin
Gamma-GT

TAT: 4 hours / 1 day

LFT / TLFT

B / B (TDL Tiny)

Myeloma Screen

FBC and ESR
Biochemistry Profile
Protein Electrophoresis
Immunoglobulins (IgA, IgG, IgM)
Bence-Jones Protein

TAT: 5 days

MYEL

A B G RU

Osteoporosis Screen

Alkaline Phosphatase
Calcium
Albumin
Phosphate
Serum Crosslaps (DPD)
Vitamin D (25 OH)

TAT: 4 days

OPS

B B

Porphyria Full Screen (Total: Blood, Stool, Urine)

Porphyria Blood
Porphyria Stool
Porphyria Urine

TAT: 3 weeks

PORS

A RU, RF³

Urea and Electrolytes

Sodium
Potassium
Chloride
Bicarbonate
Urea
Creatinine













































TAT: 4 hours

U/E



B

Haematology





































■ All citrate samples  sent by post or with an overnight delay must be double spun and sent frozen.

TEST	CODE	SAMPLE REQs	TAT
Anaemia Profile	ANAE	  	2 days
Antenatal Profile	ANTE	  ³³    	3 days
APTT/KCCT	KCCT	 ¹⁸	4 hours
Atypical Antibody Screen (handwritten tube label)	AASC	 ^{22,33}	2 days
Blood Film Examination	FILM		1 day
Blood Group †	ABO	 ^{22,33}	2 days
† The tube's own label must be completed by hand. This must correspond with same name and date of birth details as given on the request form. Do not affix additional computerised or hand written labels.			
Carboxyhaemoglobin	CBHB		1 week
Coagulation Profile 1	CLPF	 ¹⁸	4 hours
Coagulation Profile 2	CLOT	  ¹⁸	4 hours
D-Dimers (Fibrinogen Degradation Products)	DDIT	 ⁴	4 hours
DVT/Pre-travel Screen	DVT1	   ⁹	5 days
ESR	ESR		4 hours
Fibrinogen	FIB	 ^{4,18}	4 hours
Full Blood Count	FBC		4 hours
Haematology Profile	PP3		4 hours
Haemoglobin	HB		4 hours
Immune Function Evaluation (Total)	TIE	 +  ^{5,10}	7 days
INR	PTIM	 ¹⁸	4 hours
Lymphocyte Subsets (CD3/CD4/CD8)	LYSS	 ¹⁰	1 day
Malarial Parasites	MALP	 ^{4,9,14}	STAT
Malarial Parasites (visa, non-urgent)	MP48		2 days
Mean Cell Volume (MCV)	MCV		4 hours
Microfilaria Blood Film	MICF		STAT
Natural Killer Profile 2	NKP2	 ¹⁰	2 days
PAI-1 4G/5G Polymorphism	PAIP		10 days
Paul Bunnell (Monospot)	PAUL	 or 	8 hours
Pre-Travel Screen (DVT)	DVT1	   ⁹	5 days
Prothrombin Time	PTIM	 ¹⁸	4 hours
Prothrombin Time + Dose	PT+D	 ¹⁸	4 hours
Reticulocyte Count	RETC		4 hours

Haematology



















TEST	CODE	SAMPLE REQS	TAT
Thrombin Time	THRO	 ¹⁸	4 hours
Vitamin K (With PIVKA II)	VITK	 ¹³	10 days

Special Haemostasis








TEST	CODE	SAMPLE REQS	TAT
Activated Protein C Resistance	APCR	 (Frozen) ^{4,18}	3 days
ADAMTS-13 Antibody	A13A	 (Frozen) ^{9,18}	1 month
Anti-Xa Apixaban Monitoring * Please state drug and time of dose on request.	APIX	 (Frozen) ^{*18}	3 days
Anti-Xa Edoxaban Monitoring *Please state drug and time of dose on request.	EDOX	 (Frozen) ^{*18}	3 days
Anti-Xa Fondaparinux Monitoring * Please state drug and time of dose on request.	FOND	 Frozen) ^{*18}	3 days
Anti-Xa LMWH Monitoring * Please state drug and time of dose on request.	LMWX	 (Frozen) ^{*18}	3 days
Anti-Xa Rivaroxaban Monitoring * Please state drug and time of dose on request.	RIVA	 (Frozen) ^{*18}	3 days
Antithrombin III	A111	 (Frozen) ^{4,9,18}	3 days
Factor II Assay	FAC2	 (Frozen) ^{9,18}	5 days
Factor V Assay	FAC5	 (Frozen) ^{9,18}	5 days
Factor VII Assay	FAC7	 (Frozen) ^{9,18}	5 days
Factor VIII Assay	FAC8	 (Frozen) ^{9,18}	5 days
Factor VIII Inhibiting Antibody	F8IA	  ¹⁸	2 weeks
Factor IX Assay	F1X	 (Frozen) ^{9,18}	5 days
Factor IX Inhibiting Antibody	F9IA	  ¹⁸	2 weeks
Factor X Assay	FX	 (Frozen) ^{9,18}	5 days
Factor XI Assay	FX1	 (Frozen) ^{9,18}	5 days
Factor XII Assay	FX11	 (Frozen) ^{9,18}	5 days
Factor XIII Assay	FA13	 (Frozen) ^{9,18}	5 days
FXIII A Subunit	F13S	 (Frozen) ^{9,18}	14 days
Hughes Syndrome	LUPA	   ^{4,18}	2 days
Lupus Anticoagulant and Anticardiolipin Abs	LUPA	   ^{4,9,18}	2 days
Lupus Anticoagulant only	LUPC	  ^{9,18}	2 days
Miscarriage/Thrombotic Risk Profile	PROP	      ¹⁸	5 days
P2Y12 Receptor Platelet Function Analysis (Clopidogrel Resistance)	P2Y	J** ¹	1 day

**Samples not processed at Halo, please contact laboratory prior to sample taking.

Haematology

TEST	CODE	SAMPLE REQ	TAT
Platelet Aggregation Studies **Samples not processed at Halo, please contact laboratory prior to sample taking.	PLAG	J** 1	3 days
Platelet Function Test Screen – PFA-100/200 ** Samples not processed at Halo, please contact laboratory prior to sample taking	PFAT	J** 1	1 day
Protein C	PRC	 (Frozen) 4,9,18	3 days
Protein S Activity	PS1	 (Frozen) 4,9,18	5 days
Protein S Free Ag	FPRS	 (Frozen) 4,9,18	3 days
Taipan Snake Venom Time	TTVT	  9,18	1 week
Thrombotic Risk Profile	PROP	      18	5 days
Viscosity (Plasma) *EDTA plasma must be separated within 24 hours of collection and sent at room temperature.	VISC	 4 *	3 days
Von Willebrand Profile	FVWF	   4,9,12	5 days
Von Willebrands Multimers	VWM	   18	3 months

Special Haematology

TEST	CODE	SAMPLE REQ	TAT
Coombs (Direct Antiglobulin Test)	COOM		2 days
Eosin-5 Maleimide Dye binding test for Hereditary spherocytosis (EMA)* *Sample to be received by laboratory within 24 hours of being taken and the test is done Tuesday to Thursday (test must be performed within 48 hours of sample being taken.	EMA		2 days
Erythropoietin	ERY		4 days
G6PD	G6PD		4 days
Haemoglobin Electrophoresis	HBEL		4 days
HFE gene (Haemochromatosis) – common variants C282Y + H63D	HMD	 9	3 days
Thalassaemia Screen	HBEL		4 days

Flow Cytometry

TEST	CODE	SAMPLE REQS	TAT
Bone Marrow (Aspirate)	BMAS	J ¹	14 days
Bone Marrow (Trephine Biopsy)	BMI	J ¹	3 days
CD3/CD4/CD8	LYSS	A ¹⁰	1 day
CD16	CD16	A ⁴	1 day
CD19 B Cells	CD19	A ⁴	1 day
CD20	CD20	A ¹⁰	2 days
CD25	CD25	A ¹⁰	2 days
CD56	CD56	A ⁴	1 day
CD57	CD57	A	1 day
Leukaemia Immunophenotyping	LYPT	A ^{4,5}	5 days

Anaemia Profile

FBC
ESR
Iron (TIBC included)
Ferritin
B12 (Active)
Folate (RBC)

TAT: 2 days

ANAE

A A B

Antenatal Profile

FBC
Blood Group and Rh Type
Atypical Antibody Screen
Haemoglobin electrophoresis
Syphilis IgG/IgM
Glucose
FT4/TSH
Rubella Antibodies (IgG)
Toxoplasma (IgG/IgM)
Hep B sAg
Hep C Abs
Varicella zoster IgG (Immunity)
HIV 1 & 2 Abs

Please ensure the blood group (EDTA) tube label is handwritten. Do not affix a secondary label.

TAT: 3 days

ANTE

A A³³ B B B G

Coagulation Profile 1

Prothrombin Time
APTT
Fibrinogen

TAT: 4 hours

CLPF

C¹⁸

Coagulation Profile 2

FBC
Prothrombin Time
APTT
Fibrinogen

TAT: 4 hours

CLOT

A C¹⁸

DVT/Pre-travel Screen

FBC
Factor II Prothrombin Gene
Factor V Leiden
Anticardiolipin Antibodies

TAT: 5 days

DVT1

A A B 9

Haematology Profile

FBC
ESR

TAT: 4 hours

PP3

A

Miscarriage/
Thrombotic Risk Profile

FBC
Coagulation Profile
Antithrombin III
Factor V Leiden gene
Factor II Prothrombin gene
MTHFR gene
Lupus Anticoagulant
Protein C
Free Protein S Ag
Anticardiolipin Abs

TAT: 5 days

PROP

A A B C C C 18

Natural Killer Profile 2

CD3
CD4
CD8
CD16/CD56
CD19

TAT: 2 days

NKP2

A 10

Pre-Travel Screen (DVT)

FBC
Factor II Prothrombin Gene
Factor V Leiden
Anticardiolipin Antibodies

TAT: 5 days

DVT1

A A B 9

Thrombotic Risk Profile

FBC
Coagulation Profile
Antithrombin III
Factor V Leiden Common Variant
Factor II Prothrombin
Common Variant
MTHFR Common Variants
Lupus Anticoagulant
Protein C
Free Protein S Ag
Anticardiolipin Abs

TAT: 5 days

PROP

A A B C C C 18

Von Willebrand Profile

Von Willebrand Factor
Von Willebrand Activity
(Ristocetin Cofactor)
Factor VIII Assay

TAT: 5 days

FVWF

C C C 4,9,12

Microbiology

TEST	CODE	SAMPLE REQ	TAT
16S rRNA Bacterial Gene	16S	J	1 week
18S rRNA Fungal Gene	18S	J	1 week
Aspergillus Precipitins	ASPP	B	5 days
Beta D Glucan	XBDG	B	3 days
Blood Culture[#]	BCUL	2 x BC ⁴	6 days +
<p>#Please contact the Phlebotomy at Patient Reception 020 7307 7383 for further details, as needed.</p> <p>Blood cultures must be taken prior to any other blood samples. The aerobic bottle must be collected first, followed by the anaerobic bottle. Each bottle should be filled with 8-10 ml of blood, use the markings on the bottles to achieve this.</p> <ul style="list-style-type: none"> • Other bloods can be collected but must be collected after the blood cultures. • Bottles must be labelled with the patient's identification details. • Bottles and Request Form need to give the time taken and the body site that the blood was taken from. Ensure that the bottle barcodes are not obscured when adding patient labels. • Send the blood cultures to the laboratory without delay. 			
Calprotectin/QFIT Profile (Combined)	QCAL	QFIT sample collection device	5 days
Campylobacter Jejuni Antibodies	CJAB	B	5 days
Candida (Culture)	CANC	STM/CS	2-4 days
Candida Antibodies	CANA	B	5 days
Carbapenemase producing organism screen	MDR	STM (rectal)	4-5 days [‡]
<p>‡ Presumptive positive isolates will be sent to the PHE reference laboratory for confirmation.</p>			
Clostridium Difficile Toxin by PCR	CLOS	RF*	2 days
<p>* Not performed on formed stool specimens.</p>			
Cryptococcal Antigen	CRYC	Serum or CSF	1 day
Cryptosporidium	CRPO	RF	2 days
CSF for Microscopy and Culture	CSF	CSF	1-3 days
Culture (Any site)	CULT		up to 5 days
Fluid Culture	FLUD	SC	2-7 days
Fluid for Crystals + Culture	FLU2	SC	1 day
Fungal ID + Sens	FUID	Fungal sample / STM	14 days
Fungal investigations (non-superficial extended culture)	FUN	All specimens other than Skin, Hair and Nails	From 3 days
Fungal investigations (superficial/dermatophyte PCR test)	DERM	Skin, Hair, Nails	3-7 days
Galactomanan (Aspergillus Antigen)	SGAL	B	2 weeks
Gonorrhoea – Culture	GONN	CS ^{‡‡‡}	2-3 days
<p>‡ ‡ ‡ The optimal sample type from the female genital tract is an endocervical swab. Gonorrhoea does not survive well outside the endocervical epithelium; a negative gonorrhoea culture result from a vaginal swab is not reliable for excluding infection.</p>			

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Microbiology

TEST	CODE	SAMPLE REQ	TAT
Group B Strep – Vaginal and Rectal (STM/Self-collect)	GBSX	2 x STM / Blue gel Amies swab x2	3-5 days
H. pylori Antigen – Stool (RF/Self-collect)	HBAG	RF / Stool or faecal container	3 days
H. pylori Culture	HPCU	J	3 weeks
HVS ‡ ‡ ‡ Culture for Mycoplasma, Ureaplasma and Trichomonas vaginalis has been discontinued due to the superiority of molecular methods. If investigations for Mycoplasma genitalium, Ureaplasma or Trichomonas vaginalis are required please request PCR testing (see Sexual Health section of Lab Guide).	HVS	STM/CS †††	2-4 days
IUCD for Culture	IUCD	Send Device	11-12 days
Legionella Urine Antigen	LEGA	RU	1 day
MRSA (Rapid PCR) one swab per site	MRSA	Blue Micro Swab	4 hours
MRSA (Rapid PCR) one swab per site x 2	MRS2	Blue Micro Swab x 2	4 hours
MRSA Culture one swab per site	MRSW	Blue Micro Swab	2 days
MRSA Culture one swab per site x 2	MRW2	Blue Micro Swab x 2	2 days
MRSA Culture (Self-collect) – Nose/Groin	MRW2	Purple liquid Amies swab x2	2 days
MRSA Culture (Self-collect) – Nose/Groin/Axilla	MRW3	Purple liquid Amies swab x3	2 days
MRSA PCR (Self-collect) – Nose/Groin	MRS2	Purple liquid Amies swab x2	1 day
MRSA PCR (Self-collect) – Nose/Groin/Axilla	MRS3	Purple liquid Amies swab x3	1 day
Mycology/Skin Scrapings by PCR	DERM	Submit Sample	3-7 days
Nail Clippings	DERM	Nail clippings	3-7 days
Pleural Fluid for Culture	FLUP	SC	7 days
Pneumococcal Antigen	PNAG	RU	1 day
Pneumocystis Jiroveci (PCP) Examination ‡ ‡ BAL: Induced sputum or bronchoalveolar lavage.	PCYS	BAL ††	2-3 days
QFIT/Calprotectin Profile (Combined)	QCAL	QFIT sample collection device	5 days
Quantitative Faecal Immunochemical Test (QFIT) (Self-collect)	QFIT	QFIT sample collection device	1 day
Rapid Strep (incl. m/c/s) ** Do not use a black swab for RAPS. Use Blue only. Rapid antigen is reported within 4 hours with full culture to follow.	RAPS	STM **	1-3 days**

Microbiology

TEST	CODE	SAMPLE REQS	TAT
Schistosoma (Urine)	USCH	Mid-morning terminal urine following exercise ¹⁴	1-2 days
Sellotape Test *** Use clear Sellotape only and attach to slide.	SELL	Send Sample***	1 day
Semen Culture	SPCU	Semen	2-4 days
Skin Scrapings/Mycology by PCR	DERM	Send Sample	3-7 days
Specific Gravity (Urine)	USG	RU	24 hours
Sputum for Routine Culture	SPU1	SC	2-4 days
Sputum for TB Culture (AFB)	SPU2	SC	up to 8 weeks
Stool for OCP and Culture † † Please provide relevant travel history. If travel history is not provided, stool will be investigated for endemic pathogens only [Campylobacter, Salmonella, Shigella, Shigatoxin-producing E coli (VTEC), Cryptosporidium and Giardia].	PENT	RF	2-3 days
Stool for OVA Cysts & Parasites by PCR	MOCP	RF	2 days
Stool Reducing Substances	STRS	RF ⁷	5 days
Swab (Cervical)	CERS	STM / CS	2-4 days
Swab (Ear)	EARS	STM	2-4 days (Culture) 8-9 days (Fungal) – same swab
Swab (Eye)	EYES	STM	2-4 days
Swab (Nasal)	NASS	STM	2-4 days
Swab (Oral)	ORSW	STM / CS	2-4 days
Swab (Penile)	PENS	STM / CS	2-4 days
Swab (Rectal)	RECG	STM / CS	2-4 days
Swab (Skin)	SKIS	STM	2-4 days
Swab (Throat)	THRS	STM	2-4 days
Swab (Urethral)	URES	STM / CS	2-4 days
Swab (Vaginal)	VAGS	STM / CS	2-4 days
Swab (Vulval)	VULV	STM / CS	2-4 days
Swab (Wound)	WOUS	STM	2-4 days
Synovial Fluid (for microscopy and culture) † † † If prosthetic joint is present please state in clinical details to ensure that enrichment culture is prolonged for 14 days.	FLU2	SC ^{†††}	14 days
TB (Pleural Fluid)	TBCU	SC	up to 8 weeks
TB Culture	SPU2	SC	up to 8 weeks
TB Culture (Urine)	TBUR	3 x EMU	up to 8 weeks

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Microbiology

TEST	CODE	SAMPLE REQ	TAT
TB Slopes – Confirmation and Sensitivity	TBSL	TB slope (LJ medium-green) ⁶	up to 8 weeks
Tissue for culture	TISS	Tissue sample	up to 14 days
Urine (Microscopy Only)	UMIC	RU	1 day
Urine Chemistry and Microscopy (Self-collect) Mid-stream urine.	UMIC	Urine (Universal). Mid stream.	1-2 days
Urine Chemistry, Microscopy and Culture (Self-collect) Mid-stream urine.	UCEM	Urine (Universal & Boric). Mid stream.	1-2 days
Urine for Extended Culture	UCXD	MSU	up to 7 days
Urine for Microscopy and Culture † † † † Optimal sample type for urine culture is a mid-stream clean catch urine sent in a sterile pot containing boric acid preservative.	UCEM	MSU ††††	1-2 days

Calprotectin/QFIT Profile (Combined)

Calprotectin

QFIT

TAT: 5 days

QCAL

QFIT sample collection device

Urine culture processing and results

All urine culture testing is performed using manual methods. The culture pathway adheres to national guidance and is a fully UKAS-accredited method.

Manual testing allows a larger amount of urine to be tested than previous automated method, which enables the laboratory to detect lower bacterial counts (as low as 103 cfu/mL) and also facilitates the follow up of significant organisms grown from mixed cultures.

If the culture result is indicative of urinary tract infection, antibiotic susceptibilities will be tested from the culture growth and will be available 24 hours after the culture result. 'Direct sensitivities' are no longer performed. Direct susceptibility testing is not inoculum-controlled, produces inaccurate results and is not UKAS-accredited.

Culture results should be interpreted alongside the microscopy WBC count and clinical signs and symptoms. Significant growth on culture in the absence of pyuria may be suggestive of contamination with regional flora rather than true infection. It should be noted, however, that WBC degrade in urine quite rapidly and delays between sample collection and microscopy may lead to falsely low WBC readings which may account for these findings.

What does the result 'No significant growth' mean?

The amount of growth falls below the threshold for urinary tract infection (< 103 cfu/mL). There is no laboratory evidence of urinary tract infection. Occasionally, this may be seen in very early stages of infection or in a partially treated urinary tract infection. Therefore, please send a repeat specimen if symptoms persist.

What does the result 'mixed growth doubtful significance' mean?

This means that the culture revealed a heavy growth of at least 3 organisms with no predominating organism; this represents contamination of the urine with the patient's flora during collection.

This result does not exclude urinary tract infection but it is not possible to determine the causative organism among the mixture of organisms.

If symptoms persist, please send a repeat urine specimen and ensure that patient understands optimal collection technique.

If you are receiving a lot of 'mixed growth of doubtful significance' results, please consider the following:

- **The instructions that patients are given to collect their urine sample**

Poor collection technique is the most common reason for a heavily mixed growth in a urine sample. It is almost impossible to collect a urine sample without any contamination from the normal bacterial flora which inhabits the area surrounding the urethral opening, but optimal collection technique will minimise this contamination and allow the true infective cause to stand out and be identified (a patient instruction leaflet is available).

- **Delays between sample collection and laboratory processing**

The time between sample collection and laboratory processing can allow small amounts of contaminating bacterial flora to multiply up to higher amounts prior to laboratory testing, which can result in heavy mixed growth of bacteria on culture. Using a red topped specimen pot containing boric acid preservative will minimise this.

Microbiology

If, despite these measures, a patient has recurrent mixed growth reports from multiple urines, it may suggest that your patient has abnormal urinary tract architecture, immunosuppression or other non-infective cause that requires different laboratory investigations or referral to a specialist. If further information is required, please telephone the laboratory and ask to discuss the case with one of our consultant Microbiologists.

Red topped boric acid containers

The preservative reduces the overgrowth of organisms and, to a lesser extent, reduces the degradation of white cells during transit leading to a more accurate laboratory result for both microscopy and culture. UKAS recommends the use of boric acid containers for all urine sample for microscopy and culture (Urine M,C&S) to improve the quality of microbiological results.

Red topped boric acid containers are for requests for urine microscopy and culture (MC&S) ONLY. Boric acid container should NOT be used for:

- Other urine microbiology tests
(e.g. investigations for Chlamydia, Mycobacterium, Schistosomiasis, urinary antigen testing)
- Urine samples being analysed
by PCR methodology
- Urine samples for non-microbiology tests
(e.g. biochemistry, virology, pregnancy testing)
- Very small urine volumes (<20ml) e.g. neonates

Use of urinary dipsticks: boric acid may inhibit leukocyte esterase dipstick readings; dipstick testing performed on a sample in a boric acid container should be interpreted with caution.

If additional tests are required in addition to urine microscopy and culture, an additional sample in a white-topped universal container should be sent. In this case, it is advised that the mid-stream clean catch urine is collected in a sterile bowl and then transferred to the necessary specimen containers.

Group B Streptococcus (GBS)

Group B Streptococcus (GBS or group B Strep) is the most common cause of severe infection in newborn babies, and of meningitis in babies under age 3 months. On average in the UK:

- 2 babies a day develop group B Strep infection
- 1 baby a week dies from group B Strep infection
- 1 baby a week survives group B Strep infection with long term disability

Most GBS infection is of early onset, presenting in babies within the first 6 days of life, and usually within the first 12 hours after birth. Between age 7 days and 3 months, these infections are rare, and in babies over 3 months they are very rare indeed.

Most early-onset GBS infections (in babies aged 0-6 days) can be prevented by giving intravenous antibiotics in labour to women whose babies are at raised risk of developing GBS infection.

In the UK, women are offered IV antibiotics in labour based on specific risk factors.

GBS is normal flora of the distal GI tract. Up to 30% of women carry it harmlessly in their vaginal tract. Vaginal carriage at the time of vaginal delivery can result in transmission of GBS to baby. Babies are more vulnerable to infection as their immature immune systems cannot fight off the multiplying bacteria. If untreated, GBS can cause serious infections, such as meningitis and septicaemia, which may lead to stillbirths, and newborn and infant deaths. If they survive, babies can develop permanent problems including hearing or vision loss, or cerebral palsy.

Current GBS prevention focuses on giving intravenous antibiotics to women in labour, aiming to reduce disease in infants at delivery. 2 x **Blue culture swabs** (lower vaginal and lower rectal) should ideally be taken from 35 weeks. Swabs will be placed in enrichment culture in the microbiology laboratory to ensure maximal detection.



Swabs: Types and Codes

Patient Request Forms and **Swabs** should be labelled with the body site from which the sample was taken. **This is important.** The swab site determines the appropriate culture media required to target the most likely pathogens.

Culture Swabs

SITE	CODE	SAMPLE TYPE
Candida only swab	CANC	Black or Blue Micro Swab
Cervical swab	CERS	Black or Blue Micro Swab
Ear swab	EARS	Blue or Orange Micro Swab
Eye swab	EYES	Blue or Orange Micro Swab
Gonorrhoea	GONN	Black Charcoal Swab
High vaginal swab	HVS	Black or Blue Micro Swab
Nasal swab	NASS	Blue or Orange Micro Swab
Oral swab	ORSW	Black or Blue Micro Swab
Penile swab	PENS	Black or Orange Micro Swab
Rectal swab	RECG	Black or Blue Micro Swab
Skin swab	SKIS	Blue Micro Swab
Throat swab	THRS	Blue Micro Swab
Urethral swab	URES	Black or Orange Micro Swab
Vaginal swab	VAGS	Black or Blue Micro Swab
Vulval swab	VULV	Black or Blue Micro Swab
Wound swab	WOUS	Black or Blue Micro Swab

MRSA by Culture

CODE	SAMPLE TYPE
MRSW	Blue Micro Swab x 1 – state site
MRW2	Blue Micro Swab x 2 – state sites
MRW3	Blue Micro Swab x 3 – state sites
MRW4	Blue Micro Swab x 4 – state sites
MRW5	Blue Micro Swab x 5 – state sites

Rapid MRSA by PCR

CODE	SAMPLE TYPE
MRSA	Blue Micro Swab x 1 – state site
MRS2	Blue Micro Swab x 2 – state sites
MRS3	Blue Micro Swab x 3 – state sites
MRS4	Blue Micro Swab x 4 – state sites
MRS5	Blue Micro Swab x 5 – state sites

PCR methods for the detection of Dermatophyte Fungal Cultures

The detection of Dermatophyte fungal cultures uses High Sensitivity PCR testing. This reduces the overall turnaround time by up to three weeks, and increases the detection of fungal infection compared to combined microscopy and culture. Furthermore the specific targeting pathogens associated with superficial fungal infection is increased which assists in preventing the over reporting of insignificant fungi that are contaminants.

Fungal test codes

	Investigation of Superficial Fungal Infection	Investigation of Non-Superficial Fungal Infection
Test code	DERM*	FUN*
Sample type	Skin, Hair and Nail.	All specimens other than Skin, Hair and Nail.
Turnaround time	72 hours for interim PCR report, and 7 days for final culture (unless the fungal culture needs to be extended for significant growth).	7 days (non-sterile e.g. ear swab) and 3 weeks (sterile i.e. CSF).
Notes	<ul style="list-style-type: none">• Dermatophyte PCR has replaced microscopy for Skin, Hair and Nail (72 Hour TAT).• Non-dermatophyte culture will take 7 days.• Microscopy is carried out to confirm significance of rare fungi.• Pseudomonas investigation in Nail specimens is available on request.	<ul style="list-style-type: none">• Non-sterile specimen fungal cultures are performed on Sabouraud's agar plates for 7 days with no microscopy.• Sterile specimen fungal cultures have microscopy (Calcafluor) reported on the day of processing and culture on a Sabouraud's agar slope, incubated for 21 days.

Stool test codes

Traditional culture methods have been replaced by Real Time PCR for enteric pathogen testing. The benefits are increased sensitivity and a higher detection rate. Once received and processed in the microbiology lab, negative results will be available within 24 hours. Positive results will be followed up with culture and sensitivities for final reporting.

Stool OCP and Culture

Sample type	Comments
Stool Please request as PENT Serosep EntericBio PCR Bacteria/Bacterial Toxins <ul style="list-style-type: none">• Salmonella • Campylobacter• Shigella • VTEC Parasites <ul style="list-style-type: none">• Cryptosporidium • Giardia	All stool samples will be tested for UK Pathogens. Overseas pathogens will only be tested if specifically requested and travel history and clinical details are provided. Samples that are positive for the bacterial pathogens will be cultured to provide sensitivities and, if indicated, for PHE referral. Samples will be kept for 7 days after receipt to allow for additional testing if required.

Microbiology

Stool for OCP

Sample type	Comments
Stool	Please request as OCP Requests for OCP only will include testing for cryptosporidium and giardia by PCR Overseas pathogens will only be tested if requested and travel history and clinical details are provided.

C. Difficile detection

Sample type	Comments
Stool	Please request as CLOS Serosep Enteric Bio PCR Alere Techlab EIA (Toxin) Two tier PCR and Toxin c.diff screening based on PHE guidance.

Enteric Organism Rapid Detection – see Tropical Immunology page 90

Endocrinology

TEST	CODE	SAMPLE REQ	TAT
11 Deoxycorticosterone	DEOX	B	10 days
11 Deoxycortisol	11DC	B (Frozen)	10 days
17 Hydroxyprogesterone	17OH	B	5 days
ACTH (Adrenocorticotrophic Hormone)	ACTH	A (Plasma, spun and frozen within 2 hours) ⁴¹	1 day
Aldosterone	ALDN	A or B	5 days
Aldosterone (Urine)	UALD	PU	5 days
Alpha-Fetoprotein	AFP	B	4 hours
Amenorrhoea Profile (Venous/Self-collect) CHANGE	AMEN / TAME	B / F (TDL Tiny) B (TDL Tiny)	4 hours / 1 day
Andropause Profile	ANDP	B B	8 hours
Androstenedione	ANDR	B (Frozen)	5 days
Antidiuretic Hormone	ADH	A A (Plasma Frozen) ⁴	10 days
Antimullerian Hormone (AMH) (Venous/Self-collect) Samples can be taken, at any time during a patient's monthly cycle. Ambient, unspun sample stability has been validated for up to 5 days (Venous).	AMH	B / B (TDL Tiny)	4 hours / 1 day
BNP (NT-pro BNP)	BNP	B	4 hours
C Peptide	CPEP	B	3 days
Calcitonin	CATO	B (Frozen) ⁴	1 day
Catecholamines (Plasma)	CATE	A A (Plasma Frozen) ⁴	5 days
Catecholamines (Urine)	UCAT	PU (collect on acid) ¹	5 days
Cortisol (Venous/Self-collect)	CORT	B / B (TDL Tiny)	4 hours / 1 day
Cortisol (Urine)	UCOR	CU	5 days
DHEA	DHEX	B	7-10 days
DHEA – Urine (Dehydroepiandrosterone)	UDHE	CU	3 weeks
DHEA Sulphate (Venous/Self-collect)	DHEA	B / B (TDL Tiny)	4 hours / 1 day
Dihydrotestosterone	DHT	B B	7 days
Down Syndrome Risk Bloods only (Risk to be calculated by clinician)	HCGF/ PAPA	B	4 hours
Down Syndrome Risk Profile (2nd trimester) Quad	DRP	B DRP form ^{7,8}	5 days
Down Syndrome Risk Profile with risk calculation first trimester	DRP	B DRP form + image of scan ^{7,8}	5 days
Erectile Dysfunction Profile	IMPO	A B B G	3 days
Fasting Insulin Resistance Index (FIRI)	FIRI	B G	4 hours

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Endocrinology





TEST	CODE	SAMPLE REQ	TAT
Female Hormone Profile (Venous / Self-collect)	FIP / TFIP	B / F (TDL Tiny) B (TDL Tiny)	4 hours / 1 day
First Trimester Antenatal Screen (Risk to be calculated by requesting clinician)	HCGF/ PAPA	B	4 hours
Free T3 (Venous / Self-collect)	FT3	B / B (TDL Tiny)	4 hours / 1 day
Free T4 (Venous / Self-collect)	FT4	B / B (TDL Tiny)	4 hours / 1 day
FSH (Venous / Self-collect)	FSH	B / B (TDL Tiny)	4 hours / 1 day
Growth Hormone (Fasting)	GH	B ^{7,35}	4 hours
Gut Hormone Profile	GUTP	A A (Frozen within 15 minutes) ⁴¹	3 weeks
HCG (Quantitative)	QHCG	B	4 hours
Hirsutism Profile	HIRP	B	4 hours
HRT Profile 1	HRT	B	4 hours
HRT Profile 2	HRT2	B G	4 hours
IGF-1 (Somatomedin)	SOMA	B (Frozen) ⁴	1 day
IGF-BP3	IGF3	B (Frozen) ⁴	5 days
Impotence Profile	IMPO	A B B G	3 days
Inhibin A	INIA	B	1 month
Inhibin B	INIB	B (Day 3 of cycle, frozen)	5 days
Insulin	INSU	B	4 hours
Luteinising Hormone (LH) (Venous / Self-collect)	LH	B / B (TDL Tiny)	4 hours / 1 day
Macroprolactin	PRLD	B	4 days
Male Hormone Profile	MIPR	B	4 hours
Melatonin (Serum)	MEL	B (Frozen)	5 days
Melatonin (Urine)	UMEL	CU ¹³	2 weeks
Menopause Profile (Venous / Self-collect)	MENO / TMEN	B / F (TDL Tiny) B (TDL Tiny)	4 hours / 1 day
Metabolic Syndrome Profile	METS	A B B G	9 days
Metanephrines (Plasma) Must be frozen within 2 hours.	PMET	A (Frozen plasma, must be frozen within 2 hours)	7 days
Metanephrines (Urine)	UMEX	PU (collect on acid) ¹	5 days
Oestradiol (Venous / Self-collect) Requests for a single self-collect Oestradiol [TOES] requires 1 x F (TDL Tiny) only.	OEST / TOES	B / F (TDL Tiny)	4 hours / 1 day
Oestriol (Estriol)	E3	B B	4 days

Endocrinology



















TEST	CODE	SAMPLE REQS	TAT
Oestrone	E1	B B	4 days
Osteocalcin	OST	B (Frozen) ⁴	4 days
Parathyroid Hormone (Whole)	PTHI	A ⁴	1 day
Pituitary Function Profile CHANGE	PITF	B B ⁷	1 day
Polycystic Ovary Syndrome Profile	PCOP	A B B B G ⁷	5 days
Polycystic Ovary Syndrome SHORT	PCOS	B G	4 hours
Pregnancy (Serum) [Quantitative]	QHCG	B	4 hours
Pregnenolone	PREN	B	15 days
Progesterone (Venous / Self-collect)	PROG	B / B (TDL Tiny)	4 hours / 1 day
Proinsulin	PROI	A (Frozen plasma) ⁴	5 days
Prolactin (Macro)	PRLD	B	4 days
Prolactin (Venous / Self-collect)	PROL	B / B (TDL Tiny)	4 hours / 1 day
Renin	RENI	A (Frozen plasma) ³⁶	5 days
Reverse T3	RT3	B ^{7,37}	15 days
Serotonin	SERT	H H (Frozen whole blood) ¹	10 days
Serotonin (Urine)	USER	PU 50mls (Frozen) ¹	5 days
Sex Hormone Binding Globulin (Venous / Self-collect)	SHBG	B / B (TDL Tiny)	4 hours / 1 day
Somatomedin (IGF-1)	SOMA	B (Frozen) ⁴	1 day
T3	T3	B	4 hours
T3 (Reverse)	RT3	B ^{7,37}	15 days
Testosterone (Venous / Self-collect)	TEST	B / B (TDL Tiny)	4 hours / 1 day
Testosterone (Free) (Venous / Self-collect)	FTES	B / B (TDL Tiny)	3 days
Thyroglobulin Abs	TGAB	B	1 day
Thyroglobulin Assay	TGA	B	1 day
Thyroid Abs (Thyroglobulin + Thyroid Peroxidase Abs) (Venous / Self-collect)	THAB	B / B (TDL Tiny)	1 day / 2 days
Thyroid Peroxidase Antibodies/Anti TPO	TPEX	B	1 day
Thyroid Profile 1 (FT4/TSH) (Venous / Self-collect)	TF	B / B (TDL Tiny)	4 hours / 1 day
Thyroid Profile 2	TF2	B	2 days
Thyroid Profile 3 (FT3/FT4/TSH) (Venous / Self-collect)	TF3	B / B (TDL Tiny)	4 hours / 1 day
Thyroxine (T4)	T4	B	4 hours

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Endocrinology

TEST	CODE	SAMPLE REQS	TAT
Thyroxine Binding Globulin	TBG	 (Frozen)	10 days
TSH (Venous / Self-collect)	TSH	 /  (TDL Tiny)	4 hours / 1 day
TSH-Receptor Antibodies	TSI		4 days

Reproductive Immunology at Rosalind Franklin Laboratory, Chicago, USA

TEST	CODE	SAMPLE REQ	TAT
Reproductive Immunophenotype Panel	3RF		1 week
NK Assay/Cytotoxicity Panel	4RF		1 week
NK Assay Follow-Up Panel	5RF		1 week
TH1/TH2 Cytokine Ratio	6RF	 ⁵	1 week
Leucocyte Antibody Detection Panel MALE	7RF	 ^{6,34}	1 week
Leucocyte Antibody Detection Panel FEMALE	8RF		1 week
HLA DR Antigens	9RF		2 weeks
HLA DQ Alpha Antigens	10RF		2 weeks
HLA DQ Beta Antigens	11RF		2 weeks
HLA A, B, C	14RF		2 weeks
NK Assay Panel + Intralipids	16RF		1 week
KIR (Killer-like Immunoglobulin-like Receptors) Genotyping	17RF		2-3 weeks
TH1/TH2 Intracellular Cytokine Ratios with IVIG, Prednisolone	20RF	 ⁵	1 week
TH1/TH2 Intracellular Cytokine Ratios with IVIG	21RF	 ⁵	1 week
TH1/TH2 Intracellular Cytokine Ratios with Prednisolone	22RF	 ⁵	1 week
Endometrial Biopsy Immune Profiling	23RF	J (Contact Referrals)	2 weeks
T Regulatory Cells	25RF		3 days
HLA-C	26RF		2 weeks
PAI-1 4G/5G Polymorphism	PAIP		10 days

Patients who have samples taken at TDL's Patient Reception at 76 Wimpole Street may attend any time during hours of opening on Mondays or Tuesdays, and by NOON on Wednesdays to allow for same day shipping to Chicago by Fed Ex. Samples for Rosalind Franklin are not accepted on Thursdays, Fridays or Saturdays. Fed Ex charges are included in these charges.

Reproductive Immunology from St Helier

TEST	CODE	SAMPLE REQ	TAT
NK (CD69) Cell Assay	CD69	*	Send Mon-Thurs only
NK (CD69) and NK Cytotoxicity	69C	*	Send Mon-Thurs only
NK Cytotoxicity Assay	HSNK	*	Send Mon-Thurs only
NK Cytotoxicity with suppression with steroid, IVIg and intralipin, and NK (CD69) cell assay	69CI	*	Send Mon-Thurs only
NK Cytotoxicity with suppression, steroid, IVIg & Intralipin	NKCY	*	Send Mon-Thurs only
Suppression with steroid, IVIg and intralipin, NK (CD69) cell assay, TH1/TH2 cytokines CHANGE	NCIT	*	Send Mon-Thurs only
TH1/TH2 Cytokine Profile	1TH2	*	Send Mon-Thurs only

Patients need to attend Patient Reception at 76 Wimpole Street by 11.00am latest Mondays – Thursdays. Samples cannot be accepted on Fridays, Saturdays or Sundays. Allow 2 days for results.

**Amenorrhoea Profile
(Venous / Self-collect)**

CHANGE

LH
FSH
Prolactin
Testosterone
Oestradiol – 17 Beta (Venous)
Oestradiol – 17 Beta (Self-collect)
SHBG
Free Androgen Index

TAT: 4 hours / 1 day

AMEN / TAME

/ (TDL Tiny) (TDL Tiny)

Andropause Profile

DHEAs
FSH
Testosterone
Free Androgen Index
LH
SHBG

TAT: 8 hours

ANDP

Erectile Dysfunction Profile

Lipid Profile
Glucose
HbA1C
FT4/TSH
Prolactin
Total Testosterone
Free Testosterone
PSA
SHBG
Free Androgen Index

TAT: 3 days

IMPO

Female Hormone Profile (Venous / Self-collect)

LH
FSH
Prolactin
Oestradiol – 17-Beta (Venous)
Oestradiol – 17-Beta (Self-collect)

TAT: 4 hours / 1 day

FIP / TFIP

B / **F** (TDL Tiny) **B** (TDL Tiny)

First Trimester Antenatal Screen (Risk to be calculated by requesting clinician)

Free β-hCG
PAPP-A
Free β-hCG and PAPP-A
in serum and sonographic
determination of nuchal
translucency (NT) are markers
of choice to identify women at
increased risk of Down Syndrome
during the first trimester
(week 11-13) of pregnancy.

TAT: 4 hours

HCGF/PAPA

B

Hirsutism Profile

FSH
LH
Testosterone
DHEAs
SHBG

TAT: 4 hours

HIRP

B

HRT Profile 1

FSH
Oestradiol – 17-Beta
Progesterone

TAT: 4 hours

HRT

B

HRT Profile 2

Lipid Profile
Glucose
FT4
TSH
FSH
OEST

TAT: 4 hours

HRT2

B **G**

Impotence Profile

Lipid Profile
Glucose
HbA1C
TSH
Prolactin
Total Testosterone
Free Testosterone
PSA
SHBG
Free Androgen Index

TAT: 3 days

IMPO

A **B** **B** **G**

Male Hormone Profile

FSH
LH
Testosterone
Free Androgen Index
Prolactin
SHBG

TAT: 4 hours

MIPR

B

Menopause Profile (Venous / Self-collect)

FSH
LH
Oestradiol – 17-Beta (Venous)
Oestradiol – 17-Beta (Self-collect)
TSH
FT4

TAT: 4 hours / 1 day

MENO / TMEN

B / **F** (TDL Tiny) **B** (TDL Tiny)

Metabolic Syndrome Profile

Lipid Profile
Glucose
HbA1C
Insulin
hsCRP
Adiponectin

TAT: 9 days

METS

A **B** **B** **G**

Pituitary Function Profile

CHANGE

TSH
FSH
LH
Prolactin
IGF-1 (Somatomedin)
Cortisol

Please provide details of time of day sample is taken. Patient should be resting for 30 mins before sample taking.

TAT: 1 day

PITF

B B ⁷

Polycystic Ovary Syndrome SHORT

Testosterone
SHBG
FAI
FSH
LH
Glucose
Insulin
Lipid Profile
FT4/TSH

TAT: 4 hours

PCOS

B G

Polycystic Ovary Syndrome Profile

Testosterone
TSH
Glucose
HbA1C
FSH
DHEAs
Insulin
LH
17 Hydroxyprogesterone
Lipid Profile
Prolactin
Cortisol
Antimullerian Hormone
Androstenedione
SHBG

A fasting 9.00am sample is recommended.

TAT: 5 days

PCOP

A B B B G ⁷

Thyroid Profile 1 (FT4/TSH) (Venous / Self-collect)

FT4
TSH

TAT: 4 hours / 1 day

TF

B / B (TDL Tiny)

Thyroid Profile 2

T4
TSH
Free T3
Free T4
Thyroglobulin Abs
Thyroid Peroxidase

TAT: 2 days

TF2

B

Thyroid Profile 3 (FT3/FT4/TSH) (Venous / Self-collect)

FT3
FT4
TSH

TAT: 4 hours / 1 day

TF3

B / B (TDL Tiny)

TDL Andrology

The single most important factor determining a man's fertility potential is the production of healthy sperm. A semen analysis has classically been used as the marker of this potential, by providing information about the sperm count, motility and morphology. However, there are other parameters given in a semen analysis that are often neglected or overlooked, which may indicate important pathologies – such as infection, prostatic disease, immunological infertility, retrograde ejaculation, malformation or obstruction of the genital tract, tumour, and congenital or endocrine disorders.

Early diagnosis of the male factor is important in order to detect any underlying pathology, determine the extent of infertility and ensure appropriate treatment. It may also avoid unnecessary investigations for the female partner, particularly if her age is a limiting factor.

For men who have had a vasectomy, clearance should only be given when there is no evidence of presence of sperm in two consecutive semen samples. It is therefore vital to ensure that results are reported according to best practice guidelines. Special clearance may be given at the doctor's discretion when there are persistent non-motile sperm present.

Guidelines for Producing Samples

Ideally semen samples should be produced on-site at TDL's Patient Reception at 76 Wimpole Street. Ideally patients must abstain from ejaculation for 2-3 days prior to the test, generally no less than 2 days and no longer than 7 days before the test is acceptable. This requirement is important for semen analyses and post vasectomy analyses to ensure reliability of results. It is possible that samples that do not comply with guidelines for abstinence and collection may not be able to be processed. All semen samples must be produced directly into the sterile containers provided by The Doctors Laboratory.

All containers are weighed and batch tested for sperm cytotoxicity. In exceptional circumstances when semen samples are produced off-site, they can only be accepted by the Andrology Department in sample containers provided by TDL.

TDL Andrology provides reference values to those given in the most recent WHO guidelines (2021). WHO 2021 guidelines state that two semen analyses should be performed before any diagnosis is confirmed. This may require requests for two (separate) semen analyses.

Appointments

It is important to make an appointment for all semen samples (on or off site) whether for a comprehensive semen analysis or post vasectomy analysis. It may be necessary to give patients who attend without an appointment a specific time to re-attend. The first appointments for post vasectomy samples should usually be 12 weeks and 20 ejaculations after surgery.

Appointments can be made by calling **020 7025 7940**. There is an attendance fee of £50.00 in addition to pathology charges.


Please complete a Pathology Request Form for your patient. If you would like to request other pathology, you can use the same form or complete a second additional form. Results will usually be reported to you within 48 hours.

If you would like to discuss these tests, or any aspect of this service including clinical interpretation by the consultant please contact TDL Andrology on **020 7025 7940** or email **andrology@tdlpathology.com** for further information.



SCAN ME

Book an appointment online:
www.tdlpathology.com/andrologybooking

TEST	CODE	SAMPLE REQ	TAT
Individual Semen Parameters***	SPOD	Semen ¹	1 day
*** Semen parameters may be requested individually (e.g. count only, vitality only, motility etc.). Please request as SPOD and indicate on the request form which parameter is required.			
Oxidative Stress in Semen (ROS + MIOXSYS)	SROS	Semen ¹	1 day
Retrograde Ejaculation	RTRO	Contact lab	2 days
Semen Analysis, Comprehensive*	SPER	Semen ¹	2 days*
* If required, comprehensive semen analysis can be reported within 4 hours, with morphology to follow.			
Semen Analysis, Post-Vasectomy**	PVAS	Semen ¹	2 days
** For men who have had a vasectomy, clearance should only be given when there is no evidence of presence of sperm in a single ejaculate when recommendations are met. It is rare that a 'diagnosis' is made without confirmation, therefore patients/clinicians should be able to freely request a second confirmatory sample. Special clearance may be given at the doctor's discretion, when there are <100 000/ml non-motile sperm present after the assessment of two specimens in full accordance with recommendations. Recommendations, as given by the Association of Biomedical Andrologists, the British Andrology Society and the British Association of Urological Surgeons 2016, are as follows:			
<ul style="list-style-type: none"> • Analysis of post vasectomy semen samples should not occur until 12 weeks post-surgery and after a minimum of 20 ejaculates • Semen samples must be analysed within 4 hours of production, and in cases where sperm is found a repeat analysis must be performed within 1 hour of production • Semen should be provided in weighed specimen containers provided by TDL Andrology • Sexual abstinence should be between 2 and 7 days. 			
Semen Analysis, Vasectomy Reversal*	SPER	Semen ¹	2 days*
* If required, comprehensive semen analysis can be reported within 4 hours, with morphology to follow.			
Semen Culture	SPCU	Semen	2-4 days
Semen Fructose	SPCF	Semen	2 days
Semen Leucocytes	PMNS	Semen	2 days
Semen Zinc	SPCZ	Semen	up to 10 days
Sperm Aneuploidy	SPPL	Semen ¹	4 weeks
Sperm Antibodies (Serum)	ASAB		5 days
Sperm Antibodies/MAR Test (Semen)†	ASPA	Semen	1 day
† Sperm antibodies in semen are measured as part of the routine semen analysis.			
Sperm Comet®	CMET	Semen ¹	1-2 weeks
Sperm Count (Post-Vasectomy)	PVAS	Semen ¹	2 days
Sperm DNA Fragmentation (SCSA)	SEXT	Semen ¹	1-2 weeks
Sperm Morphology (Kruger strict criteria)	MRPH	Semen ¹	2 days

By special arrangement

- Sperm swim test
- Sperm preparation for overnight survival
- Sperm motility and vitality testing for epididymal toxicity
- Sperm retrieval procedures (biopsy, PESA, MESA)
- Sperm cryopreservation and storage (undertaken by Andrology Solutions – HFEA licensed)

All men who store sperm must be screened for HIV 1&2, Hepatitis B, Hepatitis C and HTLV. Under HFEA regulations, sperm can be stored for an initial period of 10 years with formal consent. All patients are offered counselling prior to sperm cryopreservation.

These arrangements, and details for other specialist semen tests, are available on request. Please contact TDL Andrology on **020 7025 7940** or email sheryl.homa@tdlpathology.com for further information.

Sperm DNA fragmentation

High sperm DNA fragmentation is associated with reduced natural pregnancy rates and assisted conception pregnancy rates as well as live birth rates. In addition, DNA fragmentation leads to higher miscarriage rates as published in the ESHRE Recurrent Pregnancy Loss 2017 Guideline. High levels of DNA fragmentation may be reduced by considering varicocele repair, treatment of underlying infections or inflammation, changes in lifestyle or with antioxidant supplements.

When requesting Sperm DNA Fragmentation there are two options. Please specify whether the request is for sperm DNA fragmentation by **SCSA** or **COMET**.

Sperm Chromatin Structure Assay (SCSA®) [SEXT]

This test has the ability to measure large numbers of cells (between 5,000 and 10,000 sperm), rapidly in an ejaculate. The SCSA® test monitors the changes in fluorescence of a probe, acridine orange, to detect both single and double DNA strand breaks using flow cytometry. It has been developed using human and animal models over the last 35 years and is one of the most statistically robust tests available for sperm DNA fragmentation. It is a standardised, validated CLIA approved test with high reproducibility and low variability. The test requires a minimum sperm count of approximately 100,000/ml.

Sperm COMET® Assay [CMET]

Exact® tests, powered by SpermComet® technology measure sperm DNA damage. The Exact range of tests are available via healthcare professionals only. Sperm DNA can be damaged when sperm are being made in the testes or as they mature before ejaculation. This damage breaks the DNA into fragments, so sperm DNA tests are also known as sperm DNA fragmentation tests. Men with high levels of sperm DNA damage are less likely to get their partner pregnant and have increased risk of miscarriage. Even if semen analysis results are 'normal', the sperm DNA could be damaged and therefore poor quality. Sperm DNA damage can reduce your chances of having a baby. The Comet® assay can measure both single and double strand breaks. Only a small number of sperm (a minimum of 5,000) sperm are required to perform the assay.

It is a standardized ISO 13485 certified test with high reproducibility and low variability.

It also has the advantage of requiring only 5000 sperm so it can be used for men with low sperm counts and also for surgically retrieved sperm samples.

Sperm Aneuploidy

Chromosomal abnormalities may be somatic cell in origin, in which case they can be detected by a simple blood karyotype analysis. However, most sperm chromosome anomalies arise as a result of errors during meiosis, which cannot be detected by a blood karyotype analysis. These anomalies can only be detected by looking at the sperm chromosomes directly. Studies have shown that sperm with a high rate of aneuploidy have a negative impact on pregnancy rate and are associated with recurrent pregnancy loss.

This test uses fluorescent in situ hybridisation (FISH) to label individual chromosomes with specific probes. Hundreds of sperm are assessed from one ejaculate. There are limitations to the test as only 5 probes are currently used routinely for analysis (three of the 22 autosomes: chromosomes 13, 18 and 21, and the sex chromosomes, X and Y), although others are available upon specific request. The results are reported showing incidence of disomy or nullisomy for each of the autosomes and for both sex chromosomes. A sex chromosome ratio is also reported. It is CE marked.

Instructions for collection of Sperm DNA and Aneuploidy specimens

Sperm DNA Fragmentation or Sperm Aneuploidy testing are not part of the Comprehensive Semen Analysis and need to be requested as a separate test, test code SEXT and SPPL, respectively.

Semen samples ideally need to be frozen as soon as possible after liquefaction, but not longer than 60 minutes post ejaculation. Samples must be snap-frozen for Sperm DNA Fragmentation and cryopreserved in TYB for Sperm Aneuploidy. If samples are prepared by another laboratory. Two cryovials containing not less than 0.25 mls of semen is required. Frozen samples can be sent to, or collected by TDL, by arrangement, and must be accompanied with relevant patient details, the sperm count and GDPR consent form.

A count of a minimum 0.1 million/ml is required for accurate DNA and aneuploidy reporting.

Oxidative Stress in Semen (ROS + MIOXSYS) and Male infertility

There is now growing evidence to support a link between oxidative stress and male infertility. It is the underlying cause of sperm DNA damage and impairs semen parameters and fertilisation, adversely affects embryo development and is associated with reduced pregnancy rates. It may also increase the risk of miscarriage. High levels of ROS may be reduced by considering varicocele repair, treatment of underlying infections or inflammation, changes in lifestyle or with antioxidant supplements.

TDL provides a comprehensive assessment of oxidative stress by **combined measurement of Reactive Oxygen Species and Redox Potential**. Please request as oxidative stress test (code ROS).

The test includes combined testing for:

- **Chemiluminescence Assay for Reactive Oxygen Species:** Reactive Oxidative stress may be measured by a simple chemiluminescence test in semen, which measures the level of reactive oxygen species.
- **MIOXSYS Electrochemical Assay for Redox Potential:** Oxidative stress may be determined by an electrochemical assay which measures the redox potential in semen. This test measures the overall difference between total oxidants and antioxidants in the system.

If you would like to discuss these tests, or any aspect of this service, please contact TDL Andrology on **020 7025 7940** or **020 7307 7373**, or email **andrology@tdlpathology.com**.

References

Vassiliou A, Martin CH, Homa ST, Stone J, Dawkins A, Genkova MN, Skyla Dela Roca H, Parikh S, Patel J, Yap T, Killeen AP. Redox potential in human semen: Validation and qualification of the MiOXsys assay. *Andrologia*. 2021 Mar;53(2):e13938. doi: 10.1111/and.13938. Epub 2020 Dec 30. PMID: 33377541.

Semen samples need specialist handling – for this reason all requests for semen analyses should be made by appointment. Practices or patients should contact TDL Andrology on **020 7025 7940** to make appointments and to confirm instructions for sample collection.

Effects of ROS-induced Oxidative Stress on Sperm

- Lipid peroxidation which damages the sperm surface causing an abnormal morphology and impaired motility.
- Damage to proteins on cell surface responsible for cell signalling and may affect enzyme function inside the cell.
- Increased semen viscosity.
- Peroxidation of DNA and subsequent unravelling or fragmentation.
- Possible mutagenic effects.
- Damage to seminiferous epithelium, damage to tubules, testicular atrophy, reduced spermatogenesis.
- Decrease in sperm vitality, motility.
- Impaired fertilization by affecting sperm capacitation and the acrosome reaction.

Causes of Elevated ROS Levels

- Genito-urinary tract infection
- Prostatitis
- Vasectomy reversal
- Varicocele
- Cryptorchidism
- Chronic disease
- Xenobiotics
- Chemical pollutants and occupational hazards
- Heavy metal exposure
- Removal of seminal plasma during sperm preparation for assisted conception
- Drugs – cyclophosphamide, aspirin, paracetamol
- Smoking
- Excessive exercise
- Heat exposure
- Obesity
- Age

Sexual Health

TEST	CODE	SAMPLE REQ	TAT
7 STI Profile by PCR (7 tests from 1 Sample)	DL12	FCRU / PCR Swab / TPV or Aptima urine / multisite swab	2 days
Chlamydia – PCR swab	SPCR	PCR	2 days
Chlamydia – Thin Prep	TPCR	TPV	2 days
Chlamydia – Urine	CPCR	FCRU	2 days
Chlamydia/Gonorrhoea – PCR Swab	SCG	PCR	2 days
Chlamydia/Gonorrhoea – Rectal (PCR/Self-collect)	RSCG	PCR / Aptima multisite swab	2 days
Chlamydia/Gonorrhoea – Thin Prep	TCG	TPV	2 days
Chlamydia/Gonorrhoea – Throat (PCR/Self-collect)	TSCG	PCR / Aptima multisite swab	2 days
Chlamydia/Gonorrhoea – Urine (FCRU/Self-collect)	CCG	FCRU / Aptima urine	2 days
Chlamydia/Gonorrhoea – Vaginal (Self-collect)	SCG	Aptima multisite swab	2 days
Chlamydia/Gonorrhoea/Trichomonas – PCR Swab	SCGT	PCR	2 days
Chlamydia/Gonorrhoea/Trichomonas – Thin Prep	TCGT	TPV	2 days
Chlamydia/Gonorrhoea/Trichomonas – Urine	CCGT	FCRU	2 days
CT/GC/Trichomonas/Mgen – PCR Swab	SGTM	PCR Swab	2 days
CT/GC/Trichomonas/Mgen – Thin Prep	TGTM	TPV	2 days
CT/GC/Trichomonas/Mgen – Urine	CGTM	FCRU	2 days
Gardnerella vaginalis by PCR	GVPC	FCRU / PCR / TPV	2 days
Gonorrhoea – Culture	GONN	CS^{‡‡‡}	2-3 days
‡ ‡ ‡ The optimal sample type from the female genital tract is an endocervical swab. Gonorrhoea does not survive well outside the endocervical epithelium; a negative gonorrhoea culture result from a vaginal swab is not reliable for excluding infection.			
Gonorrhoea – PCR swab	SGON	PCR	2 days
Gonorrhoea – Thin Prep	TGON	TPV	2 days
Gonorrhoea – Urine	CGON	FCRU	2 days
Haemophilus ducreyi by PCR	DUCR	PCR	7 days
Hepatitis A Profile	HEPA	B	4 hours
Hepatitis B Surface Antigen (Venous/Self-collect)	AUAG / THBA	B / B (TDL Tiny)	4 hours / 1 day
Hepatitis C Antibodies (Venous/Self-collect)	HEPC / THCV	B / B (TDL Tiny)	4 hours / 1 day

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Sexual Health

TEST	CODE	SAMPLE REQ	TAT
Herpes Simplex (HSV) 1 & 2 (PCR/Self-collect) (Oral or Genital)	HERS	PCR / Aptima multisite swab	5 days
Herpes Simplex I/II by PCR (Urine)	HERD	FCRU	5 days
HIV 1 & 2/p24Ag (Venous/Self-collect)	HDUO / THIV	B / B (TDL Tiny)	4 hours / 1 day
HIV/HBV/HCV Screen by PCR/NAAT (10 days post exposure)	STDX	A 10mls or 2 x 4mls (Vacutainer only)	3 days
HIV/HBV/HCV (Early detection by PCR/NAAT) with Syphilis	STXX	B A 10mls or 2 x 4mls	3 days
HIV Rapid RNA HIV-1 QUALITATIVE	LHIV	A (Vacutainer only)	4 hours
HIV Rapid RNA HIV-1 QUANTITATIVE	RHIV	A (Vacutainer only)	4 hours
HPV (DNA and reflexed mRNA)	HPVT	TPV	5 days
HPV (HR mRNA types 16, 18 + others)	HPVH	TPV	3 days
HPV (Individually typed low & high risk DNA subtypes)	HP20	TPV / PCR swab	3 days
HPV (Individually typed high risk DNA subtypes) (Self-collect)	HPVZ	Qvintip vaginal swab	3 days
HPV (mRNA all high risk subtypes) (Self-collect)	HPVY	Qvintip vaginal swab	3 days
Lymphogranuloma Venerium (LGV) – Rectal (Self-collect)*	LGVP	Aptima multisite swab	1-2 weeks
* This test can be configured to be automatically reflexed as required.			
Lymphogranuloma Venerium (LGV) (PCR)	LGVP	PCR ⁴²	1-2 weeks
Macrolide Resistance Test (Mgen)	MGR	FCRU / PCR	1-2 weeks
Monkeypox Virus – Lesion (Self-collect)	MPXV	Aptima multisite swab	2 days
Mycoplasma genitalium by PCR	MGEN	FCRU / PCR / TPV	2 days
Mycoplasma genitalium Detection – Urine or Vaginal (Self-collect)	MGEN	Aptima urine or multisite swab	2 days
Mycoplasma genitalium Resistance – Urine or Vaginal (Self-collect)*	MGR	Aptima urine or multisite swab	1-2 weeks
* This test can be configured to be automatically reflexed as required.			
Mycoplasma genitalium/ Ureaplasma by PCR	MUPC	FCRU / PCR / TPV	2 days
Rapid Xpert HIV-1 RNA Qualitative – Early Detection from 10 days	LHIV	A (Vacutainer only)	4 hours
Rapid Xpert HIV-1 RNS Viral Load – Rapid Testing for HIV-Positive Patient Prognosis and Response To Antiretroviral Therapy	RHIV	A (Vacutainer only)	4 hours
RPR (Syphilis)	RPR	B	2 days

Sexual Health

TEST	CODE	SAMPLE REQ	TAT
STD1 M/F STD Quad (Urine and Serology)	STD1	B FCRU	2 days
STD2 M/F STI Profile Plus (Urine and Serology)	STD2	B FCRU (If culture swabs are needed please request separately)	4 days
STD3 Female STD Quad (PCR Swab and Serology)	STD3	B PCR	2 days
STD4 Female STI Profile Plus (PCR Swab and Serology)	STD4	B PCR (If culture swabs are needed please request separately)	4 days
STD5 Serology only	STD5	B	4 hours
STD6 Serology only without HIV	STD6	B	4 hours
STD8 Vaginitis/BV Profile using Culture & PCR Swab	STD8	PCR and STM	3 days
STD9 Symptomatic lesion sample using PCR Swab from lesion & PCR Swab	STD9	2 x PCR Swab	7 days
STI Profile by PCR (7 tests from 1 Sample) (Self-collect)	DL12	Aptima urine or multisite swab	2 days
STI Profile: MSM1 (Venous/Self-collect)	MSM1	B / FCRU / PCR Swab Throat / PCR Swab Rectal or B (TDL Tiny) / Aptima Urine / Aptima multisite swab x 2	2 days
STI Profile: MSM2 (Venous/Self-collect)	MSM2	B / FCRU / PCR Swab Throat / PCR Swab Rectal or B (TDL Tiny) / Aptima urine / Aptima multisite swab x 2	3 days
Syphilis by PCR (chancere)	SYPS	PCR	5 days
Syphilis IgG/IgM (Venous/Self-collect)	SERJ / TSYP	B / B (TDL Tiny)	4 hours / 1 day
TPPA	TPPA	B	2 days
Trichomonas vaginalis	TVPC	FCRU / PCR / TPV	2 days
Trichomonas Vaginalis (TV) – Urine or Vaginal (Self-collect)	TVPC	Aptima urine or multisite swab	2 days
Triple Swab Female STI Profile (Vaginal/Throat/Rectal Swabs) (PCR/Self-collect)	3SWA	PCR swab x 3 (label by site) or Aptima multisite swab x 3 (label by site)	2 days
Ureaplasma urealyticum by PCR	UGEN	FCRU / PCR / TPV	2 days
Vaginitis/BV Profile (Culture & PCR/Self-collect)	STD8	PCR and STM or Aptima multisite swab and Blue gel Amies swab	3 days / 3-5 days

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

**STD1 M/F STD Quad
(Urine and Serology)**

SEROLOGY
HIV 1&2/p24 Antigen
Syphilis IgG/IgM

URINE
Chlamydia
Gonorrhoea

TAT: 2 days

STD1

B FCRU

**STD2 M/F STI Profile
Plus (Urine and Serology)**

SEROLOGY
HIV 1&2/p24 Antigen
Hep B Surface Antigen
Hep C Abs
Hep C Ag
Syphilis IgG/IgM

URINE
Chlamydia/Gonorrhoea
Mycoplasma genitalium
Ureaplasma
Trichomonas vaginalis
Gardnerella vaginalis
Herpes Simplex I/II

TAT: 4 days

STD2

B FCRU (If culture swabs are needed please request separately)

**STD3 Female STD Quad
(PCR Swab and Serology)**

SEROLOGY
HIV 1&2/p24 Antigen
Syphilis IgG/IgM

VAGINAL PCR SWAB
Chlamydia
Gonorrhoea

TAT: 2 days

STD3

B PCR

**STD4 Female STI Profile
Plus (PCR Swab and Serology)**

SEROLOGY
HIV 1&2/p24 Antigen
Hep B Surface Antigen
Hep C Abs
Hep C Ag
Syphilis IgG/IgM

VAGINAL PCR SWAB
Chlamydia/Gonorrhoea
Mycoplasma genitalium
Ureaplasma
Trichomonas vaginalis
Gardnerella vaginalis
Herpes Simplex I/II

TAT: 4 days

STD4

B PCR (If culture swabs are needed please request separately)

STD5 Serology only

HIV 1&2/p24 Antigen
Hepatitis B Surface Antigen
Hep C Abs
Hep C Ag
Syphilis IgG/IgM

TAT: 4 hours

STD5

B

**STD6 Serology
only without HIV**

Hepatitis B Surface Antigen
Hep C Abs
Hep C Ag
Syphilis IgG/IgM

TAT: 4 hours

STD6

B

**STD8 Vaginitis/BV
Profile using Culture
& PCR Swab**

Candida species
Gardnerella vaginalis by PCR
Trichomonas vaginalis by PCR

TAT: 3 days

STD8

PCR and STM

Sexual Health

STD9 Symptomatic lesion sample using PCR Swab from lesion & PCR Swab

Syphilis by PCR
Herpes Simplex I/II by PCR
(from single swab)

TAT: 7 days

STD9

2 x PCR Swab

7 STI Profile by PCR (7 tests from 1 Sample)

Chlamydia trachomatis
Neisseria gonorrhoea
Mycoplasma genitalium
Ureaplasma species
Trichomonas vaginalis
Gardnerella vaginalis
Herpes Simplex I/II

All tests can be requested individually

TAT: 2 days

DL12

FCRU / PCR / TPV

or Aptima urine or multisite swab

CT/GC/Trichomonas/ Mgen – PCR Swab

Chlamydia
Gonorrhoea
Trichomonas vaginalis
Mycoplasma genitalium

All tests can be requested individually

TAT: 2 days

SGTM

PCR Swab

CT/GC/Trichomonas/ Mgen – Urine

Chlamydia
Gonorrhoea
Trichomonas vaginalis
Mycoplasma genitalium

All tests can be requested individually

TAT: 2 days

CGTM

FCRU

HIV/HBV/HCV Screen by PCR/NAAT (10 days post exposure)

Positive findings will be reflexed for confirmatory testing
HIV1 and HIV2 (RNA)
Hepatitis B Virus (HBV DNA)
Hepatitis C Virus (HCV RNA)

Samples must be received in the laboratory within 2 days of sample taking

STDx provides diagnostic confirmatory testing only when used in addition to serology for Ag/Ab HIV-1&2, HBV, HCV

TAT: 3 days

STDx

A 10mls or 2 x 4mls
(Vacutainer only)

HIV/HBV/HCV (Early detection by PCR/ NAAT) with Syphilis

HIV1 and HIV2 (RNA)
Hepatitis B Virus (HBV DNA)
Hepatitis C Virus (HCV RNA)
Syphilis IgG/IgM

Samples must be received in the laboratory within 2 days of sample taking

TAT: 3 days

STXX

B A 10mls or 2 x 4mls

HIV Rapid RNA HIV-1 QUALITATIVE

Early detection from 10 days
HIV-1 RNA
Sample must be received in the laboratory within 24 hours of sample taking

TAT: 4 hours

LHIV

A (Vacutainer only)

HIV Rapid RNA HIV-1 QUANTITATIVE

Rapid testing for HIV-positive patient prognosis and response to antiretroviral therapy
HIV-1 RNA VIRAL LOAD (40 copies/ml)
Sample must be received in the laboratory within 24 hours of sample taking

TAT: 4 hours

RHIV

A (Vacutainer only)

STI Profile: MSM1 (Venous / Self-collect)

HIV 1&2/p24 Ag
Syphilis IgG/IgM
Urine for CT/GC
Throat Swab CT/GC
Rectal Swab CT/GC

TAT: 2 days

MSM1

B / FCRU / PCR Swab Throat / PCR Swab Rectal
or **B** (TDL Tiny) / Aptima Urine / Aptima multisite swab x 2

STI Profile: MSM2 (Venous / Self-collect)

HIV 1&2/p24 Ag
Syphilis IgG/IgM
Hep B sAg
Hep C Abs
7 STI by PCR Screen
Throat Swab CT/GC
Rectal Swab CT/GC
Macrolide Resistance Test (M.gen)

TAT: 3 days

MSM2

B / FCRU / PCR Swab Throat / PCR Swab Rectal
or **B** (TDL Tiny) / Aptima Urine / Aptima multisite swab x 2

Triple Swab Female STI Profile (Vaginal/ Throat/Rectal Swabs) (PCR / Self-collect)

CT/GC Vaginal
CT/GC Throat
CT/GC Rectal

TAT: 2 days

3SWA

PCR Swab x 3 (label by site)
or Aptima multisite swab x 3 (label by site)

FASTest Test Now: Sexual Health screening ahead of expected time

TEST	CODE	SAMPLE REQS	TAT
FAST Chlamydia – PCR Swab	FSCT	PCR Swab	4 hours
FAST Chlamydia – Urine	FCT	FCRU	4 hours
FAST CT/GC – PCR Swab	FSCG	PCR Swab	4 hours
FAST CT/GC – Rectal PCR Swab	FRCG	PCR Swab	4 hours
FAST CT/GC – Throat PCR Swab	FTCG	PCR Swab	4 hours
FAST CT/GC – Urine	FCG	FCRU	4 hours
FAST Gonorrhoea – PCR Swab	FSGN	PCR Swab	4 hours
FAST Gonorrhoea – Urine	FGN	FCRU	4 hours
FAST Screen SHORT with Swab	FSSS	B PCR Swab	4 hours
FAST Screen SHORT with Urine	FSSC	B FCRU	4 hours
FAST Screen with Swab	FSWS	B PCR Swab	4 hours
FAST Screen with Urine	FUSC	B FCRU	4 hours

FAST Screen SHORT with Urine

HIV 1&2/p24 Ag
Syphilis IgM/IgG
FAST Urine CT/GC

TAT: 4 hours

FSSC

B FCRU

FAST Screen SHORT with Swab

HIV 1&2/p24 Ag
Syphilis IgM/IgG
FAST Swab CT/GC

TAT: 4 hours

FSSS

B PCR Swab

FAST Screen with Urine

HIV 1&2/p24 Ag
Hep B sAg
Hep C Abs
Syphilis IgG/IgM
FAST Urine CT/GC

TAT: 4 hours

FUSC

B FCRU

FAST Screen with Swab

HIV 1&2/p24 Ag
Hep B sAg
Hep C Abs
Syphilis IgG/IgM
FAST Swab CT/GC

TAT: 4 hours

FSWS









B PCR Swab

STI	INCUBATION PERIOD	SAMPLE SITE	TEST TYPE	TEST CODE	SAMPLE TYPE	TAT
Chlamydia CT (Bacterial)	1 – 3 weeks, up to 6 weeks	Urine Cervix /Vagina Cervix /Vagina	Chlamydia Chlamydia Chlamydia	CPCR SPCR TPCR	First catch Urine PCR Swab Thin Prep Vial	2 days 2 days 2 days
Gonorrhoea GC (Bacterial)	2 – 7 days, up to 1 month	Urine Cervix /Vagina Cervix /Vagina Cervix /Vagina	Gonorrhoea by PCR Gonorrhoea by PCR Gonorrhoea by PCR Gonorrhoea by CULTURE	CGON SGON TGOH GONH	First Catch Urine PCR Swab Thin Prep Vial Black Charcoal swab	2 days 2 days 2 days 2-3 days
CT/GC Combined (Bacterial)	1 – 3 weeks, up to 6 weeks	Urine Cervix /Vagina Cervix /Vagina Rectum Throat	CT/GC CT/GC CT/GC CT/GC CT/GC	CCG SCG TCG RSCG TSCG	First Catch Urine PCR Swab Thin Prep Vial PCR Swab PCR Swab	2 days 2 days 2 days 2 days 2 days
Mycoplasma genitalium (Bacterial)	Symptoms develop at 1 – 3 weeks	Urine GU Site Cervix /Vagina	Mycoplasma genitalium by PCR Mycoplasma genitalium by PCR Mycoplasma genitalium by PCR	MGEN MGEN MGEN	First Catch Urine PCR Swab Thin Prep Vial	2 days 2 days 2 days
Ureaplasma urealyticum (Bacterial)	Symptoms develop at 1 – 3 weeks	Urine GU Site Cervix /Vagina	Ureaplasma by PCR Ureaplasma by PCR Ureaplasma by PCR	UGEN UGEN UGEN	First Catch Urine PCR Swab Thin Prep Vial	2 days 2 days 2 days
Trichomonas vaginalis (Parasitic)	4 – 28 days, many patients are asymptomatic carriers	Urine GU Site Cervix /Vagina	Trichomonas vaginalis by PCR Trichomonas vaginalis by PCR Trichomonas vaginalis by PCR	TVPC TVPC TVPC	First Catch Urine PCR Swab Thin Prep Vial	2 days 2 days 2 days
Gardnerella vaginalis (Bacterial)	Imbalance of normal flora	Urine GU Site Cervix /Vagina	Gardnerella vaginalis by PCR Gardnerella vaginalis by PCR Gardnerella vaginalis by PCR	GVPC GVPC GVPC	First Catch Urine PCR Swab Thin Prep Vial	2 days 2 days 2 days
Bacterial Vaginosis (BV) (Bacterial)	Imbalance of normal flora	Cervix /Vagina	Bacterial Vaginosis (BV) Profile by both MICROSCOPY and PCR	STD8	Both Microscopy & PCR swab	3 days

Herpes Simplex Viral I/II (Viral)	2 – 14 days, testing is most appropriate for patients with symptomatic lesion(s)	Herpes lesion	Herpes by PCR Herpes by PCR	HERS HERD	PCR Swab First Catch Urine	5 days 5 days
Human Papillomavirus (Viral)	HPV is the most common sexually transmitted infection – usually asymptomatic	Cervical cells Cells/papilloma from site (throat/penile/anal)	HPV (DNA and reflexed mRNA) HPV (Individually typed low & high risk DNA subtypes) HPV (Individually typed low & high risk DNA subtypes)	HPVT HP20 HP20	Thin Prep Vial PCR Swab Cells / Papilloma	5 days 3 days 3 days
Genital warts (Viral)	Weeks / months after exposure	GU Warts	HPV (DNA and reflexed mRNA) HPV (Individually typed low & high risk DNA subtypes) HPV (Individually typed low & high risk DNA subtypes)	HPVT HP20 HP20	Thin Prep Vial PCR Swab Cells / Papilloma	5 days 3 days 3 days
Syphilis/Herpes (Bacterial/Viral)	Whenever active lesions are present	Symptomatic lesion	Syphilis/Herpes Lesion Profile	STD9	PCR Swab	7 days

BLOOD	INCUBATION PERIOD	SAMPLE SITE	TEST	TEST CODE	SAMPLE TYPE	TAT
Syphilis (Bacterial)	9–21 days, but up to 90 days	Blood	Syphilis IgG/IgM	SERJ	B	4 hours
Herpes Simplex Virus I/II (Viral)	IgG 4–6 weeks after exposure, IgM 5–35 days after exposure, after which test IgG	Blood	Herpes IgG (past infection) Herpes IgM (current/recent)	HERP HERM	B B	2 days 2 days
HIV (Viral)	Usually 10–90 days, but up to 180 days	Blood	HIV I&II / p24 antigen (screening from 45 days post exposure (BHIVA))	HDUO	B	4 hours
Hep B (Viral)	Usually 45–180 days, average of 60–90 days	Blood	Hep B surface antigen	AUAG	B	4 hours
Hep C Ab (Viral)	Usually 9–180 days, average of 45–65 days	Blood	Hep C Antibodies	HEPC	B	4 hours
EARLY DETECTION PROFILES BY PCR	INCUBATION PERIOD	SAMPLE SITE	TEST	TEST CODE	SAMPLE TYPE	TAT
7 STIs by PCR	One sample for 7 STI Tests	Urine Cervix Vagina	Chlamydia Gonorrhoea Mycoplasma genitalium Ureaplasma genitalium Trichomonas vaginalis Gardnerella vaginalis Herpes Simplex I/II	PP12	Thin Prep Vial or First Catch Urine or PCR Swab or Aptima urine or multisite swab	2 days
HIV / HBV / HCV	Early Detection Screen by PCR Multiplex	Blood	HIV 1&2 RNA Hepatitis B (HBV DNA) Hepatitis C (HCV RNA)	STDx	A 10mls or 2x4mls (Vacutainer only)	3 days

Immunology

TEST	CODE	SAMPLE REQ	TAT
Acute Viral Hepatitis Screen	AHSC		4 hours
Adrenal Cortex Antibodies	ACTX		2 days
ANCA (Anti-Neutrophil Cytoplasmic Abs)	ANCA		2 days
Anti-Actin Antibodies	AAA		5 days
Anti-Basal Ganglia Antibodies	ABGA		3 weeks
Anti-CCP Antibodies	CCP		2 days
Anti-Liver Cytosol Antibodies	ALCA		5 days
Anti-MOG [Myelin Oligodendrocyte Glycoprotein] Antibodies	AMOG		3 weeks
Anti-MUSK Antibodies	MUSK		2 weeks
Anti-Nuclear Antibodies (titre & pattern)	ANAB		2 days
Anti-Phosphatidylserine Antibodies	PHTS		5 days
Anti-Phospholipase A2 Receptor	AA2R		6 weeks
Anti-Ri Antibodies	RIAB		3 days
Anti-SLA (Soluble Liver Antigen) Abs	LSA		10 days
Anti-Staphylolysin Titre (SGOT)	ASTT		3 days
Anti-Streptolysin Titre/ASOT	ASLT		2 days
Anti-Sulfatide Antibodies	ASA		5 weeks
Aquaporin 4 Antibodies (Neuromyelitis Optica)	AQUA		2 weeks
Ascariasis Serology	ASC		5 days
Autoantibody Profile I	AUTO		2 days
Autoantibody Profile II	ENDO		2 days
Avian Precipitins (11 Species)	AVIA		5 days
Babesia PCR	PCRB		7 days
Beta 2 Glycoprotein 1 Abs	B2GP		5 days
Borrelia Antibodies (Lyme Disease) IgG, IgM	BORR	 ^{9,14}	2 days
Borrelia Antibodies (Lyme Disease) IgM	BORM		2 days
Borrelia Confirmation (Immunoblot)	BORC	 ^{9,14}	10 days
Brucella Serology	BRUC	 ⁹	2-3 weeks
C1 Esterase Inhibitor	C1EI		5 days
C3 Complement	C3		4 hours
C3/C4 Complement	COMP		4 hours
C4 Complement	C4		4 hours
Calprotectin	CALP	QFIT sample collection device	5 days

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Immunology



































TEST	CODE	SAMPLE REQS	TAT
Calprotectin/QFIT Profile (Combined)	QCAL	QFIT sample collection device	5 days
Cardiolipin Antibodies (IgG+IgM)	ACAB	B	2 days
CCP Antibodies (RF)	CCP	B	2 days
Centromere Autoantibodies	CENT	B	2 weeks
CH50 (Classical pathway)	CH50	B (Frozen) ⁴	4 days
Chagas Disease Serology (S.American Trypanosomiasis) T. Cruzi	CHGA	B ^{9,14}	10 days
Chlamydia Species Specific (MIF) Ab Screen	CHAB	B	2 days
Chronic Fatigue Syndrome Profile	VIP1	A + B ¹⁰	5 days
Coeliac Disease – HLA DQ2/DQ8 Genotype	Q2Q8	A ⁹	10 days
Coeliac/Gluten Genetic Profile 2** CHANGE	GSA2	A B	10 days
**See page 87			
Coeliac/Gluten Sensitivity Profile** CHANGE	GSA	B	2 days
**See page 87			
Colloid Antigen-2 Antibodies	CA2A	B	2 weeks
Cotinine (Serum)	COT	B	4 days
COVID-19 (SARS-CoV-2) Roche Elecsys Anti-SARS-CoV-2 S (SPIKE) (Venous / Self-collect)	SCOV	SST/Serum B (Venous) / B (TDL Tiny)	1 day
Diphtheria Antibodies	DIPH	B	5 days
DNA (Double Stranded) Antibodies IgG	DNAA	B	2 days
DNA (Single Stranded) Antibodies	DNAS	B	5 days
Echinococcus (Hydatid) Antibodies	EFAT	B ^{9,14}	5 days
Ehrlichiosis Antibodies	EHRL	B ^{9,14}	10 days
Endomysial Antibodies (IgA) (Venous / Self-collect)	AEAB	B / B (TDL Tiny)	2 days
Extractable Nuclear Antibodies (nRNP, Sm, Ro, La, Jo1, Scl70) CENP-B	ENA	B	2 days
Farmers Lung Precipitins	FARM	B	5 days
Fasciola Hepatica Antibodies (Liver Fluke)	FASC	B	2 weeks
Ganglionic Acetylcholine Receptor Antibodies	GACA	B	1 month
Ganglioside GM1, GD1B, GQ1B Abs	GANG	B	5 days
Gastric Parietal Autoantibodies	GASP	B	2 days
Giardia Serology	GIAR	B	5 days
Gliadin Antibodies (IgG) (deamidated) (Venous / Self-collect)	AGAB	B / B (TDL Tiny)	2 days
Glomerular Basement Membrane Abs	AGBM	B	2 days

Immunology

































TEST	CODE	SAMPLE REQ	TAT
Glutamic Acid Decarboxylase Antibodies (GAD 65)	GAD	B	5 days
Gluten Sensitivity Evaluation CHANGE	GSA	B	2 days
Gluten Sensitivity Profile CHANGE	GLUT	A B B	10 days
Gluten/Coeliac Genetic Profile 2 CHANGE	GSA2	A B	10 days
Granulocyte Immunology	GRIM	A A (or 10ml) B	2 weeks
H. pylori Antibodies (IgG)	HBPA	B	2 days
H. pylori Antigen – Breath	HBQT	J	5 days
Haemophilus B Influenzae Antibodies	HINF	B	5 days
Histamine (Blood)	HITT	A (Frozen plasma)	5 days
Histamine (Urine)	HITU	RU	5 days
Histamine Releasing Urticaria Test	CURT	B	3 weeks
Histone Antibodies	HISA	B	5 days
Histoplasmosis	HISP	B	10 days
HLA B27	HLAB	A ⁹	3 days
IgE (Total)	IGE	B	1 day
Immune-Complexes	IMCP	B	5 days
Immunoglobulins (IgG, IgM, IgA)	IMM	B	4 hours
Insulin Antibodies	INAB	B	5 days
Interleukin 1 Beta	ILB	B (Frozen) ^{4,7}	1-2 weeks
Interleukin 2	IL2	B (Frozen) ^{4,7}	1-2 weeks
Interleukin 4	IL4A	B (Frozen) ^{4,7}	1-2 weeks
Interleukin 6	IL6	B (Frozen) ^{4,7}	1-2 weeks
Interleukin 8	IL8	B (Frozen) ^{4,7}	1-2 weeks
Interleukin 10	IL10	B (Frozen) ^{4,7}	1-2 weeks
Interleukin 28b Genotype	IL28	A	2 weeks
Intrinsic Factor Antibodies	IFAB	B	2 days
Islet Cell Antibodies	ICAB	B	3 days
Legionella Antibodies	LEGO	B	2 days
Legionella Urine Antigen	LEGA	RU	1 day
Leptospirosis (Weil's Disease) Abs (IgM)	LEP	B	5 days
Leukotriene E4	LTE4	CU (Frozen)	3 weeks
Liver Immunoblot	LIVI	B	3 days
Liver Kidney Microsomal Antibodies	LKM	B	2 days
Lupus Anticoagulant and Anticardiolipin Abs	LUPA	B C C ^{4,9,18}	2 days

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Immunology

TEST	CODE	SAMPLE REQS	TAT
Lyme Disease (Borrelia Abs) IgG, IgM	BORR	 ^{9,14}	2 days
Lyme Disease (Borrelia Abs) IgM	BORM		2 days
Meningococcal Serology (only serogroup C)	MENI		6 weeks
Mitochondrial Antibodies	AMIT		3 days
Mitochondrial Antibodies M2	MAM2		2 days
Myasthenia Gravis Evaluation	MGE		5 days
Myelin Associated Glycoprotein Antibodies	MAG		5 days
Myelin Basic Protein Antibodies	MBPA		2 weeks
Myeloperoxidase Antibodies	MPO		2 days
Myocardial Antibodies	MYO		1 week
Myositis Panel	MYOS		3 days
Neuronal Antibody (Hu, Ri, Yo, Cv2, Ma2)	NEUR		10 days
NMDA Receptor Antibodies	NMDA		3 weeks
Nucleic Acid Antigen Antibodies	DNA		2 days
Oligoclonal Bands	CSFO	CSF + 	5 days
Ovarian Autoantibodies	OVAB		2 days
Paragomius Serology	PRGM		2 weeks
Parathyroid Antibodies	PTHA		1 week
Pemphigus/Pemphigoid Autoantibodies	SKAB		2 days
Pertussis (Whooping Cough) Antibodies	PERS		5 days
Pituitary Antibodies	PITU	 ⁴	1 month
Pneumococcal Antibodies – Serotype Specific	PASS		5 weeks
Pneumococcal Antibody Screen	PNEU		5 days
Proteinase 3 Ab	PR3		2 days
Purkinje Cell Antibody (Hu and Yo)	PURK		10 days
Q Fever (C Burnetti) Antibodies	QFEV	 ⁹	10 days
QFIT/Calprotectin Profile (Combined)	QCAL	QFIT sample collection device	5 days
Rheumatoid Factor (Latex Test)	RF		1 day
Rheumatology Profile 1 (Screen)	RH	 	2 days
Rheumatology Profile 2 (Connective tissue)	RH2	   	3 days
Rheumatology Profile 3 (Rheumatoid/Basic)	RH3	 	2 days
Rheumatology Profile 4 (Systemic Lupus)	RH4	  	2 days
Rheumatology Profile 5 (Mono Arthritis)	RH5	   	3 days
Rheumatology Profile 6 (Rheumatoid Plus)	RH6		2 days

Immunology

TEST	CODE	SAMPLE REQ	TAT
Rheumatology Profile 7 (Sjogren's Syndrome)	RH7		10 days
Rickettsial Species Antibody Profile	RICK		7 days
RNA Polymerase Antibodies	RNAP		3 days
RPR (Syphilis)	RPR		2 days
Saccharomyces Cerevisiae Antibodies	ASCA		2 weeks
Salivary Duct Antibodies	SAB		12 days
Scleroderma Immunoblot	SCLI		3 days
Sjogren's Syndrome	RH7		10 days
Skin (Pemphigus/Pemphigoid) Autoantibodies	SKAB		2 days
Skin Antibodies by Immunofluorescence	STSK		1 month
Sleeping Sickness Serology (African Trypanosomiasis)	TRYP	 ⁹	10 days
Smooth Muscle Antibodies	ASMO		2 days
Sperm Antibodies (Serum)	ASAB		5 days
Steroid Cell Antibody	SCA		2 days
Striated/Skeletal Muscle Antibody	STRA		2 days
Strongyloides Antibodies	STGA		10 days
Syphilis IgG/IgM (Venous/Self-collect)	SERJ / TSYP	 /  (TDL Tiny)	4 hours / 1 day
TB Quantiferon®-TB Gold*	TBQ4	Special tubes or  ¹	3 days
* Please indicate clearly if samples have/have not been incubated prior to sending to the laboratory. If Lith Hep (green top) tube is used, please request as TBQ4 and ensure sample is received in the laboratory within 16 hours of sample taking.			
Tetanus Antibody	TETA		5 days
Thyroid Abs (Thyroglobulin + Thyroid Peroxidase Abs) (Venous/Self-collect)	THAB	 /  (TDL Tiny)	1 day / 2 days
Thyroid Peroxidase Antibodies/Anti TPO	TPEX		1 day
Tissue Transglutaminase IgA (Coeliac) (Venous/Self-collect)**	TAA	 /  (TDL Tiny)	2 days
**See page 87			
Tissue Transglutaminase IgG	TAAG		5 days
Total Immune Function Evaluation	TIE	 +  ^{5,10}	7 days
Total Immunoglobulin E	IGE		1 day
Toxocara Antibodies (IgG)	TFAT	 ⁹	5 days
Toxoplasma Antibodies (IgG+IgM)	TFAM	 ⁹	4 hours
Toxoplasma Antibody Full Evaluation (IgM, Dye Test, IgG Avidity)	TDYE	 ⁹	10 days

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Immunology

TEST	CODE	SAMPLE REQS	TAT
Toxoplasma by PCR	TXAG	A	5 days
TPPA	TPPA	B	2 days
Trichinella Serology	TRIC	B	5 days
Trypanosome (Chagas) Antibodies	CHGA	B ^{9,14}	10 days
TSH-Receptor Antibodies	TSI	B	4 days
Tularaemia Antibodies	TULA	B ¹⁴	5 days
Urinary Methyl Histamine	UHIT	RU (Frozen)	2 weeks
Urticaria Test (Histamine Releasing)	CURT	B	3 weeks
Vascular Endothelial Growth Factor	VEGF	B	14 days
Voltage Gated Calcium Channel Antibodies	CCAB	B	3 weeks
Voltage Gated Potassium Channel Antibodies	VPCA	B	3 weeks
Whooping Cough (Pertussis) Antibodies	PERS	B	5 days
Whooping Cough (Pertussis) by PCR	PERP	Prenasal (posterior nasopharynx) swab	5 days
Yellow Fever Antibodies	YELL	B ^{9,14}	10 days
Yersinia Antibodies	YERS	B	4 days
Zika Abs IgM and IgG – Antibody detection from 15 days	ZKAB	B	Up to 14 days
Zika RNA by PCR in Semen	ZIKS	Semen	Up to 14 days
Zika RT PCR – Window of detection from 1-14 days from onset of symptoms	ZIKU	RU	Up to 14 days
Zika RT PCR – Window of detection from 1-7 days from onset of symptoms	ZIKA	B	Up to 14 days

Acute Viral Hepatitis Screen

Hepatitis A IgM Abs
Hepatitis B Surface Antigen
Hepatitis C Abs

TAT: 4 hours

AHSC

B

Autoantibody Profile I

Thyroid Abs (Thyroglobulin +
Thyroid Peroxidase Abs)
Anti-Nuclear Antibodies
Mitochondrial Antibodies
Smooth Muscle Antibodies
Gastric Parietal Autoantibodies
LKM

TAT: 2 days

AUTO

B

Autoantibody Profile II

Thyroid Abs (Thyroglobulin +
Thyroid Peroxidase Abs)
Islet Cell Antibodies
Adrenal Antibodies
Gastric Parietal Autoantibodies
Gonadal (Ovarian) Abs

TAT: 2 days

ENDO

B

Calprotectin/QFIT Profile (Combined)

Calprotectin
QFIT

If CALP < 50ug/g then the below comment will be appended:

Calprotectin: < 50 ug/g- Not indicative of GI inflammation. Consider IBS, or quiescent IBD if this is a known patient.

If CALP = 50 ug/g or higher, then the below comment will be appended:

Calprotectin: 50-150 ug/g repeat calprotectin in 2 weeks (Also consider other potential causes (infection, NSAIDS, GI malignancy) depending on the magnitude of the result and clinical context.)

Repeated Calprotectin result: 100–250 ug/g routine referral to gastroenterology.

Calprotectin: >250 ug/g urgent referral to gastroenterology.

TAT: 5 days

QCAL

QFIT sample collection device

Chlamydia Species Specific (MIF) Ab Screen

Chlamydia trachomatis
(serovar A-K & L1-L3)
Chlamydia pneumoniae
Chlamydia psittaci

TAT: 2 days

CHAB

B

Chronic Fatigue Syndrome Profile

Epstein-Barr Virus Antibody Profile
Lymphocyte Subsets (CD4/CD8)
CRP
Vitamin D (25 OH)

TAT: 5 days

VIP1

A + B¹⁰

Coeliac/Gluten Genetic Profile 2

CHANGE

Gliadin deamidated IgG
Total IgA
Tissue Transglutaminase (IgA)
HLA DQ2/DQ8

TAT: 10 days

GSA2

A B

Coeliac/Gluten Sensitivity Profile

CHANGE

Gliadin deamidated IgG
Total IgA
Tissue Transglutaminase (IgA)

TAT: 2 days

GSA

B

Gluten Sensitivity Profile

CHANGE

Gluten Single IgE Allergen
Deamidated Gliadin IgG Antibodies
Tissue Transglutaminase IgA
HLA DQ2/DQ8
Total IgA

TAT: 10 days

GLUT

A B B

Rheumatology Profile 1
(Screen)

FBC
ESR
Uric Acid
RF
Anti-CCP Antibodies
C Reactive Protein

TAT: 2 days

RH

A B

Rheumatology Profile 2
(Connective tissue)

FBC
ESR
Uric Acid
Anti-Nuclear Autoantibodies
DNA (Double Stranded)
Antibodies IgG
Antibodies to Extractable
Nuclear Antigens (ENA):
Anti-nRNP
Anti-Sm
Anti-Ro (SS-A)
Anti-La (SS-B)
Anti-Jo-1
Anti-Scl 70
Anti-CENP

RH

TAT: 3 days

RH2

A A B B

Rheumatology Profile 3
(Rheumatoid/Basic)

FBC
ESR
Uric Acid
RF
Anti-CCP Antibodies
Anti-Nuclear Autoantibodies
C Reactive Protein

TAT: 2 days

RH3

A B

Rheumatology Profile 4
(Systemic Lupus)

FBC
ESR
Anti-Nuclear Autoantibodies
DNA (Double Stranded)
Antibodies IgG
Antibodies to Extractable
Nuclear Antigens (ENA):
Anti-nRNP
Anti-Sm
Anti-Ro (SS-A)
Anti-La (SS-B)
Anti-Jo-1
Anti-Scl 70
Anti-CENP

RF

Anti-CCP Antibodies
Anti-Cardiolipin Autoantibodies
Complement 3/4
C Reactive Protein

TAT: 2 days

RH4

A B B

Rheumatology Profile 5
(Mono Arthritis)

FBC
ESR
Uric Acid
RF
Anti-CCP Antibodies
Anti-Nuclear Autoantibodies
C Reactive Protein
HLA B27

TAT: 3 days

RH5

A A B B

86

Please ensure all specimens and forms are labelled with given Forename, Surname, DOB, Date and Time of sample collection.
See page 25 for sample-taking and special handling instructions.

Rheumatology Profile 6 (Rheumatoid Plus)

RF
Anti-CCP Antibodies
C Reactive Protein

TAT: 2 days

RH6

B

Rheumatology Profile 7 (Sjogren's Syndrome)

Anti-Ro (SS-A)
Anti-La (SS-B)
Salivary Antibodies (SAB)
C Reactive Protein

TAT: 10 days

RH7

B

Coeliac Disease (CD)

Coeliac Disease (CD) is an immune-mediated disease of the intestines that is triggered by the ingestion of gluten in genetically susceptible individuals. Gluten is the major protein component of wheat, rye, and barley. Genetic predisposition does play a key role in CD, and it is well known that CD is strongly associated with specific HLA class II genes known as HLA-DQ2 and HLA-DQ8. Approximately 95% of CD patients express HLA-DQ2, and the remaining patients are usually HLA-DQ8 positive. The negative predictive value for both tests is higher than 99%. However, the HLA-DQ2 allele is common and is carried by approximately 30% of Caucasian individuals. Thus, HLA-DQ2 or HLA-DQ8 is necessary for disease development but is not sufficient for disease development; its estimated risk effect is only 36-53%.

Note: History taking is important if a patient has been on a gluten-free diet for 6-12 months, approximately 80% will lose their antibody response. After 5 years this increases to >90%.

Coeliac pathway

To determine the new Coeliac Pathway, a TDL audit of more than 12,000 requests for coeliac testing was carried out and results assessed within UKAS current guidelines. The purpose of these new guidelines is to reduce the risk of missing IgA deficient patients.

The new pathway covers this by adding a total IgA to all low Tissue Transglutaminase (TTG) IgA results to check for an IgA deficiency. If an IgA deficiency is identified, a reflex deamidated gliadin IgG will be carried out to determine whether the patient is likely to have coeliac disease with an IgG antibody.

The changes are as follows:

- Initial TTG IgA samples are received and tested
- If TTG IgA is LOW <0.2 U/ml reflex testing for Total IgA will be undertaken
- If Total IgA is LOW <0.1 g/L then reflex testing for Gliadin IgG test will be undertaken
- If TTG IgA is HIGH ≥ 10 U/ml then reflex testing for Endomysial IgA will be undertaken as a confirmatory test for first time positive samples.

Endomysial IgA

- This is no longer available as a stand-alone test. If requested the request will default to TTG IgA.
- However if TTG IgA is positive endomysial IgA will be carried out as a confirmatory test. This only needs to be done once in the patients history.

Endomysial IgG requests

- No longer available as a single test request.

Deamidated gliadin IgA requests

- This is no longer available. If requested the request will default to TTG IgA.

















Deamidated gliadin IgG requests

- This can be requested as an individual standalone test as well as being incorporated into the coeliac pathway. This may be useful when testing children's samples.

Appropriate clinical comments will be added to results automatically – see table.

Gliadin IgG Requests			
TTG IgA result U/ml	Total IgA result for new assay g/L	Deamidated gliadin IgG result U/ml	Comment
0.2 to 10	N/A	N/A	Coeliac disease unlikely (please note that if the patient has no dietary gluten results may appear false negative)
>= 10	N/A	N/A	Suggestive of coeliac disease
<0.2	>= 0.1	N/A	Coeliac disease unlikely (please note that if the patient has no dietary gluten, results may appear false negative)
<0.2	<0.1	>=10	Consistent with coeliac disease in a patient with selective IgA deficiency
<0.2	<0.1	< 7	Coeliac disease unlikely (please note that if the patient has no dietary gluten, results may appear false negative)
<0.2	<0.1	7-10	Result equivocal suggest referral to a gastroenterologist for consideration of duodenal biopsy

Tropical and Travel-Related Immunology

TEST	CODE	SAMPLE REQ	TAT
Amoebic (<i>E. histolytica</i>) Antibodies	AFAT		1 week
Amoebic (<i>E. histolytica</i>) PCR	AMAG	RF	2 days
Bancroftia/Oncerciasis/Filarial Antibodies	TFIF	 ¹⁴	2 weeks
Bilharzia (Schistosome) Antibody Screen	BILH	 ¹⁴	10 days
Bilharzia (Urine)	USCH	Mid-morning terminal urine following exercise ¹⁴	1-2 days
Borrelia Antibodies (Lyme Disease) IgG, IgM	BORR	 ^{9,14}	2 days
Borrelia Antibodies (Lyme Disease) IgM	BORM		2 days
Borrelia Confirmation (Immunoblot)	BORC	 ^{9,14}	10 days
Cryptosporidium Detection by PCR	CRPA	RF	2 days
Dengue Virus Serology	DENG	 ^{9,14}	5 days
DVT/Pre-travel Screen	DVT1	   ⁹	5 days
Echinococcus (Hydatid) Antibodies	EFAT	 ^{9,14}	5 days
Enteric Organism Rapid Detection	EORD	RF	2 days
Filaria (Lymphatic and Non-Lymphatic) Antibodies	FIFA	 ^{9,14}	10 days
Gastrointestinal Pathogen PCR (Self-collect)	EORD	Stool/faecal container	2 days
Insect/Worm/Ova/Cysts	FLEA	Send Specimen ^{9,14}	5 days
Leishmania Antibodies	LEIS		5 days
Malarial Antibodies (<i>Pl. falciparum</i>)	MALA	 ^{9,14}	5 days
Malarial Antibodies (species specific)	MALS	 ^{9,14}	10 days
Post-Travel Screen 1 (Prior to 6 weeks)	PTS	    ¹⁴	10 days
Post-Travel Screen 2 (Prior to 6 weeks)	PTS2	      ¹⁴	10 days
Pre-Travel Screen (DVT)	DVT1	   ⁹	5 days
Rickettsial Species Antibody Profile	RICK		7 days
Schistosome (Bilharzia) Antibodies	BILH	 ¹⁴	10 days
Toxoplasma Antibodies (IgG+IgM)	TFAM	 ⁹	4 hours
Tropical Screen (from 6 weeks post-travel)	TROP	  ^{9,14}	10 days
Zika Abs IgM and IgG – Antibody detection from 15 days	ZKAB		Up to 14 days
Zika RNA by PCR in Semen	ZIKS	Semen	Up to 14 days
Zika RT PCR – Window of detection from 1-14 days from onset of symptoms	ZIKU	RU	Up to 14 days
Zika RT PCR – Window of detection from 1-7 days from onset of symptoms	ZIKA		Up to 14 days

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Post-Travel Screen 1
(Prior to 6 weeks)

Haematology Profile
Biochemistry Profile
Schistosome Abs
Malarial Abs

TAT: 10 days

PTS

A A B G ¹⁴

Post-Travel Screen 2
(Prior to 6 weeks)

Haematology Profile
Biochemistry Profile
Schistosome Abs
Malarial Abs
Hep A IgM Abs
Hep B sAg
Hep C Abs
HIV Duo

TAT: 10 days

PTS2

A A B B B G ¹⁴

DVT/Pre-travel Screen

FBC
Factor II Prothrombin Gene
Factor V Leiden
Anticardiolipin Antibodies

TAT: 5 days

DVT1

A A B ⁹

Tropical Screen
(from 6 weeks post-travel)

Amoebic Antibodies
Schistosomal Antibodies (Bilharzia)
Echinococcus Antibodies (Hydatid)
Leishmania Antibodies
Malarial Antibodies (IFA)
Toxoplasma Antibodies IgG
Toxoplasma Antibodies IgM

TAT: 10 days

TROP

B B ^{9,14}

Enteric Organism Rapid Detection (RF / Self-collect)

Detection of Bacterial, Viral and Parasitic Infection by Multiplex Real-Time PCR

Bacteria and Bacterial Toxins
C. difficile Toxin A/B gene,
Campylobacter spp.,
Enteroaggregative E.coli (EAEC),
Enteroinvasive E.coli (EIEC)/
Shigella, Enterotoxigenic E.coli (ETEC), Enteropathogenic E.coli (EPEC), Plesiomonas shigelloides, Salmonella, Shiga-toxin producing E.coli (STEC) stx1/ stx2, Shiga-toxin producing E.coli (STEC) O157:H7, Vibrio cholerae, Vibrio parahaemolyticus, Vibrio vulnificus, Yersinia enterocolitica

Viruses
Adenovirus 40/41, Astrovirus, Norovirus GI, Norovirus GII, Rotavirus A, Sapovirus (I, II, IV, V)

Parasites
Cyclospora cayetanensis, Cryptosporidium spp., Entamoeba histolytica, Giardia lamblia
This does NOT include stool for m/c/s – this needs to be requested as a separate test. Please provide two samples if this is required.

TAT: 2 days

EORD

RF / Stool/faecal container

Virology

Immune status




















TEST	CODE	SAMPLE REQS	TAT
Hepatitis A Immunity (IgG/IgM)	HAIM	B	4 hours
Hepatitis B Immunity (IgG) (Venous/Self-collect)	HBIM / THBI	B / B (TDL Tiny)	4 hours / 1 day
Measles Antibodies (IgG) Immunity	MEAS	B	1 day
Measles Antibodies (IgM)	MEAM	B ⁹	2 days
Measles, Mumps, Rubella (MMR)	MMR	B	1 day
Mumps Antibodies (IgG)	MUMP	B	1 day
Mumps Antibodies (IgM)	MUMM	B	1 day
Pertussis (Whooping Cough) Antibodies	PERS	B	5 days
Pneumococcal Antibody Screen	PNEU	B	5 days
Rabies Antibody	RABI	B	20 days
Rubella Antibody (IgG)	RUBE	B	4 hours
Rubella Antibody (IgM)	RUBM	B	4 hours
Rubella PCR	RUBP	A / Amniotic Fluid	5 days
Tetanus Antibody	TETA	B	5 days
Varicella zoster Antibodies (IgG)	VZOS	B	1 day
Varicella zoster Antibodies (IgM)	VZOM	B	1 day

Hepatitis testing

TEST	CODE	SAMPLE REQS	TAT
Hepatitis (Acute) Screen	AHSC	B	4 hours
Hepatitis A (IgM)	HAVM	B	4 hours
Hepatitis A Immunity (IgG/IgM)	HAIM	B	4 hours
Hepatitis A Profile	HEPA	B	4 hours
Hepatitis A RNA by PCR	HAVR	A or B	3 weeks
Hepatitis A, B & C Profile	ABC	B	4 hours
Hepatitis B (PCR) Genotype	BGEN	A	7 days
Hepatitis B 'e' Antigen and Antibody	HEPE	B	4 hours
Hepatitis B Core Antibody – IgM	HBCM	B	4 hours
Hepatitis B Core Antibody – Total	HBC	B	4 hours
Hepatitis B DNA (Viral load)	DNAB	A	5 days
Hepatitis B Immunity (IgG) (Venous/Self-collect)	HBIM / THBI	B / B (TDL Tiny)	4 hours / 1 day

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Virology

TEST	CODE	SAMPLE REQ	TAT
Hepatitis B Profile	HEPB		4 hours
Hepatitis B Resistant Mutation	HBRM	 or 	7 days
Hepatitis B Surface Antigen (Venous / Self-collect)	AUAG / THBA	 /  (TDL Tiny)	4 hours / 1 day
Hepatitis C Abs Confirmation (RIBA)	RIBA		5 days
Hepatitis C Antibodies (Venous / Self-collect)	HEPC / THCV	 /  (TDL Tiny)	4 hours / 1 day
Hepatitis C Antigen (Early detection) (Venous/Self-collect)	HCAG / TCAG	 /  (TDL Tiny)	4 hours / 1 day
Hepatitis C Genotype	CGEN		5 days
Hepatitis C Quantification (Viral Load)	QPCR	 or 	5 days
Hepatitis Delta Antibody	HEPD		5 days
Hepatitis Delta Antigen	HDAG		5 days
Hepatitis Delta RNA	DRNA	 (Frozen plasma)	5 days
Hepatitis E (PCR)	EHEP		2 weeks
Hepatitis E IgG/IgM	HBE		5 days
Hepatitis G (PCR)	HEPG	 (Frozen plasma)	2 weeks

Hepatitis viral load sample instructions

Whole blood can be stored at 2°C to 30°C and must be centrifuged within 24 hours of specimen collection. Separate the plasma or serum from the pelleted red blood cells following the manufacturer's instructions for the tube used. Plasma or serum can be tested on the Panther system in the primary tube or transferred to a secondary Aptima Specimen Aliquot Tube (SAT) for testing on the Panther system. If not tested immediately, plasma and serum can be stored in accordance with the specifications below. If transferred to the SAT, plasma may be frozen at -20°C or -70°C, and serum may be frozen at -20°C. Do not freeze specimens in EDTA, ACD, or serum primary collection tubes.

After centrifugation: In the primary collection tube at 2°C to 8°C for up to 3 days.

In the Aliquoted Tubes: at 2°C to 8°C for up to 5 days.

In the Aliquoted Tubes: at -20°C or -70°C for up to 90 days.

Hepatitis B Immunity/ Vaccination Anti-HBs

less than 10 mIU/ml	Non-immune to Hepatitis B
10–50 mIU/ml	Borderline – booster indicated
50–100 mIU/ml	Low level immunity – booster suggested
100 and over	Immune to Hepatitis B

HAV, HBV and HCV assays

All virology samples are processed as per manufacturers sample requirements and guidelines.

Hepatitis virus is named in order of their discovery A, B, C, D, E and G.

Hepatitis A

Hepatitis A is spread through food and water that have been contaminated with the virus derived from human faeces and urine. Hepatitis A is an acute infection, not a chronic form of the disease.

HBV Assays

Hepatitis B surface antigen (HBsAg) (AUAG)

A protein on the surface of HBV; it can be detected in high levels in serum during acute or chronic HBV infection. The presence of HBsAg indicates that the person is infectious. The body normally produces antibodies to HBsAg as part of the normal immune response to infection. HBsAg is the antigen used to make Hepatitis B vaccine.

Hepatitis B surface antibody (anti-HBs) (HBIM)

The presence of anti-HBs is generally interpreted as indicating recovery and immunity from HBV infection. Anti-HBs also develops in a person who has been successfully vaccinated against Hepatitis B.

Total Hepatitis B core antibody (anti-HBc) (HBC)

Appears at the onset of symptoms in acute Hepatitis B and persists for life. The presence of anti-HBc indicates previous or ongoing infection with HBV in an undefined time frame.

IgM antibody to Hepatitis B core antigen (IgM anti-HBc) (HBCM)

Positivity indicates recent infection with HBV (≤6 months). Its presence indicates acute infection.

Hepatitis B e antigen and antibody (HEPE)

Hepatitis B e antigen (HBeAg): A secreted product of the nucleocapsid gene of HBV that is found in serum during acute and chronic Hepatitis B. Its presence indicates that the virus is replicating and the infected person has high levels of HBV.

Hepatitis B e antibody (HBeAb or anti-HBe):

Produced by the immune system temporarily during acute HBV infection or consistently during or after a burst in viral replication. Spontaneous conversion from e antigen to e antibody (a change known as seroconversion) is a predictor of long-term clearance of HBV in patients undergoing antiviral therapy and indicates lower levels of HBV.

HBV Viral Load (DNAB)

This assay measures the concentration of Hepatitis B viral DNA in patient serum. The test enables the viral load at the beginning of treatment to be established and, thereafter, monitored to indicate treatment success.

HBV Genotyping (BGEN)

Identifies the hepatitis B genotype (A to H) in a patient's serum/plasma. This is critical for determining treatment and monitoring response.

HBV Drug Resistance Detection (HBRM)

Detects Hepatitis B virus wild-type and drug-induced mutations, associated with lamivudine, entecavir and tenofovir.

HCV Assays

HCV Antibody (HEPC)

The test indicates exposure to virus but does not necessarily signify current infection. The HCV antibody test may therefore be used to screen patients for possible HCV infection to detect the presence of antibodies to the virus, indicating exposure to HCV. This test cannot tell if the viral infection is active, only that you were exposed to the virus in the past.

HCV Antigen (HCAG)

HVC Antigen is detectable well before the occurrence of antibodies against HCV. When virus is present, but antibodies are not detectable, a negative antibody test does not rule out HCV infection. Active HCV infection, either acute or chronic is characterised by the presence of HCV Antigen. This is analogous to HepB sAg (AUAG) in active HBV Infection.

HCV Viral Load (QPCR)

Measures the concentration of Hepatitis C viral RNA in patient serum. This state-of-the-art assay enables the viral load at the beginning of treatment to be established and, thereafter, monitored to indicate treatment success.

HCV Genotype for Treatment (CGEN)

Determines the HCV genotype in a patient's serum. The result is presented as being of either Genotype [1, 5, 6], [4] or [2, 3]. This grouping reflects required treatment duration of the different genotypes.

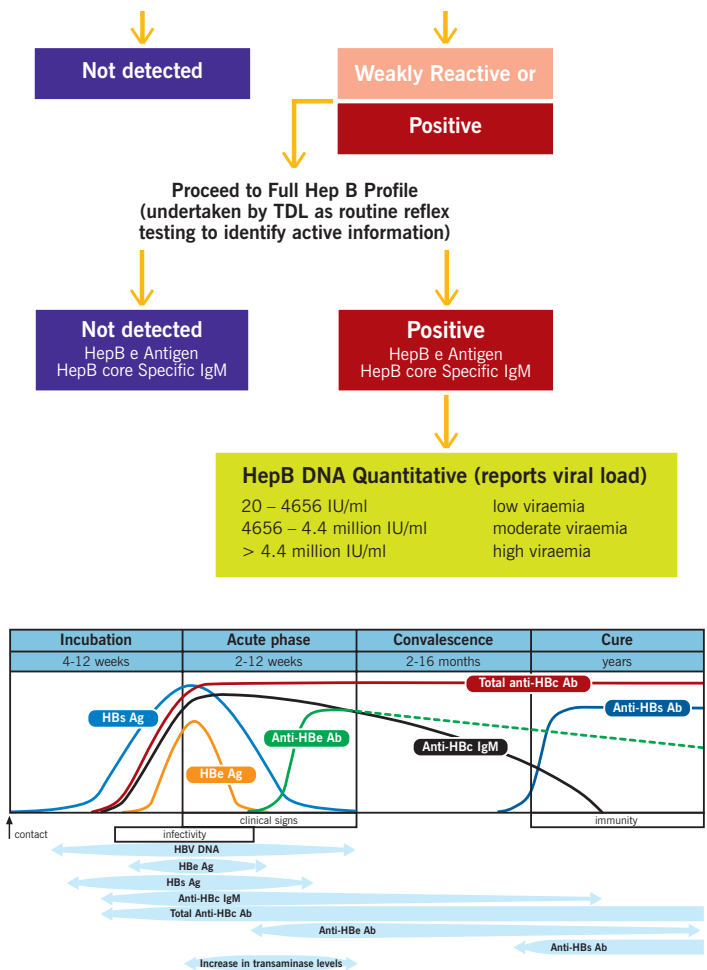
HCV Drug Resistance

Detects hepatitis C wild-type or drug-induced mutations associated with resistance to HCV drugs including NS5A inhibitors, NS5B inhibitors or NS3 inhibitors.

Hepatitis B Surface Antigen

Hepatitis B

- **Transmission:** Sexual, parenteral, perinatal, direct contact between individuals.
- **Clinical Signs:** Asymptomatic in 90% of cases.
- **Cure:** 95% of cases (adults).
- **Complications:** Cirrhosis and hepatocellular carcinoma.
- **Development of chronic form:** Yes (5% of adult cases).
- **Prevention:** Vaccination +++++; specific IgG.
- **Main Marker:** HBS Ag, anti HBc IgM, total anti HBc Ab, Anti-HBs Ab, HBe Ag, Anti-HBe Ab, HBV DNA.



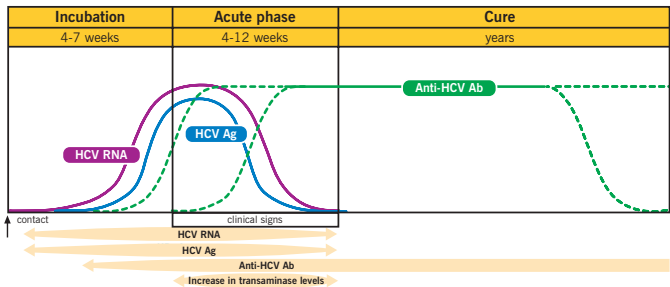
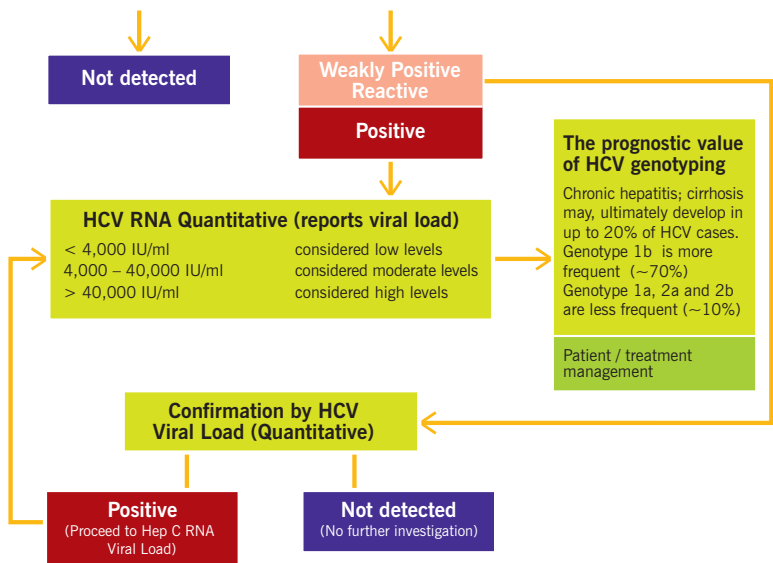
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Hepatitis C Antibodies










Hepatitis C

- **Transmission:** Parenteral, nosocomial, sexual.
- **Clinical Signs:** Asymptomatic in 90% of cases.
- **Cure:** 95% of cases (adults).
- **Complications:** Cirrhosis and hepatocellular carcinoma.






- **Development of chronic form:**
Yes (80% of adult cases).
- **Prevention:** Hygiene, no vaccination.
- **Main Marker:** Anti HCV Ab, HCV RNA










HIV testing

TEST	CODE	SAMPLE REQ	TAT
HIV 1 & 2 Abs/p24Ag (Self-collect)	THIV	 (TDL Tiny)	1 day
HIV-1 Proviral DNA	HIVP	 Whole blood	7 days
HIV Confirmation of Positive Screens (Using 3 methodologies)	HIVC		1 day
HIV/HBV/HCV Screen by PCR/NAAT (10 days post exposure)	STDx	 10mls or 2 x 4mls (Vacutainer only)	3 days
HIV Rapid RNA HIV-1 QUALITATIVE	LHIV	 (Vacutainer only)	4 hours
HIV Rapid RNA HIV-1 QUANTITATIVE	RHIV	 (Vacutainer only)	4 hours
HIV Screening: HIV1 & 2 Abs/p24 Ag (4th Gen)	HDUO		4 hours
HTLV 1 & 2 Abs. (Human T Lymphotropic Virus Type I-II)	HTLV		8 hours
HTLV by PCR	HTLP	 Whole blood	21 days

HIV positive patient monitoring

TEST	CODE	SAMPLE REQ	TAT
CD3/CD4/CD8	LYSS	 ¹⁰	1 day
HIV-1 RNA Viral Load by PCR	HIV1	  (2 x 6ml whole blood)	3 days
HIV-2 RNA by PCR	HIV2		21 days
HIV Rapid RNA HIV-1 QUANTITATIVE	RHIV	 (Vacutainer only)	4 hours
HIV Therapeutic Drug Monitoring	TDM	J	21 days

HIV-1 genotypic resistance testing

TEST	CODE	SAMPLE REQ	TAT
HIV-1 Genotypic Resistance (Integrase)	INTE	  (2 x 6ml whole blood)	21 days
HIV-1 Genotypic Resistance (RT & Protease)	HIVD	  (2 x 6ml whole blood)	21 days
HIV-1 Tropism	TRPM	  (2 x 6ml whole blood)	28 days
HLA B*57:01	HL57	 ⁹	10 days

HLA-B*57:01 should be tested before starting patients on an Abacavir (ABC) containing regimen to reduce the risk of hypersensitivity reaction. HLA-B*57:01-positive patients should not be prescribed ABC and a positive status should be recorded as an ABC allergy in the patient's medical record.

Virology – General

TEST	CODE	SAMPLE REQS	TAT
Adenovirus by PCR	ADV	A / PCR / VS / SC	7 days
Arbovirus Antibodies/Abs	ARBO	B ^{9,14}	3 weeks
Atypical Pneumonia Screen	APS	B	2 days
BK Polyoma Virus by PCR	BKPV	A /RU	5 days
Cat Scratch Fever (Bartonella IgG)	CAT	B	5 days
CD3/CD4/CD8	LYSS	A ¹⁰	1 day
Chikungunya Virus Abs	CHIK	B ^{9,14}	10 days
COVID-19 (SARS-CoV-2) Rapid RNA Sequencing	COSQ	RNA or PCR swab ⁴³	48-72 hours
Please contact lisa.levett@tdlpathology.com for details for referring samples to the laboratory for sequencing testing.			
COVID-19 (SARS-CoV-2) (PCR/Self-collect) Contact Laboratory.	NCOV	PCR Swab (nasal/ pharyngeal) / Throat and nose swab	1 day
CSF Screen by PCR	VPCR	CSF	2 days
Cytomegalovirus (CMV-DNA) Amnio	CMVD	AF	5 days
Cytomegalovirus (IgG/IgM) Antibodies	CMV	B	4 hours
Cytomegalovirus (PCR) Semen	SCVM	Semen	7 days
Cytomegalovirus (PCR) Urine	CMVU	RU	5 days
Cytomegalovirus Avidity	CMAV	B	10 days
Cytomegalovirus DNA (PCR)	CMVP	A	5 days
Cytomegalovirus Resistance	CMVR	A A (2 x 6mls)	21 days
Dengue Fever PCR	DPCR	A or B ^{9,14}	2 weeks
Epstein-Barr Virus Antibodies IgG/IgM	EBVA	A or B	2 days
Epstein-Barr Virus PCR	EBVQ	A	5 days
Hantavirus Serology	HANV	B ⁹	10 days
Herpes Simplex (HSV) 1 & 2 (PCR / Self-collect) (Oral or Genital)	HERS	PCR / Aptima multisite swab	5 days
Herpes Simplex I/II Antibody Profile (IgG)	HERP	B	2 days
Herpes Simplex I/II by PCR (Urine)	HERD	FCRU	5 days
Herpes Simplex I/II IgM	HERM	B	2 days
HIV/HBV/HCV Screen by PCR/ NAAT (10 days post exposure)	STDx	A 10mls or 2 x 4mls (Vacutainer only)	3 days
Human Herpes Virus – 6 by PCR	HHV6	A	5 days
Human Herpes Virus – 8 (IgG)	HHV8	B	10 days

Virology

TEST	CODE	SAMPLE REQS	TAT
Human Herpes Virus – 8 by PCR	HV8D	A	5 days
Human Parvovirus B19 – DNA	PCRP	A	2 weeks
JC Polyoma Virus by PCR	JCPV	A/B/CSF	5 days
Measles Antibodies (IgG) Immunity	MEAS	B	1 day
Measles Antibodies (IgM)	MEAM	B ⁹	2 days
Measles PCR	MEAP	Buccal swab	48 hours
MERS Coronavirus Test	MERS	J	1 day
Mumps Antibodies (IgM)	MUMM	B	1 day
Mycoplasma species – DNA	MPCR	A	5 days
Needle Stick Injury Profile	NSI	B B	4 hours
Neurological Viral Screen	NVIR	B B	2 days
Parvovirus Antibodies (IgM)	PARV	B	2 days
Parvovirus IgG Antibodies	PARG	B	2 days
Parvovirus IgG/IgM Abs	PARP	B	2 days
Pneumonia (Atypical) Screen	APS	B	2 days
Respiratory PCR Panel (COVID-19, Flu A/B and RSV) (PCR/Self-collect)	FLU4	PCR nasopharyngeal / Throat and nose swab	1 day
Rotavirus in Stool by PCR	ROTA	RF	1 day
Rubella Antibody (IgG)	RUBE	B	4 hours
Rubella Antibody (IgM)	RUBM	B	4 hours
Rubella Avidity	RUAV	B	1 week
Torch Screen	TORC	B	2 days
Varicella zoster – DNA	VZPC	A	5 days
Varicella zoster Antibodies (IgG)	VZOS	B	1 day
Varicella zoster Antibodies (IgM)	VZOM	B	1 day
Viral Antibody Screen	VIRA	B B	2 days
Viral Eye by PCR	VPE	PCR	3 days
Viral Respiratory RNA Screen by PCR	VPR	PCR or as specified on the form	2 days
Viral Skin/Mucosa by PCR	VPSK	PCR	2 days
West Nile Virus Abs	WNV	B	2 weeks
Zika Abs IgM and IgG – Antibody detection from 15 days	ZKAB	B	Up to 14 days
Zika RNA by PCR in Semen	ZIKS	Semen	Up to 14 days

Atypical Pneumonia Screen

Mycoplasma pneumonia Abs
Chlamydia pneumoniae (MIF)
Legionella pneumophila (IF)

TAT: 2 days

APS

B

Respiratory PCR Panel (COVID-19, Flu A/B and RSV) (PCR / Self-collect)

Flu A
Flu B
Respiratory Syncytal Virus (RSV)
COVID-19

TAT: 1 day

FLU4

PCR nasopharyngeal /
Throat and nose swab

CSF Screen by PCR

Herpes Simplex virus
Varicella zoster virus
Enterovirus

TAT: 2 days

VPCR

CSF

Hepatitis (Acute) Screen

Hepatitis A IgM Abs
Hepatitis B Surface Antigen
Hepatitis C Abs

TAT: 4 hours

AHSC

B

Hepatitis A, B & C Profile

Hepatitis A Profile
Hepatitis B Profile
Hepatitis C Abs
LFTs

TAT: 4 hours

ABC

B

Hepatitis B Profile

Hep B Surface Antigen
Hep B Surface Antibodies
Hep B Core IgG/IgM

TAT: 4 hours

HEPB

B

HIV/HBV/HCV Screen by PCR/NAAT (10 days post exposure)

Positive findings will be reflexed for confirmatory testing
HIV1 and HIV2 (RNA)
Hepatitis B Virus (HBV DNA)
Hepatitis C Virus (HCV RNA)
Samples must be received in the laboratory within 2 days of sample taking
STDx provides diagnostic confirmatory testing only when used in addition to serology for Ag/Ab HIV-1&2, HBV, HCV

TAT: 3 days

STDx

A 10mls or 2 x 4mls
(Vacutainer only)

HIV Rapid RNA HIV-1 QUALITATIVE

Early detection from 10 days
HIV-1 RNA
Sample must be received in the laboratory within 24 hours of sample taking

TAT: 4 hours

LHIV

A (Vacutainer only)

HIV Rapid RNA HIV-1 QUANTITATIVE

Rapid testing for HIV-positive patient prognosis and response to antiretroviral therapy
HIV-1 RNA VIRAL LOAD
(40 copies/ml)
Sample must be received in the laboratory within 24 hours of sample taking

TAT: 4 hours

RHIV

A (Vacutainer only)

Needle Stick Injury Profile

(Donor – Not recipient)

Hep B sAg
Hep C Abs
HIV 1+2 Abs/p24 Antigen
Serum saved for 2 years

TAT: 4 hours

NSI

B B

Neurological Viral Screen

Measles IgG
Measles IgM
Mumps IgG
Mumps IgM
CMV IgG
HSV 1+2 IgG
HSV 1+2 IgM
VZV IgG

TAT: 2 days

NVIR

B B

Torch Screen

Toxoplasma Antibodies (IgG, IgM)
Rubella Antibody (IgG, IgM)
CMV Antibody (IgG, IgM)
Herpes Antibody (HSV1/HSV2 IgG)

TAT: 2 days

TORC

B

Viral Antibody Screen

Measles IgG
Measles IgM
Mumps IgG
Mumps IgM
Mycoplasma pneumonia
CMV
HSV 1
HSV 2

TAT: 2 days

VIRA

B B

Viral Eye by PCR

Herpes Simplex virus
Varicella zoster virus
Adenovirus

TAT: 3 days

VPE

PCR

Viral Respiratory RNA Screen by PCR

Throat swabs,
nasopharyngeal aspirates
Adenovirus
Parainfluenza 1,2,3,4
Influenza A and B
Coronavirus (seasonal)
SARS-CoV-2 (COVID-19)
Parechovirus
Rhinovirus
Enterovirus
Respiratory Syncytial virus A and B
Human metapneumovirus

TAT: 2 days

VPR

PCR or as specified on the form

Viral Skin/ Mucosa by PCR

If chicken pox or shingles suspected, please indicate clearly on request form
Herpes Simplex virus
Varicella zoster virus

TAT: 2 days

VPSK

PCR

Tumour Markers/Sites

TEST	CODE	SAMPLE REQ	TAT
Alpha-Fetoprotein	AFP	B	4 hours
Breast Cancer NGS Panel Requires patient informed consent.	GENE	A A ^{9,11}	4 weeks
CA 15-3	C153	B	4 hours
CA 19-9	C199	B	4 hours
CA 50	CA50	B	5 days
CA 72-4	C724	B	5 days
CA 125 (Venous / Self-collect)	C125	B / B (TDL Tiny)	4 hours / 1 day
Carcino Embryonic Antigen	CEA	B	4 hours
Complex PSA (Prostate Specific Ag)	CPSA	B	3 days
Cyfra 21-1	CY21	B	4 days
HCG (Oncology)	HCGQ	B	4 hours
HE4 + ROMA (Earlier Detection of Ovarian Tumour)	HE4	B	1 day
Neurone Specific Enolase	NSE	B	5 days
Osteocalcin	OST	B (Frozen) ⁴	4 days
Prostate Profile (Total & Free PSA)	PR2	B	4 hours
Prostate Specific Antigen (Total) (Venous / Self-collect)*	PSPA	B / B (TDL Tiny)	4 hours / 1 day
* Results that fall between 4.00 ug/L and 10.00 ug/L will automatically reflex to a Free PSA with a calculated ratio. The ratio of Free to Total PSA may help discriminate between prostate cancer and benign prostatic hyperplasia.			
Pyruvate Kinase (M2-PK)	M2ST	RF ⁴	5 days
Pyruvate Kinase (M2-PK)	M2PK	A (Frozen plasma) ⁷	5 days
S100 Malignant Melanoma	S100	B	4 days
Squamous Cell Carcinoma	SCC	B	4 days
Testicular Tumour Profile (LDH, AFP, HCQG)	TTP	B	4 hours
Urinary Bladder Cancer Antigen ** It is recommended to collect mid-stream urine. Do not use first morning urine. Collection of urine specimen before any surgical intervention or treatment or 1–2 weeks after specimen shall not be collected with an instrument e.g. catheter.	UBC	RU (Freeze within 48 hours)**	5 days

Tumour Markers/Sites

Site	Tumour marker	Sample type	Turnaround time
Oesophagus	CA 19-9	serum	4 hours
	CEA	serum	4 hours
	SCC	serum	4 days

Site	Tumour marker	Sample type	Turnaround time
Bronchial/ Lung	NSE*	serum	5 days
	SCC*	serum	4 days
	CEA	serum	4 hours
	Cyfra 21-1	serum	4 days

Site	Tumour marker	Sample type	Turnaround time
Bile duct	CA 19-9	serum	4 hours
	CEA	serum	4 hours

Site	Tumour marker	Sample type	Turnaround time
Pancreas	CA 19-9	serum	4 hours
	CEA	serum	4 hours

Site	Tumour marker	Sample type	Turnaround time
Carcinoid	5-HIAA	24 hour urine/acidified	5 days

Site	Tumour marker	Sample type	Turnaround time
Bladder/ Chorion	CEA	serum	4 hours
	CA 50	serum	5 days
	UBC	urine	5 days

Site	Tumour marker	Sample type	Turnaround time
Cervix/ Uterus	SCC	serum	4 days
	CEA	serum	4 hours

Site	Tumour marker	Sample type	Turnaround time
Prostate	Prostate Profile (Total + Free PSA)	serum	4 hours

Site	Tumour marker	Sample type	Turnaround time
Melanoma	S-100	serum	4 days

Site	Tumour marker	Sample type	Turnaround time
Thyroid	CEA serum	4 hours	
	Thyroglobulin	serum	1 day
	Calcitonin	1ml Frozen serum	1 day

Site	Tumour marker	Sample type	Turnaround time
Breast	Breast Cancer NGS Panel	EDTA	4 weeks
	CA 15-3	serum	4 hours
	CEA	serum	4 hours

Site	Tumour marker	Sample type	Turnaround time
Liver	AFP	serum	4 hours
	CEA	serum	4 hours
	Ferritin	serum	4 hours

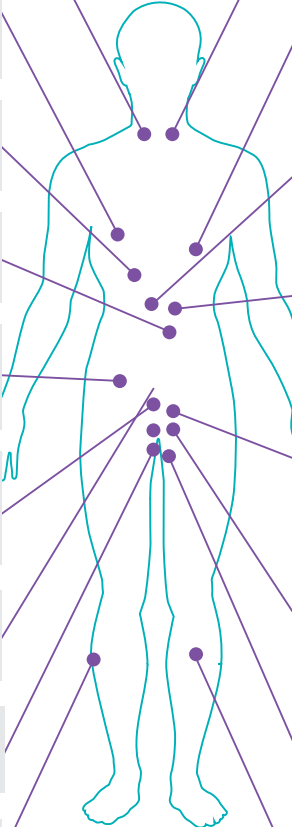
Site	Tumour marker	Sample type	Turnaround time
Gastro-intestine	CEA	serum	4 hours
	CA 19-9	serum	4 hours

Site	Tumour marker	Sample type	Turnaround time
Ovary	Ovarian Cancer NGS Panel	EDTA	4 weeks
	CA 125	serum	4 hours
	CA 15-3	serum	4 hours
	HE4 serum	1 day	
	AFP serum	4 hours	

Site	Tumour marker	Sample type	Turnaround time
Colon	CEA serum	4 hours	
	CA 19-9	serum	4 hours
	CA 50	serum	5 days

Site	Tumour marker	Sample type	Turnaround time
Testes	AFP	serum	4 hours
	HCG (quantitative)	serum	4 hours

Site	Tumour marker	Sample type	Turnaround time
	Osteocalcin	serum (frozen)	4 days



* NSE: Neurone Specific Enolase
SCC: Squamous Cell Carcinoma

Tumour Markers/Sites

HE4 + ROMA
(Earlier Detection of Ovarian Tumour)

HE4
CA 125
ROMA
Calculated Algorithm for pre and post menopausal risk of malignant disease.

TAT: 1 day

HE4

B

Prostate Profile
(Total & Free PSA)

Total PSA
Free PSA
Calculated Ratio
The ratio of Free to Total PSA may help discriminate between prostate cancer and benign prostatic hyperplasia.

TAT: 4 hours

PR2

B

Testicular Tumour Profile

LDH
AFP
HCQG

TAT: 4 hours

TTP

B

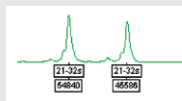
TDL Genetics

TDL Genetics is a consultant-led service which is able to provide extensive expertise in the testing, diagnosis and genetic counselling of inherited disorders. Genetic tests are performed on DNA for molecular genetic analysis and on whole chromosomes for cytogenetic analysis. Some tests are part of profiles that can be linked with assays from other TDL disciplines, such as biochemistry and haematology, to give more comprehensive results for the patient.

Genetic tests are available for:

- Prenatal diagnosis and rapid trisomy screening by Amnio-PCR
- Carrier screening
- Newborn chromosome analysis
- Confirmation of symptomatic individuals and pre-symptomatic testing
- Genetic variation that influences risk of disease
- Identity studies (paternity, zygosity, tissue typing)
- Fertility studies
- Products of conception
- Cancer

QF-PCR: DNA peaks from an unaffected fetus



QF-PCR: DNA peaks from a fetus with Down Syndrome



Genetic testing is sometimes complex and tests will vary in their ability to detect mutations or to detect all patients who have, or will develop, the disease. Some tests are diagnostic for a condition, others are indicative or are associated with an altered risk for a condition. Results can affect the lives of individuals and have implications for their family, for insurance and employment. Where testing will predict the inheritance of a disease in a healthy

person, counselling and consent are mandatory. For these tests, please complete the Genetic Request form (including informed consent). Our service provides result interpretation and risk assessment. Genetic counselling can be arranged by TDL's Consultant Clinical Geneticist.



SCAN ME

Download TDL Request Forms from:

**[www.tdlpathology.com/
tests/request-forms/](http://www.tdlpathology.com/tests/request-forms/)**

To meet the increasing range and complexity of genetic testing we have developed an excellent collaboration with other specialist laboratories.

Tests marked GENE are sent to these laboratories within our network and have a fixed price.

GENE panel composition may change throughout the year to reflect new and improved developments. Turnaround times may be longer if follow-up studies are required.

Specimen Receipt at The Doctors Laboratory is 24 hours a day. Specifically, TDL Genetics results service is available Monday to Friday 8.30am–5.30pm with the laboratory also open for processing of samples on Saturdays from 9.00am–1.00pm.

Test codes, sample requirement codes and turnaround times may be found on the following pages.

All samples must be collected in the specified containers, as shown in the key at the back of this guide. Samples should be fresh and in good condition (e.g. not clotted if EDTA or heparinised whole blood is required) otherwise testing may be adversely affected and another sample may be required. Small DNA samples are stored routinely for one year, larger DNA samples can be stored by special arrangement.

TDL Genetics

Instructions for transportation, sample labelling, and the completion of request forms can be found on the reverse of the TDL Genetics Request Form.

The locations of the Laboratory and Patient Reception are indicated on the map on the reverse of each request form. If you do not find the test you require in this directory or need more information and advice please telephone the laboratory on **020 7307 7409**.

Sending samples to the laboratory

Transport arrangements

All specimens should be kept at room temperature and despatched to the laboratory as soon as possible, by TDL/international courier, first class post, guaranteed next day delivery or a reliable alternative.

If a delay in sending the sample is unavoidable, please refrigerate overnight – DO NOT FREEZE. For NIPT sample stability see page 132, do not refrigerate or freeze NIPT bloods.

Specimens must not be allowed to come in contact with request forms, but should be kept separate by using dual – pocketed plastic bags. Specimens for inland postage must be packed in a rigid crush-proof container according to current Post Office guidelines.

IATA guidelines should be followed for international transport (advice is available from the laboratory).

Labelling of high risk samples

Please note that it is the responsibility of the referring clinician to ensure that high-risk samples are clearly identified to reduce the risk of infection to staff and others.

Patient details on request forms and samples

Request and consent forms are available directly from TDL Genetics. In order to avoid unnecessary time spent in obtaining details please provide the following information:

Information for request forms

- Surname, forename (not initials), date of birth and birth sex of patient for postnatal referrals
- Full name (not initials) and location of referring clinician
- Full address of clinician to whom the result should be sent
- Legible clinical summary, including details of any relevant family history
- Address for billing – doctor, patient or other
- Gestation on prenatal samples
- Hospital or reference number
- Test required

Essential information on sample container label

- Patient's surname and forename (not initials)
- Date of birth
- Hospital number or reference number

Consent forms

Consent forms (see back of this guide) are available for genetic testing. As genetic testing may have implications for other family members and is regarded as personal data, it is recommended that written consent is obtained wherever possible. In cases with predictive testing for severe disorders, as indicated in the laboratory guide, it is essential that patients should also be offered formal genetic counselling. It is the responsibility of the referring clinician to obtain appropriate consent from the patient.

Unlabelled samples

Unlabelled samples will ONLY be processed if the individual who took the sample can confirm the sample is from the patient in question. In the absence of this assurance, the sample will be discarded and a repeat required.

Genetic testing

The importance of clinical details

Clinical details are very important when providing genetic analysis. The more clinical information that is available (e.g. details of ultrasound information, phenotypic features or family history) the better the service we can provide. Failure to provide this information for cytogenetic studies may result in an inaccurate analysis.

Molecular genetics

Clinical details can be extremely important for clinical interpretation of a molecular genetic test.

For example, the clinical comments accompanying a cystic fibrosis screening report will vary depending on whether the patient is a potential gamete donor or a person exhibiting a cystic fibrosis phenotype.

It may also be crucial, where a mutation has already been shown to be segregating in a family, to be provided with information concerning the mutation and a family pedigree to ensure the correct analysis is performed and reliable risk figures calculated.

Cytogenetics

Cytogenetic analysis is performed according to the Professional Guidelines for the Association of Clinical Genetic Science and the recommendations provided are dependent on the clinical indications given for each case.

Clinical details inform the investigation at all stages:

- Prior to analysis, clinical details may indicate, for example, that procedures such as chromosome breakage or leukaemic studies are required, which must be referred to the oncogenomic department or specialist centre.
- During analysis they may indicate that extra cells should be screened to investigate the possibility of mosaicism, for example in a diagnosis of suspected Turner syndrome, or that particular chromosomes must be targeted for high-resolution study, for example chromosome 4 in suspected Wolf-Hirschhorn syndrome.
- When the analysis has been completed they may help to provide an accurate interpretation of the findings and in some instances prompt further investigations, for example FISH or molecular genetic studies.

When clinical details are not available a routine analysis will be performed and a conditional report issued.

Sample Stability

Molecular Genetic Samples

Whole blood collected in EDTA should be sent to the laboratory between 4°C-28°C within 48 hours.

Long term storage should be at 2-8°C.

Extracted DNA samples should be sent to the laboratory between 4°C-28°C.

Cytogenetic Samples

Cytogenetic studies require living cells, please ensure that samples reach the laboratory as soon as possible. If a delay before dispatch is unavoidable, samples may be stored in a refrigerator (4°C) but they must not be frozen.

Samples sent more than 48 hours after sampling, or kept at temperatures below 4°C and greater than 38°C may have inhibited growth.

Information concerning packaging, transportation, and labelling of samples is provided on the reverse of our TDL Genetics Request Form.

Requesting additional tests

Any further tests not requested at the time of sample receipt must be requested within:

- 1 week for tests requiring prenatal culture or cultured cells
- 2 weeks for DNA testing
- 2 weeks for cell culture testing
- 3 months for FISH testing

Samples can be stored for longer periods if specifically requested at the time of sample receipt.

Postnatal Diagnosis (Blood Culture)

Reasons for analysis: Chromosome studies are requested where problems that may have a cytogenetic basis are suspected, e.g. babies with birth defects; children with developmental delay and physical handicaps, or adults with fertility problems. Additionally, prospective gamete donors are screened to detect carriers of balanced chromosome rearrangements.

Sample requirements: Lithium heparin whole blood specimens are required – gently mixed to prevent clotting and must not be frozen. See sample stability section for cytogenetic samples. Sample volumes may be reduced for children (2-4ml) and neonates (1-2ml).

Turnaround time: The usual turnaround time is 2-3 weeks however the laboratory will endeavour to respond to urgent requests. Where a major trisomy is suspected, a rapid PCR screen may be performed to provide an urgent provisional result.

Notes

- Rarely, blood samples fail to culture (<1%);
- The culture may yield chromosomes of insufficient quality. This will be indicated on the report and a repeat study suggested;
- The laboratory should be informed if the patient has recently received a blood transfusion.
- The laboratory should be informed if the patient has EVER had a bone marrow transplant.
- The patient's birth sex should be included on the request form.

Prenatal diagnosis

Reasons for analysis: Chromosome studies are requested where pregnancies are identified as being at risk of a cytogenetic abnormality e.g. positive maternal serum screening combined NT test; fetal abnormalities found on ultrasound; or where a parent is a known carrier of a chromosome anomaly, or where a high risk trisomy has been found by NIPT.

Sample requirements:

- Amniotic fluid – 10ml+ in a plain sterile, leak-proof container. Suitable containers can be provided by the laboratory. The specimen must not be frozen. See sample stability section for cytogenetic samples.
- Chorionic villus – 5mg+ in sterile transport medium. Suitable containers containing medium can be provided by the laboratory. The specimen must not be frozen. See sample stability section for cytogenetic samples.
- Fetal blood – 1-2ml LITHIUM HEPARIN whole blood, gently mixed to prevent clotting. The specimen must not be frozen. See sample stability section for cytogenetic samples.

Turnaround time: This is dependent on the rate of cell growth, however, the usual turnaround time is approximately 2 weeks. A number of circumstances now occur more frequently, as invasive prenatal diagnosis becomes less common, that may result in delayed reporting time. These include:

- A delay in transportation in order to collect a batch of samples to reduce courier costs. Even when couriered promptly, sample growth may be slower than that seen in samples sent immediately.
- Sampling at early or late gestations, for example to confirm non-invasive tests or follow up anomaly scans.
- A tendency to take smaller quantities of sample or to take insufficient sample for multiple techniques.
- The request for karyotyping as an add-on after an initial PCR test.

Fetal blood results will usually be reported by 10 calendar days. For all other prenatal tests, please contact the laboratory prior to taking samples.

Notes

- Maternal contamination, and mosaicism may complicate the analysis and may lead to the suggestion that a second invasive test is performed.
- Rarely, cultures fail to grow (overall <1%)
- Very small chromosome abnormalities may not be detected (this is why the phrase 'No trisomies or major chromosome abnormalities detected...' is used in our reports).
- for TTTs or heavily blood stained amniocentesis samples, please provide a maternal EDTA blood sample for comparison studies.

Solid tissue

Reasons for analysis: Fibroblast cultures may be used in addition to blood cultures, for example where tissue specific mosaicism is suspected, or where blood samples cannot be obtained. POC samples may be requested for early spontaneous miscarriages, stillbirths, or to confirm a prenatal diagnosis.

Sample requirements: All specimens should be placed in a sterile container, preferably containing transport medium. This can be supplied by the laboratory. Sterile normal saline can be used if transport medium is not available. Samples must not be placed in formaldehyde or other preservative and must not be frozen. See sample stability section for cytogenetic samples.

Turnaround time: This is dependent on the rate of cell growth, however, the usual turnaround time is approximately 4 weeks.

Notes

- Material from miscarriages has a relatively high culture failure rate (around 20%). Where failure occurs, alternative molecular methods may be attempted, usually a KaryoLite Bacs-on-Beads assay that can detect whole monosomy or trisomy of any chromosome, if possible.
- If no villus or fetal parts are identified in supposedly POC material and a normal female chromosome result is found, this may indicate that maternal tissue has been cultured (this will be noted on our report).
- If a request is made for remaining pregnancy loss tissue to be returned to the patient or hospital for burial or cremation, we will return the sample as soon as possible once adequate tissues have been used for testing. Please ensure that this is communicated to the lab using a hospital consent form, noted on the referral form or by email. Patients can arrange to collect remaining tissues from TDL Patient Reception.

- The lab will send all remaining tissue for samples without specific consent, for sensitive incineration. Please note that there is no distinction made between fetal and other pregnancy tissues for this process and there will be no ashes afterwards. The lab keeps detailed records of all pregnancy tissue sent for incineration and a Certificate of Destruction is available if required.

Fluorescence in situ hybridisation (FISH)

Where FISH studies for specific microdeletion syndromes are required this must be indicated on the request form.

Note: FISH studies for a rapid pre or postnatal aneuploidy screen have now been superseded in our laboratory by multiplex-PCR technology. Subtelomeric screens are now performed by Array CGH as part of developmental delay investigations. Common microdeletion syndrome testing is now performed by BOBs analysis.

Statement regarding Measurement Uncertainty (MU)

Measurement Uncertainty is determined for each measurement procedure in the examination phase used to report measured quantity values on patients' samples. This is determined during verification of this assay for service introduction; creation of laboratory standard operating procedures (SOP) and interpretation of the results.

Where examinations include a measurement step but do not report a measured quantity value, the laboratory calculates the uncertainty of the measurement step where it has utility in assessing the reliability of the examination procedure or has influence on the reported result.

Estimates of measurement uncertainty are regularly reviewed and are available upon request to laboratory users.

TDL Genetics

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Molecular Cytogenetics Manager

Alessandra Callegari






























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TDL Genetics






























TEST	CODE	SAMPLE REQ	TAT
1p36 Deletion Syndrome – karyotype + CGH	KARY, FISH	CVS / AF /  ⁹	12-17 days
21-Hydroxylase Deficiency (Congenital Adrenal Hyperplasia) Requires patient informed consent.	GENE	 ^{9,11}	5 weeks
22q11 & 10p14 deletion (Di George Syndrome) – BOBs only	DGB	CVS / AF /  ⁹	5 days
22q11 & 10p14 deletion (Di George Syndrome) – BOBs (5 days) + karyotype (15 days)	DGB, KARY	CVS / AF /   ⁹	5-15 days
Achromatopsia NGS Panel Requires patient informed consent.	GENE	  ⁹	5 weeks
Adenomatous Polyposis NGS Panel	GENE	 ⁹	4 weeks
Afibrinogenemia, congenital Test code dependent on phenotype.	R90U or R97U	 	12 weeks
Aicardi-Goutières Syndrome NGS Panel Requires patient informed consent.	GENE	  ⁹	5 weeks
Alagille Syndrome NGS Panel Requires patient informed consent.	GENE	  ⁹	8 weeks
Alpha Thalassaemia – multiplex PCR for common large deletions Requires patient informed consent.	GENE	 ⁹	4 weeks
Alpha-1-Antitrypsin Genotype – PI*M, PI*S, PI*Z Requires patient informed consent.	GENE	 ⁹	5 weeks
Alpha-2-Plasmin Inhibitor Deficiency	R90U	 	12 weeks
Alport Syndrome NGS Panel – full sequencing with deletions and duplications Requires patient informed consent.	GENE	  ⁹	5 weeks
AML/ALL Molecular MRD – NPM1, PML-RARA, CBFB-MYH11, RUNX1-RUNX1T1, ETV6-RUNX1 Contact lab for further information. Requires patient informed consent.	GENE	Bone Marrow / 	5 days
AmnioBOBs only – rapid aneuploidy diagnosis for all chromosomes + common microdeletion syndromes	ABOB	AF ⁹	5 days
Amniocentesis – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	ABK	AF ⁹	5-15 days
Amniocentesis – rapid PCR diagnosis for common aneuploidies (2 days) + culture (10-15 days)	APCC	AF ⁹	2-15 days
Amniocentesis culture (karyotype) only	ACUL	AF ⁹	10-15 days
AmnioPCR only – rapid common aneuploidy diagnosis by QF-PCR	APC	AF ⁹	2 days

TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
Amyotrophic Lateral Sclerosis (Motor Neurone Disease) NGS Panel Requires patient informed consent.	GENE	  ⁹	5 weeks
Androgen Insensitivity – AR gene sequencing Requires patient informed consent.	GENE	 ⁹	5 weeks
Angelman Syndrome (Primary Screen) – methylation PCR	PWAM	 ⁹	10 days
Angelman/Rett Syndromes NGS Panel Requires patient informed consent.	GENE	  ⁹	5 weeks
Aniridia, Isolated – PAX6 gene sequencing + deletions/duplications Requires patient informed consent.	GENE	 ⁹	5 weeks
Anophthalmia/Microphthalmia/Coloboma NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Apolipoprotein E genotype – E2/E3/E4	APEG	 ⁹	2 weeks
Array CGH (Comparative Genomic Hybridisation)	CGH	CVS / AF /   ⁹	10 days
Ashkenazi Breast Cancer Screen – common variants Requires patient informed consent.	GENE	 ^{9,11}	4 weeks
Ashkenazi Jewish Carrier Screen Requires patient informed consent.	GENE	 ⁹	4 weeks
Ataxia NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Autoinflammation/Periodic Fever NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Azoospermia – karyotype + cystic fibrosis screen + polyT(5T) + Y deletions	GRP	  ⁹	10-15 days
B cell clonality assay (IgH and IgK)	IGHA	 or FFPE	2 weeks
Bardet-Biedl Syndrome NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Batten Disease (Neuronal Ceroid Lipofuscinosis) NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
BCR-ABL Diagnostic Assay	BCRD		2 weeks
BCR/ABL Quantitative – fusion gene sizes p190 + p210 MUST arrive in the laboratory within 48 hours, before 12pm on Fridays.	BCRQ	  ⁹	10 days
Becker/Duchenne Muscular Dystrophy – deletions/duplications	DMD1	 ⁹	10 days

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
Beckwith-Wiedemann Syndrome – methylation studies on 11p15 imprinting domains KvDMR + H19 Requires patient informed consent.	GENE	 ⁹	6 weeks
Behcet's Disease – HLA Tissue Typing B*51	B51	 ⁹	10 days
Bernard-Soulier Syndrome	R90U	 	12 weeks
Beta Thalassaemia – beta-globin gene sequencing Requires patient informed consent.	GENE	 ⁹	5 weeks
Bleeding and Platelet Gene Panel Contact lab. Requires patient informed consent.	R90U	  ⁹	12 weeks
Bleeding Disorder of Unknown Cause	R90U	 	12 weeks
Blood PCR for Chromosome 13, 18, 21 and sex chromosomes	BPCR		5 days
Breast Cancer – BRCA1 + BRCA2 genes only Requires patient informed consent.	GENE		4 weeks
Breast Cancer Ashkenazi Screen – common variants Requires patient informed consent.	GENE	 ^{9,11}	4 weeks
Breast Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Brugada Syndrome/Long QT Syndrome NGS Panel Requires patient informed consent.	GENE	  ⁹	4-6 weeks
C-KIT D816V variant – Mastocytosis Requires patient informed consent.	GENE	Bone Marrow / 	4 weeks
CADASIL – NOTCH3 gene sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
CAKUT (Congenital Anomalies of Kidney & Urinary Tract) NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
CALR gene mutations – see Myeloproliferative Neoplasm NGS Screening Panel			
Cancer, Comprehensive NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	5 weeks
Cardiomyopathy, Dilated NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Cardiomyopathy, Hypertrophic NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Cardiovascular, Comprehensive NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Carrier Screen (Ashkenazi Jewish) Requires patient informed consent.	GENE	 ⁹	4 weeks

Always provide clinical details and family history for genetic tests. Practice discounts do not apply to tests with the GENE code.


























See page 25 for sample-taking and special handling instructions.

TDL Genetics







































TEST	CODE	SAMPLE REQS	TAT
Carrier Screen (Ashkenazi Jewish) – Partnered Report Requires patient informed consent. Please contact the lab for special requirements before sending.	GENE	A ⁹	4 weeks
Carrier Screen (Pan-Ethnic) Requires patient informed consent.	GENE	A ⁹	4 weeks
Carrier Screen (Pan-Ethnic) – Partnered Report Requires patient informed consent. Please contact the lab for special requirements before sending.	GENE	A ⁹	4 weeks
Charcot-Marie-Tooth Syndrome NGS Panel Requires patient informed consent. Contact lab prior to sending. Referral from clinical neurologist or clinical geneticist required with genetic consent form.	GENE	A A ⁹	6 weeks
Charcot-Marie-Tooth Type 1A – PMP22 duplications Requires patient informed consent. Contact lab prior to sending. Referral from clinical neurologist or clinical geneticist required with genetic consent form.	GENE	A ⁹	6 weeks
CHARGE Syndrome – CHD7 gene sequencing Requires patient informed consent.	GENE	A ⁹	6 weeks
Chediak-Higashi Syndrome Requires patient informed consent.	R90U	A A	12 weeks
Cholestasis NGS Panel Requires patient informed consent.	GENE	A A ⁹	6 weeks
Chromosome Analysis (Amniocentesis) – culture only	ACUL	AF ⁹	10-15 days
Chromosome Analysis (Amniocentesis) – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	ABK	AF ⁹	5-15 days
Chromosome Analysis (Amniocentesis) – rapid PCR diagnosis for common aneuploidies (2 days) + culture (10-15 days)	APCC	AF ⁹	2-15 days
Chromosome Analysis (Blood)	KARY	H ⁹	2-3 weeks
Chromosome Analysis (Chorionic Villus) – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	CBK	CVS ⁹	5-15 days
Chromosome Analysis (Chorionic Villus) – rapid PCR diagnosis for common aneuploidies (2 days) + culture (10-15 days)	CVPC	CVS ^{1,9}	2-15 days
Chromosome Analysis (Chorionic Villus) – culture only	CVSC	CVS ^{1,9}	10-15 days
Chromosome Analysis (Products of Conception)	PROC	Placental Sample ^{1,9}	20-25 days

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

TDL Genetics









































TEST	CODE	SAMPLE REQ	TAT
Chromosome Analysis (Products of Conception) – BOBs rapid aneuploidy diagnosis for all chromosomes (10 days) + culture (25 days)	PBK	Placental Sample ^{1,9}	10-25 days
Chromosome Analysis (Solid Tissue)	PROC	Fetal tissue ^{1,9}	4-5 weeks
Chromosome Y Deletion – AZFa, AZFb, AZFc + SRY	YDEL	 ⁹	5 days
Coeliac Disease – HLA DQ2/DQ8 Genotype	Q2Q8	 ⁹	10 days
Colorectal Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Comparative Genomic Hybridisation (Array CGH)	CGH	CVS / AF /   ⁹	10 days
Congenital Absence of Vas Deferens – karyotype + cystic fibrosis screen + poly(T5T) + Y deletions	GRP	  ⁹	10-15 days
Congenital Adrenal Hyperplasia NGS Panel	GENE	 ⁹	6 weeks
Congenital Myopathy NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Connective Tissue Disorders NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Cornelia de Lange Syndrome NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Craniosynostosis NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Cri du Chat Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF /   ⁹	5-15 days
Cri du Chat Syndrome – BOBs only	PBOB	CVS / AF /  ⁹	5 days
CVS PCR for common aneuploidies (2 days) + culture (10-15 days)	CVPC	CVS ^{1,9}	2-15 days
CVSBOBs – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	CBK	CVS ⁹	5-15 days
CVSBOBs only – rapid aneuploidy diagnosis for all chromosomes + common microdeletion syndromes	CBOB	CVS ⁹	5 days
Cystic Fibrosis (139 common variants) – reflex to Poly T when required Please provide relevant clinical and family history.	CFS	 ⁹	5-7 days
Cytochrome P450 2C19	2C19	 ⁹	15 days
Diabetes – Obesity NGS Panel Requires patient informed consent.	GENE	 ⁹	6 weeks
DiGeorge Syndrome (22q11 & 10p14 deletion) – BOBs (5 days) + karyotype (15 days)	DGB, KARY	CVS / AF /   ⁹	5-15 days

TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
DiGeorge Syndrome (22q11 & 10p14) – BOBs only	DGB	CVS / AF /  ⁹	5 days
Dihydropyrimidine Dehydrogenase deficiency screening (Fluoropyrimidine Toxicity)	5FU	 ⁹	1-2 weeks
Dilated Cardiomyopathy NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
DNA Extraction & Storage – 3 years (longer upon request)	XDNA	 ⁹	20 days
DNA Identity Profile – 15 STR markers	DNAF	 ^{9,11}	10 days
Duchenne Muscular Dystrophy – deletions/duplications only	DMD1	 ⁹	10 days
Duchenne Muscular Dystrophy – full sequencing DMD1 gene Requires patient informed consent.	GENE	 ⁹	6 weeks
DVT/Pre-travel Screen	DVT1	   ⁹	5 days
Dysfibrinogenemia, congenital Test code dependent on phenotype.	R90U or R97U	 	12 weeks
Dysplasminogenemia	R97U	 	12 weeks
Dysprothrombinemia	R97U	 	12 weeks
Ehlers-Danlos Syndrome (associated with bleeding)	R90U	 	12 weeks
Endometrial Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Epidermolysis Bullosa NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Epilepsy, Adolescent/Adult Onset Panel Requires patient informed consent.	GENE		6 weeks
Epilepsy, Comprehensive NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Fabry Disease, X-linked – GLA gene sequencing	GENE	 ⁹	4 weeks
Facioscapulohumeral Muscular Dystrophy (FSHD) – D4Z4 repeat deletion Requires patient informed consent. Contact lab prior to sending. Referrals only from consultant neurologist or clinical geneticist. Genetic consent form required.	GENE	   ⁹	9 weeks
Factor II Prothrombin – G20210A Variant	FX2	 ⁹	5 days
Factor II Deficiency (full gene analysis) Test code dependent on phenotype.	R90U or R97U	 	12 weeks
Factor V and Factor VIII, combined deficiency of	R90U	 	12 weeks
Factor V Deficiency (full gene analysis) Test code dependent on phenotype.	R90U or R97U	 	12 weeks
Factor V Leiden – G1691A Variant	FX5	 ⁹	5 days

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TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
Factor VII Deficiency	R90U	  (Whole blood 10ml) ⁴⁰	12 weeks
Factor X Deficiency	R90U	  (Whole blood 10ml) ⁴⁰	12 weeks
Factor XI Deficiency	R90U	  (Whole blood 10ml) ⁴⁰	12 weeks
Factor XII Deficiency	R90U	 	12 weeks
Factor XIII Deficiency	R90U	 	12 weeks
Familial Adenomatous Polyposis (FAP) NEW Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Familial Exudative Vitreoretinopathy (FEVR) NGS Panel – full gene sequencing Requires patient informed consent.	GENE	  ⁹	6 weeks
Familial Hypercholesterolaemia NGS panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Familial Hypocalciuric Hypercalcaemia (FHH) Panel Requires patient informed consent.	GENE	  ⁹	8 weeks
Familial Medullary Thyroid Carcinoma – hotspot sequencing RET gene Requires patient informed consent.	GENE	 ^{9,11}	8 weeks
Fatty Acid Oxidation Deficiency NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Fletcher Factor (Prekallikrein) Deficiency	R90U	 	12 weeks
FLT3-ITD and FLT3-TKD screening assay	FLT3		24 hours
Fragile X Syndrome screen – FMR1 repeat analysis PCR Requires patient informed consent.	GENE	   ⁹	5 weeks
Friedreich Ataxia – frataxin gene repeat analysis Requires patient informed consent.	GENE	 ⁹	5 weeks
Gaucher Disease	R90U	 	12 weeks
Gaucher Disease full gene sequencing	GDMA	 ⁴⁰	4 weeks
Genetic Reproductive Profile (Male)	GRP	  ⁹	10-15 days
Ghosal Hematodiaphyseal Syndrome	R90U	 	12 weeks
Giant Platelet Disorder	R90U	 	12 weeks
Gilbert Syndrome – common UGT1A1 repeat variation Requires patient informed consent.	GENE	 ⁹	4 weeks
Glanzmann Thrombasthenia	R90U	 	12 weeks

Always provide clinical details and family history for genetic tests. Practice discounts do not apply to tests with the GENE code.































See page 25 for sample-taking and special handling instructions.

TDL Genetics






























TEST	CODE	SAMPLE REQ	TAT
Glucose-6-Phosphate Dehydrogenase (G6PD) Deficiency – full G6PD gene sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
Glycogen storage disease type 2 (Pompe) variant analysis	POMP		4 weeks
Gray Platelet Syndrome	R90U	 	12 weeks
Haemochromatosis – HFE common variants C282Y + H63D	HMD	 ⁹	3 days
Haemophilia A (Factor VIII Deficiency) Requires patient informed consent.	R90U	  (Whole blood 10ml) ⁴⁰	12 weeks
Haemophilia A (Factor VIII deficiency) – CVS	8CVS	CVS ⁴⁰	3 days
Haemophilia A (Severe) – Factor VIII (F8) common 1/22 intron inversion	HACD	  (Whole blood 10ml) ⁴⁰	6 weeks
Haemophilia B (Factor IX Deficiency)	R90U	  (Whole blood 10ml) ⁴⁰	12 weeks
Haemophilia B (Factor IX deficiency) – CVS	9CVS	CVS ⁴⁰	3 days
Hearing Loss NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Hemophagocytic Lymphohistiocytosis, Familial	R90U	 	12 weeks
Hereditary Colorectal Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Hereditary Comprehensive Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	5 weeks
Hereditary Neuropathy with Liability to Pressure Palsy – PMP22 deletion analysis Contact lab prior to sending. Referrals only from consultant neurologist or clinical geneticist. Genetic consent form required. Requires patient informed consent.	GENE	 ⁹	6 weeks
Hereditary Spastic Paraplegia Comprehensive NGS Panel Requires patient informed consent.	GENE	  ⁹	5 weeks
Hermansky-Pudlak Syndrome	R90U	 	12 weeks
HFE gene (Haemochromatosis) – common variants C282Y + H63D	HMD	 ⁹	3 days
Hirschprung Disease NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
HLA Tissue Typing A	HLA	 ⁹	10 days
HLA Tissue Typing A+B	HLBA	 ⁹	10 days
HLA Tissue Typing A+B+C (Class I)	HABC	 ⁹	10 days
HLA Tissue Typing A/B/DRB1/3/4/5	HLAF	 ⁹	10 days
HLA Tissue Typing A/B/DRB1/3/4/5/DQB1	HLF	 ⁹	10 days

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TDL Genetics

























TEST	CODE	SAMPLE REQ	TAT
HLA Tissue Typing A/B/C/DRB1/3/4/5/DQB1 (Class I & II)	HLFC	 9	10 days
HLA Tissue Typing B	HLB	 9	10 days
HLA Tissue Typing B*27 only	HLAB	 9	3 days
HLA Tissue Typing B*51 (Behcet's Disease)	B51	 9	10 days
HLA Tissue Typing B*57:01 high resolution	HL57	 9	10 days
HLA Tissue Typing C	HLC	 9	10 days
HLA Tissue Typing Coeliac Disease – DQ2/DQ8	Q2Q8	 9	10 days
HLA Tissue Typing DRB1/3/4/5	DRB1	 9	10 days
HLA Tissue Typing DRB1/3/4/5/DQB1 (Class II)	HLDQ	 9	10 days
HLA Tissue Typing Narcolepsy – DQB1*06:02 Requires patient informed consent.	GENE	 9	3 weeks
Huntington Disease – HD gene repeat analysis PCR Contact lab prior to sending. Referrals only from consultant neurologist or clinical geneticist. Genetic consent form required. Requires patient informed consent.	GENE	  9,11	5 weeks
Hyperinsulinism NGS Panel Requires patient informed consent.	GENE	  9	6 weeks
Hyperparathyroidism – CASR sequencing Requires patient informed consent.	GENE	 9	6 weeks
Hypodysfibrinogenemia, Congenital Test code dependent on phenotype.	R90U or R97U	 	12 weeks
Hypoprothrombinemia	R97U	 	12 weeks
Identity Profile (DNA) – 15 STR markers	DNAF	 9,11	10 days
IDH1/2 screening assay Requires patient informed consent.	GENE		48 hours
IgVH variant analysis for CLL	IGMU		4 weeks
Intellectual Disability NGS Panel Requires patient informed consent.	GENE	  9	6 weeks
Iron Overload Profile	IOP	  9	3 days
JAK2 gene mutations – see Myeloproliferative Neoplasm NGS Screening Panel			
Joubert/Meckel-Gruber Syndrome NGS Panel Requires patient informed consent.	GENE		6 weeks
Kallmann Syndrome NGS Panel Requires patient informed consent.	GENE	  9	6 weeks
Kennedy Disease (Spinal Bulbar Muscular Atrophy) – AR repeat expansion Requires patient informed consent.	GENE	 9	6 weeks

TDL Genetics








TEST	CODE	SAMPLE REQ	TAT
Kidney/Urinary Tract Comprehensive Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
KRAS/NRAS screening assay Requires patient informed consent.	MGP		48 hours
Lactose Intolerance Gene	LACG		2 weeks
Langer-Giedion Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF /   ⁹	5-15 days
Langer-Giedion Syndrome – BOBs only	PBOB	CVS / AF /  ⁹	5 days
Leber's Hereditary Optic Neuropathy – m.3460G>A + m.11778G>A + m.14484T>C common variants Requires patient informed consent.	GENE	 ⁹	6 weeks
Leukaemia (Rapid Acute) DNA and RNA NGS Panel Requires patient informed consent.	ALRP	 (3mL minimum) or bone marrow aspirate sample	3 days
Leukaemia Fusion Gene Screening Assay (Q30)	LMPX		24 hours
Leukaemia/Lymphoma RNA Sequencing (Fusion Gene and SNV/Indel) Panel Requires patient informed consent.	PHFP		2 weeks
Leukocyte Integrin Adhesion Deficiency	R90U	 	12 weeks
Li-Fraumeni Syndrome (p53-related cancer predisposition) – TP53 sequencing + MLPA Requires patient informed consent.	GENE	 ^{9,11}	6 weeks
Limb-Girdle Muscular Dystrophy (LGMD) NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Lissencephaly NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Long QT Syndrome/Brugada Syndrome NGS Panel Requires patient informed consent.	GENE	  ⁹	4-6 weeks
Lung Disorders NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Lynch Syndrome (HNPCC) NGS Panel NEW Requires patient informed consent.	GENE	 ⁹	4 weeks
Lysosomal Storage Disorders NGS Panel – full gene sequencing Requires patient informed consent.	LSDS	  ⁹	4-6 weeks
Macrothrombocytopenia	R90U	 	12 weeks
Male Genetic Reproductive Profile	GRP	  ⁹	10-15 days

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TDL Genetics

































TEST	CODE	SAMPLE REQ	TAT
Marfan Syndrome – FBN1 sequencing + deletions/duplications Requires patient informed consent.	GENE	 ⁹	6 weeks
Marfan Syndrome and Aortic Aneurysm and Dissection NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Marfan Syndrome and Thoracic Aortic Aneurysm and Dissection NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Maturity-Onset Diabetes of the Young (MODY) Diabetes NGS Panel Requires patient informed consent.	GENE	 ⁹	12 weeks
Meckel-Gruber/Joubert Syndrome NGS Panel Requires patient informed consent.	GENE	 ⁹	6 weeks
Medium-Chain Acyl-CoA Dehydrogenase Deficiency – ACADM sequencing Requires patient informed consent.	GENE	 ⁹	5 weeks
Melanoma Comprehensive Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Microdeletion (common) Syndromes – BOBs only	PBOB	CVS / AF /  ⁹	5 days
Microphthalmia/Anophthalmia/Coloboma NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Miller-Dieker Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF /   ⁹	5-15 days
Miller-Dieker Syndrome – BOBs only	PBOB	CVS / AF /  ⁹	5 days
Mitochondrial Genome Sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
Motor Neurone Disease (Amyotrophic Lateral Sclerosis) NGS Panel Requires patient informed consent.	GENE	  ⁹	5 weeks
MTHFR – common C677T + A1298C variants	MTHF	 ⁹	5 days
Mucopolysaccharidosis NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Multiple Endocrine Neoplasia Type 1 – full MEN1 sequencing Requires patient informed consent.	GENE	 ^{9,11}	7 weeks
Multiple Endocrine Neoplasia Type 2 – RET gene hotspot sequencing Requires patient informed consent.	GENE	 ^{9,11}	7 weeks

TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
Myeloid Gene Panel Requires patient informed consent.	MVPS	 (3mL minimum) or bone marrow aspirate sample	2 weeks
Myeloproliferative Neoplasm NGS Screening Panel NEW Requires patient informed consent.	MPNS	 (3mL minimum) or bone marrow aspirate sample	1 week
Myotonic Dystrophy Type 1 – DMPK repeat PCR Requires patient informed consent.	GENE	 ⁹	5 weeks
Myotonic Dystrophy Type 2 (PROMM) – ZNF9 repeat PCR Requires patient informed consent.	GENE	 ⁹	6 weeks
Narcolepsy (HLA DQB1*06:02) Requires patient informed consent.	GENE	 ⁹	3 weeks
Nephrotic Syndrome, Steroid-Resistant NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Nervous System/Brain Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Neurofibromatosis Type 1 – NF1 + SPRED1 sequencing + deletions/duplications Contact lab prior to sending. Requires patient informed consent.	GENE	  ^{9,11}	8 weeks
Neuronal Ceroid Lipofuscinosis (Batten Disease) NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Non-Invasive Prenatal Testing (NIPT) – common aneuploidy screening from maternal blood NEW	NIPT	J / Special tube ¹	2-4 days
Noonan Syndrome and RASopathies NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Nystagmus, X-linked Infantile – FRMD7 gene sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
Osteogenesis Imperfecta NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Ovarian Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
p53-related cancer predisposition (Li-Fraumeni Syndrome) – TP53 sequencing + MLPA Requires patient informed consent.	GENE	 ^{9,11}	6 weeks
Pancreatic Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks

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TDL Genetics

TEST	CODE	SAMPLE REQS	TAT
Paraganglioma/Pheochromocytoma NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Paroxysmal Nocturnal Hemoglobinuria	R97U	 	12 weeks
Paternity Testing (postnatal and prenatal) – sample required from each person being tested (3 people) Contact the genetics lab before sending the sample.	PATT	 / AF / CVS ^{1,12} Contact Genetics lab	5 days
Pelizaeus-Merzbacher Disease – PLP1 sequencing + deletions/duplications Requires patient informed consent.	GENE	 ⁹	6 weeks
Pendred Syndrome – SLC26A4 gene sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
Periodic Fever/Autoinflammation NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Peutz-Jegher Syndrome – STK11 sequencing + deletions/duplications Requires patient informed consent.	GENE	 ⁹	5 weeks
Phelan-McDermid Syndrome – karyotype + FISH	KARY, FISH	CVS / AF /  ⁹	12-17 days
Pheochromocytoma/Paraganglioma NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	5 weeks
Plasminogen Activator Inhibitor-1 Deficiency	R97U	 	12 weeks
Plasminogen Deficiency	R97U	 	12 weeks
Platelet-type Bleeding Disorder	R90U	 	12 weeks
POLG-Related Disorders – full POLG sequencing + deletions and duplications Requires patient informed consent.	GENE	 ⁹	6 weeks
Polycystic Kidney NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Pontocerebellar Hypoplasia NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Postnatal array CGH	CGH	  ⁹	10 days
Prader-Willi Syndrome (Primary Screen) – methylation PCR	PWAM	 ⁹	10 days
Prenatal array CGH	CGH	Amniotic fluid, CVS or POC ⁹	10 days
Prenatal Diagnosis (BOBs + Culture)	ABK or CBK	AF / CVS ⁹	3-5 days, 15 days
Pre-Travel Screen (DVT)	DVT1	   ⁹	5 days
Primary Ciliary Dyskinesia (PCD) NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks

Always provide clinical details and family history for genetic tests. Practice discounts do not apply to tests with the GENE code.

































See page 25 for sample-taking and special handling instructions.

TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
Primary Hyperoxaluria NGS Panel Requires patient informed consent.	GENE		7 weeks
Products of Conception – rapid BOBs aneuploidy diagnosis for all chromosomes (10 days) + culture (25 days)	PBK	Placental Sample ^{1,9}	10-25 days
Products of Conception (BOBs + Culture)	PBK	Placental Sample ^{1,9}	10-25 days
Products of Conception BOBs only – rapid aneuploidy diagnosis for all chromosomes	KBOB	Placental Sample or Solid Tissue ^{1,9}	10 days
Prostate Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
QF-PCR rapid common aneuploidy screen	APC	AF /  ⁹	2 days
Quebec Platelet Disorder	R90U	 	12 weeks
Recurrent Miscarriage Profile (female)	RMP	       ^{9,18}	10-15 days
Renal Cysts and Diabetes (RCAD) – HNF-1β sequencing exons 1-9 and dosage analysis by MLPA Requires patient informed consent.	GENE	 ⁹	8 weeks
Renal/Urinary Tract Cancer NGS Panel Requires patient informed consent.	GENE	  ^{9,11}	4 weeks
Retinoblastoma – RB1 sequencing + deletions/duplications Requires patient informed consent.	GENE	  ^{9,11}	6 weeks
Rett Syndrome (MECP2 gene only) – full sequencing + deletions/duplications Requires patient informed consent.	GENE	 ^{9,11}	6 weeks
Rett/Angelman Syndromes NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Scott Syndrome	R90U	 	12 weeks
Short-Chain Acyl-CoA Dehydrogenase Deficiency – ACADS sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
Short Stature – SHOX variant screening + deletions/duplications Requires patient informed consent.	GENE	 ⁹	8 weeks
Silver-Russell Syndrome – methylation studies on 11p15 imprinting domains KvDMR + H19 Requires patient informed consent.	GENE	 ⁹	7 weeks
Sitosterolemia & Thrombocytopenia	R90U	 	12 weeks
Skeletal Dysplasia NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks

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TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
Smith-Lemli-Opitz Syndrome – DHCR7 sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
Smith-Magenis Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF /   ⁹	5-15 days
Smith-Magenis Syndrome – BoBs only	PBOB	CVS / AF /  ⁹	5 days
Sotos Syndrome (Cerebral Gigantism) – NSD1 sequencing + deletions/duplications Requires patient informed consent.	GENE	 ⁹	6 weeks
Spastic Paraplegia NGS Panel Requires patient informed consent.	GENE	  ⁹	6 weeks
Spinal Bulbar Muscular Atrophy (Kennedy Disease) – AR repeat analysis Requires patient informed consent.	GENE	 ⁹	5 weeks
Spinal Muscular Atrophy – SMN1 deletions/duplications	SMA	 ⁹	10 days
Spinocerebellar Ataxia – multiplex SCA1+2+3+6+7+17 common repeat expansions Requires patient informed consent.	GENE	 ⁹	5 weeks
Spinocerebellar Ataxia NGS Panel	GENE	  ⁹	6 weeks
SRY (Sex-determining Region Y)	SRY	 ⁹	2 days
Stormorken Syndrome	R90U	 	12 weeks
Systemic mastocystosis – C-Kit common variants (KIT D816V) Requires patient informed consent.	GENE	 ⁹	4 weeks
T cell clonality assay (TCR beta and TCR gamma)	TCRA	 or FFPE	2 weeks
Takenouchi-Kosaki Syndrome	R90U	 	12 weeks
Tay Sachs Screen See also Carrier Screen (Ashkenazi Jewish/Pan-Ethnic). Requires patient informed consent.	GENE	 ⁹	4 weeks
Thrombophilia	R97U	 	12 weeks
Thrombophilia due to Activated Protein C Resistance	R97U	 	12 weeks
Thrombophilia due to Antithrombin III Deficiency	R97U	  (Whole Blood 10ml) ⁴⁰	12 weeks
Thrombophilia due to Heparin Cofactor II Deficiency	R97U	 	12 weeks
Thrombophilia due to Histidine-rich Glycoprotein (HRG) Deficiency	R97U	 	12 weeks
Thrombophilia due to Protein C Deficiency	R97U	  (Whole blood 10ml) ⁴⁰	12 weeks

TDL Genetics

TEST	CODE	SAMPLE REQ	TAT
Thrombophilia due to Protein S Deficiency	R97U		12 weeks
Thrombophilia due to Thrombomodulin Defect	R97U		12 weeks
Thrombosis Gene Panel Requires patient informed consent.	R97U		12 weeks
Thrombotic Risk Profile	PROP	 ¹⁸	5 days
Thrombotic Thrombocytopenic Purpura, Hereditary	R97U		12 weeks
Thyroid Cancer NGS Panel Requires patient informed consent.	GENE	 ^{9,11}	4 weeks
Treacher Collins Syndrome and Related Disorders NGS Panel Requires patient informed consent.	GENE	 ⁹	6 weeks
Tuberous Sclerosis (TSC1 + TSC2) Requires patient informed consent.	GENE	 ⁹	7 weeks
Urinary Tract/Renal Cancer NGS Panel Requires patient informed consent.	GENE	 ^{9,11}	4 weeks
Usher Syndrome NGS Panel Requires patient informed consent.	GENE	 ⁹	6 weeks
Very Long-Chain Acyl-CoA Dehydrogenase Deficiency – ACADVL sequencing Requires patient informed consent.	GENE	 ⁹	6 weeks
Von Hippel-Lindau Syndrome – VHL sequencing + deletions/duplications Requires patient informed consent.	GENE	 ⁹	6 weeks
Von Willebrands Disease	R90U	 (Whole blood 10ml) ⁴⁰	12 weeks
Wiskott-Aldrich Syndrome	R90U		12 weeks
Wolf-Hirschhorn Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF /  ⁹	5-15 days
Wolf-Hirschhorn Syndrome – BOBs only	PBOB	CVS / AF /  ⁹	5 days
Y chromosome microdeletions – AZFa + AZFb + AZFc + SRY	YDEL	 ⁹	5 days
Zellweger Syndrome NGS Panel Requires patient informed consent.	GENE	 ⁹	6 weeks
Zygosity testing – comparative DNA profile	DNAC	 (From each twin and both parents) ⁹	5 days

**Carrier Screen
(Ashkenazi Jewish)**

This test is optimised for individuals and couples of Ashkenazi Jewish ancestry.**

Uses the same technology as the Pan-Ethnic Carrier Screen.

**Male patients will not be screened for X-linked conditions (e.g., FMR1, etc.).

Requires patient informed consent.

TAT: 4 weeks

GENE

A **B** **9**

**Carrier Screen
(Pan-Ethnic)**

Targets 400+ Autosomal Recessive and X-linked Inherited Disorders**

** Male patients will not be screened for X-linked conditions (e.g., FMR1, etc.).

Requires patient informed consent.

TAT: 4 weeks

GENE

A **9**

DVT/Pre-travel Screen

FBC

Factor II Prothrombin Gene

Factor V Leiden

Anticardiolipin Antibodies

TAT: 5 days

DVT1

A **A** **B** **9**

Iron Overload Profile

Iron (TIBC included)

Ferritin

Transferrin Saturation

Haemochromatosis C282Y, H63D

TAT: 3 days

IOP

A **B** **9**

**Male Genetic
Reproductive Profile**

Chromosome Analysis

Y-Chromosome Microdeletions

Cystic Fibrosis Carrier Screen (139 common variants)

PolyT (5T,7T,9T) if clinically indicated

TAT: 10-15 days

GRP

A **H** **9**

**Products of Conception
(BOBs + Culture)**

Rapid Aneuploidy Diagnosis for all Chromosomes by BOBs Analysis (10 days), Chromosome Analysis (Karyotype) (25 days)

TAT: 10-25 days

PBK

Placental Sample ^{1,9}

**Recurrent Miscarriage
Profile (female)**

FBC

Coagulation Profile

Antithrombin III

Factor V Leiden Common Variant

Factor II Prothrombin Common Variant

MTHFR Common Variants

Fibrinogen

Lupus Anticoagulant

Protein C

Free Protein S Ag

Anticardiolipin Abs

Chromosome Analysis

Please request Partner's Chromosome Analysis using a separate request form.

TAT: 10-15 days

RMP

A **A** **B** **C** **C** **C** **H** **9,18**

Thrombotic Risk Profile

FBC

Coagulation Profile

Antithrombin III

Factor V Leiden Common Variant

Factor II Prothrombin Common Variant

MTHFR Common Variants

Lupus Anticoagulant

Protein C

Free Protein S Ag

Anticardiolipin Abs

TAT: 5 days

PROP

A **A** **B** **C** **C** **C** **18**

Leukaemia (Rapid Acute) DNA and RNA NGS Panel / Myeloproliferative Neoplasm NGS Screening Panel

NEW

This NGS assay allows for rapid generation of comprehensive profile of variants (both DNA and RNA) from a single NGS run. This assay can profile both DNA and RNA targets including DNA mutations and translocations detected from RNA targets and allows for simultaneous interrogation of 45 DNA target genes and 30 RNA fusion driver genes. The broad fusion panel enables sequencing of over 700 unique fusion transcripts. The panel covers relevant targets for acute myeloid leukaemia, myelodysplastic syndromes and myeloproliferative neoplasms, including CML, CMML and JMML. Requires patient informed consent.

TAT: 3 days / 1 week

ALRP (DNA & RNA)

MPNS (DNA)

A (3mL minimum) or bone marrow aspirate sample

Leukaemia / Lymphoma RNA Sequencing (Fusion Gene and SNV/Indel) Panel

The Leukaemia / Lymphoma RNA Sequencing panel is an Anchored Multiplex PCR (AMP™)-based next-generation sequencing (NGS) panel to detect and identify fusions, point mutations and expression levels from ribonucleic acid (RNA) input. The panel encompasses targets in over 199 genes relating to lymphoid and myeloid malignancies. By using gene-specific primers to amplify into molecular barcodes ligated onto the cDNA fragment ends, both known and novel fusions can be identified. Requires patient informed consent.

TAT: 2 weeks

PHFP

A

Lysosomal Storage Disorders NGS Panel – full gene sequencing

This is a 55 gene custom NGS panel which can be used to detect both pathogenic SNP/ Indels and copy number variants (including whole exon insertions / deletions) which cause the various Lysosomal storage disorders.

All known lysosomal storage diseases are covered on this panel including:

Fabry disease, Gaucher disease, Pompe disease, metachromatic leukodystrophy, all the different mucopolysaccharidoses, fucosidosis, Krabbe disease, Tay-Sachs disease, Sandhoff disease, Danon disease, lysosomal acid lipase deficiency, Niemann-Pick disease types A, B and C, lipfuscinosis, prosaposin deficiency and Salla disease.

Requires patient informed consent.

TAT: 4-6 weeks

LSDS

A A ⁹

Myeloid Gene Panel

This is a 75 gene targeted NGS panel for acute myeloid leukaemia, myeloproliferative neoplasms, myelodysplastic syndromes, and also contains a number of targets which are useful for lymphoid malignancies (ALL and lymphoma). It uses Anchored Multiplex PCR (AMPTM) chemistry which enables deep strand-specific amplification of molecular barcoded DNA fragments for sequencing.

Requires patient informed consent.

TAT: 2 weeks

MVPS

A (3mL minimum) or bone marrow aspirate sample

Array CGH testing

Chromosome abnormalities can be associated with developmental delay, autism spectrum disorder, learning difficulties, dysmorphic features and other congenital abnormalities.

Array CGH can detect smaller genetic changes than is possible by conventional karyotyping, and can provide accurate information on the size and possible consequences of the gains (duplications) or losses (deletions) identified. Multiple studies have shown that Array CGH, when applied to appropriate patients, will detect up to three times more pathogenic chromosome imbalances than karyotyping due to its greater precision and sensitivity.

Array CGH testing is now considered to be the front line test for patients presenting with developmental delay (motor or growth), autism spectrum disorder, moderate to severe learning difficulties, dysmorphic features, with or without congenital abnormalities. Consortiums in the USA and many EU countries have adopted Array CGH as the front line test in this patient cohort.

Array CGH is now more frequently used for prenatal studies as an adjunct or replacement for conventional cytogenetic studies, particularly where structural fetal abnormalities are seen at ultrasound scan but also at a patient's or doctor's request. The technique may also be utilised as a follow up test to characterise anomalies detected by a previous study (e.g. an apparently balanced de novo rearrangement or marker chromosome).

Further information is provided by the UNIQUE website at www.rarechromo.org

When to use Array CGH

- In postnatal cases, patients should present with one or more of the following:
- Mental retardation
 - Developmental delay
 - Autism/autism spectrum disorder
 - Dysmorphic features
 - Congenital malformations
- In prenatal cases, patients may present with:
- Abnormalities or increased nuchal translucency on ultrasound scan which may be associated with a chromosome imbalance.


Approximately 10-20% of results identify extra or missing DNA which may or may not be relevant to the clinical phenotype, and will require further family studies to assist with interpretation.

What can Array CGH detect?

Deletions and duplications with greater sensitivity than conventional karyotyping.

What does Array CGH not detect?

- Balanced chromosome rearrangements such as translocations or inversions.
The chromosome location of duplications (this would require additional FISH testing).
- Low frequency mosaicism (<30% abnormal cells), some types of polyploidy like triploidy, Uniparental disomy (UPD) and Fragile X syndrome, imprinting defects, genetic diseases caused by point mutations or multifactorial inheritance.

TEST	CODE	SAMPLE REQS	TAT
Postnatal array CGH	CGH	 ⁹	10 days
Blood from both parents may also be provided in case of follow up studies at no extra charge.			
TEST	CODE	SAMPLE REQS	TAT
Prenatal array CGH	CGH	Amniotic fluid, CVS or POC ⁹	10 days

EDTA and heparin blood from both parents should be provided at the time of prenatal sampling, if possible, in case of follow up studies at no extra charge.

Pan-ethnic carrier screening

The Fulgent Beacon carrier panel is a comprehensive genetic screen for people of all ethnic backgrounds. The panel analyses more than 400 genes, in which mutations may cause over 440 different recessive disorders. Testing includes Cystic Fibrosis, Sickle Cell Disease, Thalassemia and Spinal Muscular Atrophy. These conditions vary in morbidity, mortality and treatment.

The Beacon carrier screen can also be filtered to report only on diseases common to the Jewish population – such as Bloom Syndrome, Canavan Disease, Gaucher Syndrome and Tay-Sachs Disease.

Indications for use

- Pre-pregnancy screening for couples that wish to check if they are silent carriers for a disease that would have serious implications for the future health of any children.
- For patients who are concerned about a family history of a particular disease, where common mutation detections are very high – such as Tay-Sachs Disease.





The report comes with a synopsis of any diseases for which a mutation was found, including prognosis, treatment and mode of inheritance. It includes a risk assessment and recommendations for further testing.

A full list of diseases covered by this test is available from the laboratory.

Male patients will not be screened for X-linked conditions. If an X-linked condition is suspected in a male patient please contact the laboratory or a genetics specialist about diagnostic testing for that particular condition.

Limitations

A normal result does not rule out the possibility that the patient carries a rare mutation not detectable by this particular assay. For this reason, this test is also not appropriate to use as a direct prenatal screen (both parents must be confirmed carriers for a particular disease before we can offer prenatal diagnosis). Screening is not designed to detect somatic mutations.

TEST	CODE	SAMPLE REQS	TAT
Carrier Screen (Ashkenazi Jewish) Requires patient informed consent.	GENE	 9	4 weeks
Carrier Screen (Ashkenazi Jewish) – Partnered Report Requires patient informed consent. Please contact the lab for special requirements before sending.	GENE	 9	4 weeks
Carrier Screen (Pan-Ethnic) Requires patient informed consent.	GENE	 9	4 weeks
Carrier Screen (Pan-Ethnic) – Partnered Report Requires patient informed consent. Please contact the lab for special requirements before sending.	GENE	 9	4 weeks



Non-invasive prenatal testing (NIPT)

Non-invasive prenatal testing (NIPT) screens for the presence of specific chromosome disorders in the developing fetus. The test analyses fragments of cell-free DNA in maternal plasma that have been released from both maternal and placental cells.

By analysing the proportions of cell-free DNA fragments derived from different chromosomes or chromosome regions, NIPT can screen for the presence or absence of specific chromosome disorders.

NIPT is more accurate than first trimester maternal serum screening and ultrasound in identifying pregnancies with or without these disorders.

TDL Genetics uses the NIPT assay VeriSeq NIPT Solution v2, which is manufactured by Illumina and is processed at our laboratory in London.

Targeted screening for specific common chromosome disorders

Our NIPT assay is designed to screen for:

- Trisomy 21 (Down syndrome), which is associated with moderate to severe intellectual disability, congenital heart defects and other malformations;

- Trisomy 18 (Edwards syndrome) and trisomy 13 (Patau syndrome), which are associated with severe brain and cardiac malformations. There is a high risk of stillbirth or death during infancy; and
- Sex chromosome aneuploidy (abnormalities in the number of X or Y chromosomes), which can be associated with malformations and infertility, Turner syndrome (45,X) and Klinefelter syndrome (47,XXY). Triple X syndrome and XYY syndrome can also be detected. This screen is optional (no additional cost).

In addition, NIPT can also assess fetal sex. This is optional (no additional cost).

NIPT does not screen for non-chromosome disorders, familial mutations, malformations, fetal growth or fetal viability.

Accuracy of NIPT

NIPT provides fewer false-positive and false-negative results than combined first trimester screening for trisomy 21, 18 and 13.

It is important to note that NIPT is a screening test and does not provide a definitive genetic diagnosis, as NIPT cannot differentiate potential chromosome differences between the placenta and fetus.

TDL Genetics

A definitive genetic diagnosis of the fetus requires cytogenetic analysis of either amniotic fluid or chorionic villus sampling (CVS).

When to perform NIPT

NIPT should not be performed before a gestational age of 10 weeks. However, it is suitable at any time after that, preferably while there is sufficient time for further investigation or decision-making (should this be required). An ultrasound scan is required prior to NIPT to confirm dates and fetal viability, and to check for twins. Performing first trimester screening before NIPT may provide supplementary information regarding the status of the fetus.

Who is eligible for NIPT?

Eligible patients:

- Women who are at least ten weeks pregnant
- Women with singleton or twin pregnancies
- Women with IVF pregnancies and non-IVF pregnancies

NIPT is not suitable for patients with:

- Recent maternal blood transfusion (within the last 4 months)
- Maternal mosaicism
- Maternal prior organ transplant/stem cell transplant
- Maternal copy number variations
- Chromosomal copy number variations
- Fetoplacental mosaicism/confined placental mosaicism
- Maternal autoimmune disease excluding IVIg treatments
- Maternal neoplasms (benign and malignant)
- Pregnancies with fetal demise/vanishing twin

Patients with a twin pregnancy are not eligible for the sex chromosome aneuploidy component of the screen.

Reporting results

Results will be ready within 2–4 business days upon receipt of sample in the laboratory.

TDL first checks that there is sufficient cell-free fetal DNA in the maternal sample and quality data to provide an accurate assessment. A re-collection may be recommended if the sample is not suitable or an assessment may not be feasible.

The report then summarises the screening assessment for each disorder specified by the requesting doctor (see example below).

Example report

Chromosome	Result	Recommendation
Trisomy 21	HIGH PROBABILITY	Genetic counselling and additional testing
Trisomy 18	Low probability <1:10,000	Review result with patient
Trisomy 13	Low probability <1:10,000	Review result with patient
Sex chromosome aneuploidy	Not requested	---
Fetal sex	Male	Review result with patient

A high probability NIPT result should always be confirmed by amniocentesis or CVS before making any decision regarding subsequent management of the pregnancy.

Limitations of NIPT

The VeriSeq NIPT Solution v2 is not validated for use in pregnancies with more than two fetuses, fetal demise, mosaicism, partial chromosome aneuploidy, triploidy, translocations, maternal aneuploidy, transplant or malignancy. VeriSeq NIPT Solution v2 does not detect neural tube defects. Certain rare biological conditions may also affect the accuracy of the test.

TDL Genetics

For twin pregnancies, HIGH PROBABILITY test results apply to at least one fetus; male test results apply to one or both fetuses; female test results apply to both fetuses. Due to the limitations of the test, inaccurate results are possible.

A LOW PROBABILITY result does not guarantee that a fetus is unaffected by a chromosomal or genetic condition. Some non-aneuploid fetuses may have HIGH PROBABILITY results. In cases of HIGH PROBABILITY results and/or other clinical indications of a chromosomal condition, confirmatory testing is necessary for diagnosis.

If an assessment cannot be provided

On rare occasions, NIPT is unable to provide an assessment of the probability of specific chromosome disorders. This usually reflects the complex biology of genetics and pregnancy, and is not due to a failing in the laboratory.

If NIPT cannot provide a specific assessment after a repeat blood draw, it is not worth repeating the NIPT (unless advised by the laboratory). A decision about other tests (maternal serum screening, detailed ultrasound, amniocentesis or CVS) should be based on the doctor's assessment of all risk factors identified, and may require specialist consultation.

Further information

- TDL Genetics website:
www.tdlpathology.com/tdlgenetics
- Borth H, et al. Analysis of cell-free DNA in a consecutive series of 13,607 routine cases for the detection of fetal chromosomal aneuploidies in a single center in Germany. Arch Gynecol Obstet. 2021 Jun;303(6):1407-1414.



SCAN ME

Find out more about NIPT on the TDL website:

www.tdlpathology.com/non-invasive-prenatal-testing/

TEST	CODE	SAMPLE REQS	TAT
Non-Invasive Prenatal Testing (NIPT) – common aneuploidy screening from maternal blood NEW	NIPT	J / Special tube ¹	2-4 days

In-vivo Tests

All *in-vivo* tests (except Glucose Challenge Test/Mini-GTT) require an appointment. Please email phlebotomy@tdlpathology.com or call **020 7307 7373** for details, information for patient preparation, and appointment times. Sample taking fees for Extended tests are charged at £90.00 per visit.

Extended Testing

- 50g liquid glucose is consumed for the glucose challenge test/Mini-GTT.
- 75g liquid glucose is consumed for all other glucose tests.
- Each sample tube must be labelled with time of collection.

Glucose tolerance tests

TEST	CODE	SAMPLE REQ	TAT	COLLECTION TIME (MINUTES POST-GLUCOSE)
Glucose Challenge Test/Mini-GTT	RBGM	G	1 day	1 at 60 mins (50gm glucose)
Glucose Tolerance Test (Extended Plus)	GTTX	7 x G , 7 x RU	1 day	1 each at 0, 30, 60, 90, 120, 150 and 180 mins
Glucose Tolerance Test (Extended)	GTTE	5 x G , 5 x RU	1 day	1 each at 0, 30, 60, 90 and 120 mins
Glucose Tolerance Test (Short)	GTTS	2 x G , 2 x RU	1 day	1 each at 0 and 120 mins.
Glucose Tolerance Test/OGTT	GTT	3 x G , 3 x RU	1 day	1 each at 0, 60 and 120 mins (75gm glucose load)
Glucose Tolerance with Growth Hormone	GTT + GHDF	3 x B ³⁵ , 3 x G , 3 x RU	1 day	1 each at 0, 60 and 120 mins.
Glucose Tolerance with Insulin	GTTI	3 x B , 3 x G , 3 x RU	1 day	1 each at 0, 60 and 120 mins

Extended tests

TEST	CODE	SAMPLE REQ	TAT	COLLECTION TIME (MINUTES POST-GLUCOSE)
Lactose Tolerance Test	LTT	By appointment only	1 day	Contact 020 7307 7383 (Phlebotomy)
Synacthen Stimulation Test	SYNA	By appointment only	1 day	Contact 020 7307 7383 (Phlebotomy)

Antibiotic assays

TEST	CODE	SAMPLE REQ	TAT
Amikacin Level (State dose)	AMIK	B ⁴	4 hours
Gentamicin Assay	GENT	B ⁴	4 hours
Metronidazole Level	METR	B ⁴	7 days
Teicoplanin Assay	TEIC	B	5 days
Tobramycin Assay (Provide Clinical Details)	TOBR	B	3 days
Vancomycin Hydrochloride	VANC	B	4 hours

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.
























Therapeutic Drug Assays

There are three different collection times for Therapeutic Drug Monitoring:





















- **Trough Level:** Blood should be collected just before the next dose. Trough Levels check that the appropriate drug concentration is being maintained.
- **Peak Levels:** Sample collection time is dependent on specific drug type and method of administration. Peak levels check that the drug level is not in the toxic range.
- **Suspected Toxicity:**
Blood can be collected any time.

All collections should have the following noted on the request form:

- Dosage schedule including the amount and frequency and time of the last dose
- Time of specimen collection
- Clinical status of patient (e.g. routine, suspected toxicity)
- Name(s) of other drugs being taken by the patient

TEST	CODE	SAMPLE REQS	TAT
Amitriptyline	AMTR	 ⁴	5 days
Anafranil (Clomipramine)	CHLO		7 days
Carbamazepine (Tegretol)	CARB		4 hours
Clobazam	CLOB		5 days
Clomipramine (Anafranil)	CHLO		7 days
Clonazepam	CLON		7 days
Diazepam (Valium)	DIAZ		7 days
Digoxin	DIGO		4 hours
Epanutin (Phenytoin)	PHEN		4 hours
Erythropoietin	ERY		4 days
Ethosuximide	ETHO		7 days
FK506 (Tacrolimus/Prograf)	FK5	 ⁴	1-2 days
Flecainide (Tambocor)	FLEC		5 days
Fluoxetine (Prozac)	PROZ	 ⁴	5 days
Gabapentin	GABA	 ⁴	5 days
Imipramine	IMIP	 ⁴	4 days
Lamotrigine	LAMO	 ⁴	5 days
Levetiracetam (Keppra)	LEVE	 ⁴	3 days
Lithium (take 12 hours after dose)	LITH		4 hours
Lorazepam	LORA	 ⁴	10 days
Methotrexate	METX		2 days
Mycophenolic Acid (Cellcept)	MYCP		5 days
Mysoline (Primidone)	PRIM	 ⁴	3 days

Therapeutic Drug Assays

TEST	CODE	SAMPLE REQS	TAT
Olanzapine	OLAN	 ⁴	5 days
Paracetamol	PARA		4 hours
Phenobarbitone	PHB		4 hours
Phenytoin (Epanutin)	PHEN		4 hours
Primidone (Mysoline)	PRIM	 ⁴	3 days
Propanalol	PRO	 ⁴	7 days
Risperidone	RISP	 ⁴	7 days
Sinequan (Doxepin)	DOXE		10 days
Sirolimus	SIRO		3 days
Streptomycin Levels	STRM		5 days
Sulpiride	SULP	 ⁴	4 days
Tacrolimus/Prograf (FK506)	FK5	 ⁴	1-2 days
Tegretol (Carbamazepine)	CARB		4 hours
Temazepam	TEMA	 ⁴	4 days
Theophylline	THEO		4 hours
Topiramate (Topamax)	TOPI	 ⁴	4 days
Trimipramine	TRIM		5 days
Valium (Diazepam)	DIAZ		7 days
Valproic Acid (Epilim)	VALP		4 hours
Vigabatrin (Sabril)	VIGA		10 days

Allergy

For a list of individual allergens see page 145.

TEST	CODE	SAMPLE REQ	TAT
Allergy – Individual Allergens	ALLE	B	2 days
Allergy – 5 x Single Individual Allergens	5AL	B	2 days
Allergy – 10 x Single Individual Allergens	10AL	B	2 days
Allergy Profile 1 (Food & Inhalants)	1A	B B	2 days
Allergy Profile 2 (UK Aero Allergen)	2A	B	2 days
Allergy Profile 3 (Food)	3A	B	2 days
Allergy Profile 4 (Nuts & Seeds)	4A	B	2 days
Allergy Profile 5 (Children's Panel)	5A	B	2 days
Allergy Profile 6 (Shellfish)	6A	B	2 days
Allergy Profile 7 (Finfish)	7A	B	2 days
Allergy Profile 8 (Cereal – singles)	8A	B	2 days
Allergy Profile 9 (Antibiotics)	9A	B	2 days
Allergy Profile 10 (Insects)	10A	B	2 days
Allergy Profile 11 (Combined Shellfish/Finfish)	11A	B	2 days
Allergy Profile 12 (Milk & Milk Proteins)	12A	B	2 days
Allergy Profile 13 (Stone fruit/Rosaceae family)	13A	B	2 days
ALEX² Allergy Test (Venous /Self-collect) 300 allergen panel, from single sample, supplemented by Total IgE, which includes pollens, mites, cat and dog, fur, insect venoms, moulds, yeasts, food and latex.	ALEX	B (Serum) / B (TDL Tiny)	3-4 days
ISAC Panel (Venous /Self-collect) 112 allergen panel from single sample which includes components from 48 preselected allergen sources	ISAC	B / B (TDL Tiny)	3 days
Atopic Dermatitis/Eczema Profile (14 allergens)	ALEC	B	2 days
Gluten Sensitivity Profile CHANGE	GLUT	A B B	10 days
Allergic Rhinitis/Asthma Profile	ALRN	B	2 days
Histamine Releasing Urticaria Test	CURT	B	3 weeks
Prealbumin	PALB	B	3 days
Total IgE	IGE	B	1 day
Tryptase	STRY	B	2 days

Component testing

Using ImmunoCAP Allergen Components can help refine the understanding of sensitisation, by assessing a person’s sensitisation pattern at the molecular level. When used in conjunction with traditional extract-based IgE testing, these provide information at the individual component level.

For more information, please contact the Immunology Department on **020 7025 7917**.

















SCAN ME

Find out more details about component testing:

www.tdlpathology.com/specialties/allergy/allergy-component-testing/

TEST	CODE	SAMPLE REQ5	TAT
Alpha Gal Components (related to red meat)	ZZ37	B	2 days
Alternaria Components	ZZ1	B	2 days
Apple Components	ZZ36	B	2 days
Aspergillus Components	ZZ2	B	2 days
Birch Components	ZZ3	B	2 days
Brazil Components	ZZ4	B	2 days
Cashew Components	ZZ35	B	2 days
Cat Components	ZZ5	B	2 days
Celery Components	ZZ6	B	2 days
Cow’s Milk Components	ZZ7	B	2 days
Dog Components	ZZ8	B	2 days
Egg Components	ZZ9	B	2 days
Fish Components	ZZ10	B	2 days
Glycan Determinants	ZZ27	B	2 days
Hazelnut Components	ZZ11	B	2 days
Horse Components	ZZ38	B	2 days
House Dust Mite Components	ZZ12	B	2 days
Kiwi Components	ZZ32	B	2 days
Latex Components	ZZ13	B	2 days
Lipid Transfer Proteins	ZZ23	B	2 days
Lipocalins	ZZ28	B	2 days
Olive Components	ZZ14	B	2 days
Parvalbumins	ZZ29	B	2 days
Peach Components	ZZ15	B	2 days
Peanut Components	ZZ16	B	2 days

Allergy

TEST	CODE	SAMPLE REQ	TAT
Polcalcins	ZZ25		2 days
PR-10 Proteins	ZZ22		2 days
Profilins	ZZ24		2 days
Seed Storage Proteins	ZZ26		2 days
Serum Albumins	ZZ30		2 days
Sesame Components	ZZ39		2 days
Shrimp Components	ZZ17		2 days
Soybean Components	ZZ18		2 days
Timothy Grass Components	ZZ19		2 days
Tropomyosins	ZZ31		2 days
Venom Components	ZZ33		2 days
Wall Pellitory Components	ZZ20		2 days
Walnut Components	ZZ34		2 days
Wheat Components	ZZ21		2 days

Allergy Profile 1 (Food & Inhalants)

Total IgE with individual IgE allergens for:
Grass Mix, inc.: Cocksfoot, Meadow fescue, Meadow, Rye, Timothy
Weed Mix, inc.: Common ragweed, Giant ragweed, Western ragweed
Dust Mix, inc.: Blatella germanica, Dermatophagoides pteronyssinus, Dermatophagoides farinae, Hollister-Stier Labs
Mould Mix, inc.: A. alternata, Aspergillus fumigatus, Candida albicans, Cladosporium herbarum, Helminthosporium halodes, Penicillium notatum
Tree Mix, inc.: Box elder, Common silverbirch, Hazel, Oak, London plane, Maple, Sycamore
Single Allergens (19): Beef, Bermuda grass, Cat dander, Clam, Common silver birch, Cow's milk, Crab, Dog dander, Egg white, Egg yolk, Fish (Cod), Hazelnut, Horse dander, Latex, Nettle, Peanut, Shrimp/Prawn, Soya bean, Wheat

TAT: 2 days

1A

B B

Allergy Profile 2 (UK Aero Allergen)

Total IgE with individual IgE allergens for:
Alternaria Derma farinae
Aspergillus Dog dander
Birch pollen House dust mite
Cat dander Horse dander
Cladosporium Timothy grass
Common ragweed

TAT: 2 days

2A

B

Allergy Profile 3 (Food)

Total IgE with individual IgE allergens for:
Codfish Egg yolk Sesame
Cow's milk Kiwi Soya
Egg white Peanut Wheat

TAT: 2 days

3A

B

Allergy Profile 4 (Nuts & Seeds)

Total IgE with individual IgE allergens for:
Almond Peanut Pumpkin seed
Brazil nut Pecan Sesame seed
Cashew Pine nut Sunflower seed
Hazelnut Pistachio Walnut
Macadamia nut Poppy seed

TAT: 2 days

4A

B

Allergy Profile 5 (Children's Panel)

Total IgE with individual IgE allergens for:
Cat dander Egg white Soya bean
Cod Egg yolk Timothy grass
Cow's milk Hazelnut Wheat flour
Dog dander Peanut
Dust mite Silver birch

TAT: 2 days

5A

B

Allergy

Allergy Profile 6 (Shellfish)

Total IgE with individual IgE allergens for:

Clam	Lobster	Scallop
Crab	Octopus	Squid
Crawfish/Crayfish	Prawns/Shrimp	

TAT: 2 days

6A

B

Allergy Profile 7 (Finfish)

Total IgE with individual IgE allergens for:

Codfish	Sardine/Pilchard	Swordfish
Mackerel	Salmon	Tuna
Plaice	Sole	

TAT: 2 days

7A

B

Allergy Profile 8 (Cereal – singles)

Total IgE with individual IgE allergens for:

Barley	Rye
Oat	Wheat

TAT: 2 days

8A

B

Allergy Profile 9 (Antibiotics)

Total IgE with individual IgE allergens for:

Amoxicilloyl	Pen G
Ampicilloyl	Pen V
Cefaclor	

TAT: 2 days

9A

B

Allergy Profile 10 (Insects)

Total IgE with individual IgE allergens for:

Common wasp –	Paper wasp
yellow jacket	Yellow hornet
Bee	White faced hornet

TAT: 2 days

10A

B

Allergy Profile 11 (Combined Shellfish/Finfish)

Total IgE with individual IgE allergens for:

Cod	Scallop
Prawn/Shrimp	Squid
Salmon	Tuna

TAT: 2 days

11A

B

Allergy Profile 12 (Milk & Milk Proteins)

Total IgE with individual IgE allergens for:

Alpha-lactalbumin –	Goat's milk
milk proteins	Mare's milk
Beta-lactoglobulin –	Sheep's milk
milk proteins	Whey (cow and ewe)
Casein – milk proteins	
Cow's milk	

TAT: 2 days

12A

B

Allergy Profile 13
(Stone fruit/Rosaceae family)

Total IgE with individual IgE allergens for:

Almond	Pear
Apple	Plum
Apricot	Raspberry
Cherry	Strawberry
Peach	

TAT: 2 days

13A

B

ALEX² Allergy Test
(Venous / Self-collect)

300 allergen panel, from single sample, supplemented by Total IgE, which includes pollens, mites, cat and dog, fur, insect venoms, moulds, yeasts, food and latex.

TAT: 3-4 days

ALEX

B (Serum) / **B** (TDL Tiny)

ISAC Panel (Venous / Self-collect)

Simultaneous measurement in a single sample of specific antibodies to more than one hundred allergen components from more than 48 preselected allergen sources.

TAT: 3 days

ISAC

B / **B** (TDL Tiny)

Allergic Rhinitis/Asthma Profile

Total IgE with individual IgE allergens for:

Cat dander	Aspergillus fumigatus
Dog dander	Cladosporium herbarum
Common silver birch	Mugwort
Timothy grass	London plane
Dust mite -	Peanut
Dermatophagoides	Egg white
pteronysinus	Cow's milk
Alternaria alternata	

TAT: 2 days

ALRN

B

Atopic Dermatitis/Eczema Profile (14 allergens)

TOTAL IGE with individual IgE allergens for:

Cod fish	Apple
Cow's milk	Dust mite -
Egg white	dermatophagoides
Soyabean	pteronysinus
Peanut	Cat dander
Hazelnut	Dog dander
Shrimp	Timothy grass
Wheat	Common silver birch

TAT: 2 days

ALEC

B

Gluten Sensitivity Profile

CHANGE

Gluten Single IgE Allergen	Tissue Transglutaminase
Deamidated Gliadin	IgA
IgG Antibodies	HLA DQ2/DQ8
	Total IgA

TAT: 10 days

GLUT

A **B** **B**

Individual allergens

Allergens, when requested individually are priced as single tests, sample 1 x **B** (up to 5 allergens).

Protein allergens are manufactured by Thermofisher (Phadia) and are IgE specific.

GRASS POLLENS

Bahia grass **g17**
 Barley **g201**
 Bermuda grass **g2**
 Brome grass **g11**
 Canary grass **g71**
 Cocksfoot **g3**
 Common reed **g7**
 Cultivated oat **g14**
 Cultivated rye **g12**
 Cultivated wheat **g15**
 Johnson grass **g10**
 Maize, Corn **g202**
 Meadow fescue **g4**
 Meadow foxtail **g16**
 Meadow grass, Kentucky blue **g8**
 Redtop, Bentgrass **g9**
 Rye-grass **g5**
 Sweet vernal grass **g1**
 Timothy grass **g6**
 Velvet grass **g13**
 Wild rye grass **g70**

WEED POLLENS

Alfalfa **w45**
 Camomile **w206**
 Careless weed **w82**
 Cocklebur **w13**
 Common pigweed **w14**
 Common ragweed **w1**
 Dandelion **w8**
 Dog fennel **w46**
 False ragweed **w4**
 Firebush (Kochia) **w17**
 Giant ragweed **w3**
 Goldenrod **w12**
 Goosefoot, Lamb's quarters **w10**
 Japanese Hop **w22**
 Lupin **w207**
 Marguerite, Ox-eye daisy **w7**
 Mugwort **w6**
 Nettle **w20**
 Parietaria officinalis **w19**

Parietaria judaica **w21**
 Plantain (English), Ribwort **w9**
 Rape **w203**
 Rough marshelder **w16**
 Saltwort (prickly), Russian thistle **w11**
 Scale, Lenscale **w15**
 Sheep sorrel **w18**
 Sunflower **w204**
 Wall pellitory **w19**
 Wall pellitory **w21**
 Western ragweed **w2**
 Wormwood **w5**
 Yellow dock **w23**

TREE POLLENS

Acacia **t19**
 American beech **t5**
 Australian pine **t73**
 Bald cypress **t37**
 Bayberry **t56**
 Box-elder **t1**
 Cedar **t212**
 Cedar elm **t45**
 Chestnut **t206**
 Common silver birch **t3**
 Cottonwood **t14**
 Cypress **t222**
 Date **t214**
 Elder **t205**
 Elm **t8**
 Eucalyptus, Gum-tree **t18**
 European ash **t25**
 Grey alder **t2**
 Hackberry **t44**
 Hazel **t4**
 Horn beam **t209**
 Horse chestnut **t203**
 Italian/Mediterranean/Funeral cypress **t23**
 Japanese cedar **t17**
 Linden **t208**
 Maple leaf sycamore, London plane **t11**

Melaleuca, Cajeput-tree **t21**
 Mesquite **t20**
 Mountain juniper **t6**
 Mulberry **t70**
 Oak **t7**
 Oil Palm **t223**
 Olive **t9**
 Pecan, Hickory **t22**
 Peppertree **t217**
 Pine **t213**
 Privet **t210**
 Queen palm **t72**
 Red cedar **t57**
 Red mulberry **t71**
 Scotch broom **t55**
 Spruce **t201**
 Sweet gum **t211**
 Walnut **t10**
 White ash **t15**
 White hickory **t41**
 White pine **t16**
 Willow **t12**
 Virginia live oak **t218**

MICROORGANISMS

Acremonium kiliense **m202**
Alternaria alternata **m6**
Aspergillus flavus **m228**
Aspergillus fumigatus **m3**
Aspergillus niger **m207**
Aspergillus terreus **m36**
Aureobasidium pullulans **m12**
Botrytis cinerea **m7**
Candida albicans **m5**
Chaetomium globosum **m208**
Cladosporium herbarum **m2**
Curvularia lunata **m16**
Epicoccum purpurascens **m14**
Setomelanomma rostrata (*Helminthosporium halodes*) **m8**
Malassezia spp. **m227**
Mucor racemosus **m4**

Allergy

Penicillium chrysogenum
(*P. notatum*) [m1](#)
Penicillium glabrum [m209](#)
Phoma betae [m13](#)
Rhizopus nigricans [m11](#)
Staphylococcal enterotoxin A [m80](#)
Staphylococcal enterotoxin B [m81](#)
Staphylococcal enterotoxin C [m223](#)
Staphylococcal enterotoxin TSST
[m226](#)
Stemphylium herbarum (*S. botryosum*)
[m10](#)
Tilletia tritici [m201](#)
Trichoderma viride [m15](#)
Trichophyton mentagrophytes
var. *interdigitale* [m211](#)
Trichophyton rubrum [m205](#)
Ulocladium chartarum [m204](#)

EPIDERMALS AND

ANIMAL PROTEINS

Budgerigar droppings [e77](#)
Budgerigar feathers [e78](#)
Camel dander [u328](#)
Canary bird droppings [e200](#)
Canary bird feathers [e201](#)
Cat dander [e1](#)
Chicken droppings [e218](#)
Chicken feathers [e85](#)
Chicken, serum proteins [e219](#)
Chinchilla epithelium [e208](#)
Cow dander [e4](#)
Dog dander [e5](#)
Duck feathers [e86](#)
Ferret epithelium [e217](#)
Finch feathers [e214](#)
Gerbil epithelium [e209](#)
Goat epithelium [e80](#)
Goose feathers [e70](#)
Guinea pig epithelium [e6](#)
Hamster epithelium [e84](#)
Horse dander [e3](#)
Mink epithelium [e203](#)
Mouse epithelium [e71](#)
Mouse epithelium, serum proteins
and urine proteins [e88](#)
Mouse serum proteins [e76](#)
Mouse urine proteins [e72](#)
Parrot feathers [e213](#)

Pigeon feathers [e215](#)
Rabbit epithelium [e82](#)
Rabbit, serum proteins [e206](#)
Rabbit, urine proteins [e211](#)
Rat epithelium [e73](#)
Rat epithelium, serum proteins
and urine proteins [e87](#)
Rat serum proteins [e75](#)
Rat urine proteins [e74](#)
Sheep epithelium [e81](#)
Swine epithelium [e83](#)
Turkey feathers [e89](#)

MITES

Acarus siro (Storage mite) [d70](#)
Blomia tropicalis (House dust mite)
[d201](#)
Dermatophagoides farinae
(House dust mite) [d2](#)
Dermatophagoides microceras
(House dust mite) [d3](#)
Dermatophagoides pteronyssinus
(House dust mite) [d1](#)
Euroglyphus maynei
(House dust mite) [d74](#)
Glycyphagus domesticus
(Storage mite) [d73](#)
Lepidoglyphus destructor
(Storage mite) [d71](#)
Tyrophagus putrescentiae
(Storage mite) [d72](#)

ALLERGEN COMPONENTS

See page 139 for Component Testing
and Component Allergen Profiles

HOUSE DUST

Greer Labs., Inc. [h1](#)
Hollister-Stier Labs. [h2](#)

INSECTS

Berlin beetle [i76](#)
Blood worm [i73](#)
Cockroach, American [i206](#)
Cockroach, German [i6](#)
Fire ant [i70](#)
Grain weevil [i202](#)
Green nimitti [i72](#)
Horse fly [i204](#)

Mediterranean flour moth [i203](#)
Mosquito [i71](#)
Moth [i8](#)

VENOMS

Bumblebee [i205](#)
Common wasp (Yellow jacket) [i3](#)
European Paper Wasp [i77](#)
European hornet [i75](#)
Honey bee [i1](#)
Paper wasp [i4](#)
White-faced hornet [i2](#)
Yellow hornet [i5](#)

DRUGS

Amoxicilloyl [c6](#)
Ampicilloyl [c5](#)
Cefaclor [c7](#)
Chlorhexidine [c8](#)
Gelatin bovine [c74](#)
Insulin human [c73](#)
Penicilloyl G [c1](#)
Penicilloyl V [c2](#)
Pholcodine [c261](#)
Morphine [c260](#)
Suxamethonium (succinylcholine)
[c202](#)

OCCUPATIONAL

Bougainvillea [k214](#)
Cotton seed [k83](#)
Ethylene oxide [k78](#)
Ficus [k81](#)
Formaldehyde/Formalin [k80](#)
Hexahydrophthalic anhydrid [k209](#)
Isocyanate HDI (Hexamethylene
diisocyanate) [k77](#)
Isocyanate MDI (Diphenylmethane
diisocyanate) [k76](#)
Isocyanate TDI (Toluene diisocyanate)
[k75](#)
Ispaghula [k72](#)
Latex [k82](#)
Methyltetrahydrophthalic anhydrid
[k211](#)
Phthalic anhydride [k79](#)
Sunflower seed [k84](#)
Trimellitic anhydride, TMA [k86](#)

Allergy

PARASITES

Anisakis p4
Ascaris p1
Echinococcus p2

MISCELLANEOUS

Cotton, crude fibers o1
Mealworm o211
MUXF3 CCD, Bromelain o214
Seminal fluid o70
Streptavidin o212

FOODS – FRUITS & VEGETABLES

Apple f49
Apricot f237
Asparagus f261
Aubergine, eggplant f262
Avocado f96
Bamboo shoot f51
Banana f92
Beetroot f319
Blackberry f211
Blueberry f288
Broccoli f260
Brussel sprouts f217
Cabbage f216
Carrot f31
Cauliflower f291
Celery f85
Cherry f242
Cucumber f244
Date f289
Fennel, fresh f276
Fig f328
Garlic f47
Grape f259
Grapefruit f209
Kiwi f84
Lemon f208
Lettuce f215
Lime f306
Mandarin (tangerine, clementine, satsumas) f302
Mango f91
Melon f87
Olive (black, fresh) f342
Onion f48
Orange f33
Papaya f293

Passion fruit f294
Peach f95
Pear f94
Persimon (kaki fruit, sharon) f301
Pineapple f210
Plum f255
Potato f35
Pumpkin f225
Raspberry f343
Spinach f214
Strawberry f44
Sweet potato f54
Tomato f25
Watermelon f329

FOODS – SEED, LEGUMES & NUTS

Almond f20
Barley f6
Brazil nut f18
Buckwheat f11
Cashew nut f202
Chick pea f309
Coconut f36
Common millet f55
Fenugreek f305
Foxtail millet f56
Gluten f79
Green bean f315
Hazel nut f17
Lentil f235
Lima bean f182
Linseed f333
Lupin seed f335
Macadamia nut f345
Maize, Corn f8
Oat f7
Pea f12
Peanut f13
Pecan nut f201
Pine nut, pignoles f253
Pistachio f203
Poppy seed f224
Pumpkin seed f226
Quinoa f347
Rape seed f316
Red kidney bean f287
Rice f9
Rye f5
Sesame seed f10

Soybean f14
Spelt wheat f124
Sugar-beet seed f227
Sweet chestnut f299
Walnut f256
Wheat f4
White bean f15

FOODS – SPICES

Anise f271
Basil f269
Bay leaf f278
Black pepper f280
Caraway f265
Chillipepper f279
Clove f268
Coriander f317
Dill f277
Ginger f270
Green pepper (unripe seed) f263
Lovage f275
Mace f266
Marjoram f274
Mint f332
Mustard f89
Oregano f283
Paprika, Sweet pepper f218
Parsley f86
Tarragon f272
Thyme f273
Vanilla f234

FOODS – FISH, SHELLFISH & MOLLUSCS

Abalone f346
Anchovy f313
Blue mussel f37
Cat fish f369
Chub mackerel f50
Clam f207
Crab f23
Crayfish f320
Fish (cod) f3
Gulf flounder f147
Haddock f42
Hake f307
Halibut f303
Herring f205
Jack mackerel, Scad f60

Allergy

Langust (spiny lobster) f304

Lobster f80

Mackerel f206

Megrim f311

Octopus f59

Oyster f290

Pacific squid f58

Plaice f254

Pollock f413

Red snapper f381

Salmon f41

Sardine (Pilchard) f308

Sardine, Japanese Pilchard f61

Scallop f338

Shrimp f24

Sole f337

Squid f258

Swordfish f312

Tilapia f414

Trout f204

Tuna f40

Walleye pike f415

Whitefish (Inconnu) f384

FOODS – EGG & FOWL

Chicken f83

Egg f245

Egg white f1

Egg yolk f75

Turkey meat f284

FOODS – MEAT

Beef f27

Mutton f88

Pork f26

Rabbit f213

FOODS – MILK

Casein f78

Cheese, cheddar type f81

Cheese, mold type f82

Cow's whey f236

Goat milk f300

Mare's milk f286

Milk f2

Milk, boiled f231

Sheep milk f325

Sheep whey f326

FOODS – ADDITIVES

Carob (E410) f296

Guar, guar gum (E412) f246

Gum arabic (E414) f297

Cochineal extract (Carmine red) (E120)
f340

FOODS – MISCELLANEOUS

Cacao f93

Coffee f221

Malt f90






































Mushroom (champignon) f212

Tea f222

Yeast f45


































Vitamins, Nutrition and Lifestyle

Vitamins

TEST	CODE	SAMPLE REQS	TAT
1,25 Vitamin D *Serum sample stable for 3 days ambient.	D3	 *	5-8 days
Beta Carotene	CARO		5 days
Biotin CHANGE	BIOS	 ⁷	5 days
Carotenes	CARO	 ¹³	5 days
Vitamin A (Retinol)	VITA		5 days
Vitamin B (Functional)	FUNC	  or 	5 days
Vitamin B Profile	VBP	  	5 days
Vitamin B1 (Thiamine)	VIT1		5 days
Vitamin B2 (Riboflavin)	VIB2		5 days
Vitamin B3 (Nicotinamide)	VIB3		5 days
Vitamin B5 (Pantothenic Acid)	VB5S		5 days
Vitamin B6 (Pyridoxine)	VITB		5 days
Vitamin B7 (Biotin) CHANGE	BIOS	 ⁷	5 days
Vitamin B9 (Folic acid) – Red cell	RBCF		2 days
Vitamin B9 (Folic acid) – Serum	FOLA		1 day
Vitamin B12 (Active) (Venous/Self-collect)	B12	 /  (TDL Tiny)	1 day
Vitamin B12 (Active)/Red Cell Folate	B12F	 	2 days
Vitamin C (Active) *Serum should be separated and frozen within 3 hours of venepuncture.	VITC	 (spun and frozen within 3 hours)*	5 days
Vitamin D (1, 25 Dihydroxy) *Serum sample stable for 3 days ambient.	D3	 *	5-8 days
Vitamin D (25-OH) (Venous/Self-collect)	VITD	 /  (TDL Tiny)	4 hours / 1 day
Vitamin E (Alpha Tocopherol)	VITE		5 days
Vitamin K (Nutritional) * Sample should be light protected after collection, spun/separated and frozen within 24 hours of collection.	VKN	Serum (SST or ) *	5 days
Vitamin Profile 1	VITS	   ⁷	5 days
Vitamin Profile 2	VIT2	     ^{7,13}	5 days

Nutrition and lifestyle

This provides valuable diagnostic information, which can be assimilated with other diagnostic markers in the assessment of nutritional status, and compares favourably to semi-quantitative functional assays.

TEST	CODE	SAMPLE REQ	TAT
Caeruloplasmin	CERU		1 day
Copper (Serum)	COPP	 or 	5 days
Essential Fatty Acid Profile (Red Cell)	EFAR	 ⁴	10 days
Folate (Red Cell)	RBCF		2 days
Magnesium (Whole blood)	RCMG	 or 	4 days
Mineral Screen	MINE	 	5 days
Mineral Screen (Whole blood)	RMIN	 	5 days
Mineral Screen and Industrial Heavy Metal Screen (Trace Metals)	TRAC	   	7-10 days
Omega 3/Omega 6 (Venous/Self-collect)	OMG3	 ⁴ /  (TDL Tiny)	5 days
Selenium (Serum) (Venous/Self-collect)	SELE	 /  (TDL Tiny)	4 days
Sports/Performance Profile	SPOR	         ⁴	5 days
Xylose Tolerance Test	XTT	 ¹	7 days
Zinc (Serum/Plasma) CHANGE	ZINC		2 days
Zinc (Urine)	URZN		5 days
Zinc (Whole Blood)	RBCZ	 or 	5 days

Patients taking supplements may be advised to stop medication prior to testing.

Vitamins, Nutrition and Lifestyle

Mineral Screen

Calcium
Magnesium
Zinc
Iron (TIBC included)
Copper
Chromium
Manganese

TAT: 5 days

MINE

B K

Mineral Screen (Whole blood)

Whole Blood Potassium
Whole Blood Magnesium
Whole Blood Calcium
Whole Blood Manganese
Whole Blood Zinc
Whole Blood Copper
Whole Blood Selenium
Whole Blood Chromium

TAT: 5 days

RMIN

H H

Mineral Screen and Industrial Heavy Metal Screen (Trace Metals)

Aluminium
Manganese
Iron (TIBC included)
Calcium
Zinc
Magnesium
Copper
Cadmium
Mercury
Lead
Chromium

TAT: 7-10 days

TRAC

A B H K

Sports/Performance Profile

FBC/ESR
Biochemistry Profile
HDL/LDL
Ferritin
C-Reactive Protein
Omega 3/Omega 6
Mineral Screen
Vitamin B9 (Red Cell Folate)
Vitamin B12 (Active)

TAT: 5 days

SPOR

A A A B B B B G K⁴

Vitamin B Profile

Vitamin B1
Vitamin B2
Vitamin B3
Vitamin B6
Vitamin B9 (Red cell)
Vitamin B12 (Active)

TAT: 5 days

VBP

A A B

Vitamin Profile 1

Vitamin A
Beta Carotene
Vitamin B1
Vitamin B2
Vitamin B6
Vitamin D (25-OH)
Vitamin E

TAT: 5 days

VITS

A B B⁷

Vitamin Profile 2

Vitamin A
Beta Carotene
Vitamin B1
Vitamin B2
Vitamin B3
Vitamin B6
Vitamin B9 (Red Cell Folate)
Vitamin B12 (Active)
Vitamin D (25-OH)
Vitamin E

TAT: 5 days

VIT2

A A A B B^{7,13}

Essential Red Cell Fatty Acids
Omega-3/Omega-6

Omega-3 is the name given to a family of polyunsaturated fatty acids, which the body needs but cannot manufacture itself. Omega-3 fats are used as the building blocks for fat derived hormones such as prostaglandins and leukotrienes. The hormones with an Omega-3 base tend to reduce inflammation, while those that have an Omega-6 base increase inflammation. In the cell membrane the competition between these two essential fats has a direct bearing on the type of local hormone produced and the level of inflammation in the cell.

The Omega-6 to Omega-3 ratio in the cell membranes is key to the development of inflammatory disorders such as rheumatoid arthritis and heart disease. Diets low in oily fish and high in grains will promote inflammation and affect good health.

The ratio of Omega-6 to Omega-3 in the West is around 15 to 1, fifteen times more Omega-6 on the cell membrane promoting inflammation. Having twice as much Omega-6 is considered by most experts to be the optimal amount but a ratio of 2:1 is not easy to produce by diet alone. Many people are aware of the health benefits of Omega-3 but the supplementation to achieve optimal health is erratic. Being able to test for Essential Red Cell Fatty Acids (Omega-6/Omega-3 ratio) identifies a person's current status and is sufficiently specific to allow an accurate supplementation recommendation to be made.

Results show the Omega Ratio with a clear recommendation for the required level of Omega Supplementation (if any) to achieve optimal levels.

TEST	CODE	SAMPLE REQS	TAT
Omega 3/Omega 6 (Venous/Self-collect)	OMG3	A ⁴ / A (TDL Tiny)	5 days

Self-collection samples



The TDL Self-Collect range of testing has been gathering increased and important attention for healthcare services. Self-collection is being adopted across different target areas of healthcare: sexual health screening, wellness testing, genetic conditions, lifestyle review, pre-operative work ups, etc. Self-collection sampling allows patients to collect samples at home, and together with Royal Mail Tracked postal returns, facilitates safe and effective delivery of samples throughout the UK to the laboratory.

As part of the ongoing development of the TDL self-collection service, the sample collection kits ensure that TDL is aligned to regulatory requirement around ISO:13485 kit manufacture and UKCA marking across the UK. This requirement for UKCA marked kits also addresses the need for clinically approved stability and comparative performance. The interest being generated for this service ensures best attention, continued development, with regular review of the repertoire, and where possible more tests will be added to the available Self-Collection list.

The TDL Self-Collect capillary blood and sample kits include a helpful range of diagnostic and screening tests. These sample collection kits are not home test kits that provide an immediate result for the patient. Samples collected at home are all returned to the laboratory for testing, using Royal Mail Tracked 24 postal services. Results are returned directly to the healthcare organisation, doctor or healthcare

professional – not to the patient. Self-Collect kits need to be UKCA marked (or dual marked with UKCA/CE) to represent the product claims that kits are being used for the collection of samples in a non-clinic setting.

The Self-Collect kit itself allows for combinations of sample types (urine, stool, swabs) – and the range of UKCA marked kits are listed on page 155. Instructions for sample collection are enclosed in each collection kit. The best results are obtained by patients who closely follow the instructions that are provided, and by collecting enough blood drops to sufficiently fill the microtainer tube(s) in their kit. A request form or specially provided tube label must be returned with the collected sample. It is exciting that the scope of this service, together with its performance and quality standards, will be revised, developed, and updated on a regular basis.

For more details relating to this service, please email UKCAkits@tdlpathology.com



SCAN ME

Find out more information about the TDL Self-Collect kits:

[www.tdlpathology.com/
self-collect-kits/](http://www.tdlpathology.com/self-collect-kits/)

Self-collection samples

Quality is key

- **Components:** verified for the specific intended use of the kit and linked to the accredited tests performed in the laboratory.
- **Instructions:** monitored for ease of use, version controlled, with regular feedback for ongoing improvement.
- **Quality:** Management of technical files, regulatory submissions and manufactured to the required ISO:13485 medical device manufacturing standards.
- **Supply:** Assembled within the UK. Both individual kit fulfilment services and larger size kit orders are available.
- **Security:** Test kits are security sealed.
- **Accompanying information:** Request forms cannot be inserted into the sealed kits. An accompanying envelope (TDL will provide) or other clearly visible method must be sent with each kit to clearly display the request form.
- **Laboratory testing:** Verified diagnostic tests performed in an ISO:15189 accredited clinical laboratory

We recommend that all healthcare organisations and healthcare professionals using our TDL Tiny™ and TDL Self-Collect kits are up to date with latest diagnostic testing guidelines and relevant updates, including but not limited to those published by:

- UKHSA Standards for Microbiology Investigations (SMI)
- British Association of Sexual Health and HIV Guidelines (BASHH)
- Royal College of Obstetrics and Gynaecology Guidelines (RCOG)
- NICE Evidence-based recommendations on faecal immunochemical tests (DG30)
- British Society of Haematology Evidence Based Guidance (BSH)
- Association of Clinical Biochemistry (ACB)

Self-collection samples

TDL's range of kits

Respiratory virus PCR

KIT CODE	KIT TYPE	SAMPLE TYPE
KT293	Respiratory Virus Swab Collection Kit (2mL)	Oropharyngeal and Nasal swab

Capillary blood

KIT CODE	KIT TYPE	SAMPLE TYPE
KT353	Capillary Blood Collection Kit (SST)	Capillary Blood (SST)
KT354	Capillary Blood Collection Kit (EDTA)	Capillary Blood (EDTA)
KT384	Capillary Blood Collection Kit (SST x2)	Capillary Blood (SST x2)
KT355	Capillary Blood Collection Kit (SST and EDTA)	Capillary Blood (SST and EDTA)
KT423	Capillary Blood Collection Kit (SST x2 and EDTA)	Capillary Blood (SST x2 and EDTA)
KT445	Capillary Blood Collection Kit (Plain and SST)	Capillary Blood (Plain and SST)

Sexual health

KIT CODE	KIT TYPE	SAMPLE TYPE
KT356	Sexual Health Collection Kit (Urine)	Aptima Urine
KT357	Sexual Health Collection Kit (Vaginal)	Aptima multisite swab
KT358	Sexual Health Collection Kit (Blood and Vaginal)	Capillary Blood and Aptima multisite swab
KT359	Sexual Health Collection Kit (Throat and Rectal)	Aptima multisite swab x2
KT360	Sexual Health Collection Kit (Blood and Urine)	Capillary Blood and Aptima Urine
KT361	Sexual Health Collection Kit (Blood, Urine, Throat and Rectal – MSM)	Capillary Blood, Aptima Urine and Aptima multisite swab x2
KT424	Sexual Health Collection Kit (Blood, Vaginal, Throat and Rectal)	Capillary Blood and Aptima multisite swab x3
KT404	Sexual Health Collection Kit (Oral lesion)	Oral swab
KT405	Sexual Health Collection Kit (Genital lesion)	Genital swab
KT421	Sexual Health Collection Kit (Urine, Throat and Rectal – MSM)	Aptima Urine and multisite swab x2
KT425	Sexual Health Collection Kit (Throat)	Aptima multisite swab
KT426	Sexual Health Collection Kit (Rectal)	Aptima multisite swab
KT428	Sexual Health Collection Kit (Vaginal, Throat and Rectal)	Aptima multisite swab x3
KT429	Sexual Health Collection Kit (Blood, Urine, Vaginal, Throat and Rectal)	Capillary Blood, Aptima Urine and Aptima multisite swab x3

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Self-collection samples









Microbial/Viral screening

KIT CODE	KIT TYPE	SAMPLE TYPE
KT364	HPV Swab Collection Kit	Qvintip swab
KT365	MRSA Collection Kit (Nose and Groin)	Purple liquid Amies swab x2
KT422	MRSA Collection Kit (Nose, Groin and Axilla)	Purple liquid Amies swab x3
KT366	GBS Collection Kit (Vaginal and Rectal)	Blue gel Amies swab x2
KT441	Vaginitis Collection Kit (Vaginal – Culture and PCR)	Aptima multisite swab and Blue gel Amies swab
KT385	Urinalysis Collection Kit (Chemistry and Microscopy)	Urine (Universal)
KT386	Urinalysis Collection Kit (Chemistry, Microscopy and Culture)	Urine (Universal and Boric)

Gastrointestinal

KIT CODE	KIT TYPE	SAMPLE TYPE
KT362	QFIT Collection Kit	QFIT sample collection device
KT363	Faecal Collection Kit	Stool/faecal container
KT430	Faecal Collection Kit (QFIT and Stool x2)	QFIT sample collection device and stool/faecal container x2

















Please post self-collected samples on the same day they are taken, avoid posting over weekends and bank holidays.

TEST	CODE	SAMPLE REQ	TAT	KIT CODE
7 STI Profile by PCR (7 tests from 1 Sample)	DL12	Aptima urine or multisite swab	2 days	KT356 or KT357
ALEX ² Allergy Test 300 allergen panel, from single sample, supplemented by Total IgE, which includes pollens, mites, cat and dog, fur, insect venoms, moulds, yeasts, food and latex.	ALEX	 (TDL Tiny)	3-4 days	KT353
Amenorrhoea Profile (LH, FSH, PROL, TEST, TOES, SHBG, FAI) CHANGE	TAME	 (TDL Tiny)  (TDL Tiny)	1 day	KT445
Amylase	AMY	 (TDL Tiny)	1 day	KT353
Antimullerian Hormone (AMH)	AMH	 (TDL Tiny)	1 day	KT353
C Reactive Protein	CRP	 (TDL Tiny)	1 day	KT353
C Reactive Protein (High Sensitivity)	HCRP	 (TDL Tiny)	1 day	KT353
CA 125	C125	 (TDL Tiny)	1 day	KT353

Self-collection samples

TEST	CODE	SAMPLE REQ	TAT	KIT CODE
Calcium Sample integrity may be compromised on received samples older than 2 days.	CA	B (TDL Tiny)	1 day	KT353
Calcium + Vitamin D Sample integrity may be compromised on received samples older than 2 days.	CALD	B (TDL Tiny)	1 day	KT353
Calprotectin	CALP	QFIT sample collection device	5 days	KT362 or KT430
Calprotectin/QFIT Profile (Combined)	QCAL	QFIT sample collection device	5 days	KT362 or KT430
Carbohydrate Deficient Transferrin (CDT)	CDT	B (TDL Tiny)*	3 days	KT353
Chlamydia/Gonorrhoea – Rectal	RSCG	Aptima multisite swab	2 days	KT426
Chlamydia/Gonorrhoea – Throat	TSCG	Aptima multisite swab	2 days	KT425
Chlamydia/Gonorrhoea – Urine	CCG	Aptima urine	2 days	KT356
Chlamydia/Gonorrhoea – Vaginal	SCG	Aptima multisite swab	2 days	KT357
Cortisol	CORT	B (TDL Tiny)	1 day	KT353
COVID-19 (SARS-CoV-2) RNA by PCR Contact Laboratory.	NCOV	Throat and nose swab	1 day	KT293
COVID-19 (SARS-CoV-2) Roche Elecsys Anti-SARS-CoV-2 S (SPIKE)	SCOV	B (TDL Tiny)	1 day	KT353
Creatinine (including eGFR)	CREA	B (TDL Tiny)	1 day	KT353
DHEA Sulphate	DHEA	B (TDL Tiny)	1 day	KT353
DL12 7 STI Profile by PCR (7 PCR tests from 1 Sample)	DL12	Aptima urine or multisite swab	2 days	KT356 or KT357
Elastase *5 day stability time ambient.	ELAS	Stool/faecal container*	5 days	KT363 or KT430
Endomysial Antibodies (IgA)	AEAB	B (TDL Tiny)	2 days	KT353
Female Hormone Profile (LH, FSH, PROL, TOES)	TFIP	F (TDL Tiny) B (TDL Tiny)	1 day	KT445
Ferritin	FERR	B (TDL Tiny)	1 day	KT353
Free T3	FT3	B (TDL Tiny)	1 day	KT353
Free T4	FT4	B (TDL Tiny)	1 day	KT353
FSH	FSH	B (TDL Tiny)	1 day	KT353
Gastrointestinal Pathogen PCR	EORD	Stool/faecal container	2 days	KT363 or KT430
Gladin Antibodies (IgG) (deamidated)	AGAB	B (TDL Tiny)	2 days	KT353
Group B Strep – Vaginal and Rectal	GBSX	Blue gel Amies swab x2	3-5 days	KT366

Self-collection samples






TEST	CODE	SAMPLE REQ	TAT	KIT CODE
H. pylori Antigen – Stool	HBAG	Stool/faecal container	3 days	KT363 or KT430
HbA1c	GHB	 (TDL Tiny)	1 day	KT354
Hepatitis B Immunity (IgG)	THBI	 (TDL Tiny)	1 day	KT353
Hepatitis B Surface Antigen	THBA	 (TDL Tiny)	1 day	KT353
Hepatitis C Antibodies	THCV	 (TDL Tiny)	1 day	KT353
Hepatitis C Antigen (Early detection)	TCAG	 (TDL Tiny)	1 day	KT353
Herpes Simplex (HSV) 1 & 2 – Genital lesion	HERS	Aptima multisite swab	5 days	KT405
Herpes Simplex (HSV) 1 & 2 – Oral lesion	HERS	Aptima multisite swab	5 days	KT404
HIV 1 & 2 Abs/p24Ag	THIV	 (TDL Tiny)	1 day	KT353
HPV (Individually typed high risk DNA subtypes)	HPVZ	Qvintip vaginal swab	3 days	KT364
HPV (mRNA all high risk subtypes)	HPVY	Qvintip vaginal swab	3 days	KT364
Iron (TIBC included)	FE	 (TDL Tiny)	1 day	KT353
Iron Status Profile	ISP	 (TDL Tiny)	1 day	KT353
ISAC Panel 112 allergen panel from single sample which includes components from 48 preselected allergen sources	ISAC	 (TDL Tiny)	3 days	KT353
Lipase	LIPA	 (TDL Tiny)	1 day	KT353
Lipid Profile	LIPP	 (TDL Tiny)	1 day	KT353
Lipoprotein (a)	LPOA	 (TDL Tiny)	1 day	KT353
Liver Function Tests (Excluding AST/ALT)	TLFT	 (TDL Tiny)	1 day	KT353
Luteinising Hormone (LH)	LH	 (TDL Tiny)	1 day	KT353
Lymphogranuloma Venerium (LGV) – Rectal *	LGVP	Aptima multisite swab	1-2 weeks	KT426
* This test can be configured to be automatically reflexed as required.				
Menopausal Profile (FSH, LH, TOES, TSH, FT4)	TMEN	 (TDL Tiny)  (TDL Tiny)	1 day	KT445
Monkeypox Virus – Lesion	MPXV	Aptima multisite swab	2 days	KT405
MRSA Culture – Nose/Groin	MRW2	Purple liquid Amies swab x2	2 days	KT365
MRSA Culture – Nose/Groin/Axilla	MRW3	Purple liquid Amies swab x3	2 days	KT422
MRSA PCR – Nose/Groin	MRS2	Purple liquid Amies swab x2	1 day	KT365
MRSA PCR – Nose/Groin/Axilla	MRS3	Purple liquid Amies swab x3	1 day	KT422

Self-collection samples

TEST	CODE	SAMPLE REQS	TAT	KIT CODE
Mycoplasma genitalium Detection – Urine or Vaginal	MGEN	Aptima urine or multisite swab	2 days	KT356 or KT357
Mycoplasma genitalium Resistance – Urine or Vaginal * * This test can be configured to be automatically reflexed as required.	MGR	Aptima urine or multisite swab	1-2 weeks	KT356 or KT357
Oestradiol Requests for a single self-collect Oestradiol [TOES] requires 1 x F (TDL Tiny) only.	TOES	F (TDL Tiny)	1 day	KT445
Omega 3/Omega 6	OMG3	A (TDL Tiny)	5 days	KT354
PEth (Phosphatidylethanol)	PETH	A (TDL Tiny) ³⁸	5-7 days	KT354
PLAC Test (Lp-PLA2)	PLA2	B (TDL Tiny)	2 days	KT353
Progesterone	PROG	B (TDL Tiny)	1 day	KT353
Prolactin	PROL	B (TDL Tiny)	1 day	KT353
Prostate Specific Antigen (Total)	PSPA	B (TDL Tiny)	1 day	KT353
QFIT/Calprotectin Profile (Combined)	QCAL	QFIT sample collection device	5 days	KT362 or KT430
Quantitative Faecal Immunochemical Test (QFIT)	QFIT	QFIT sample collection device	1 day	KT362 or KT430
Respiratory PCR Panel (COVID-19, Flu A/B and RSV)	FLU4	Throat and nose swab	1 day	KT293
Selenium (Serum)	SELE	B (TDL Tiny)	4 days	KT353
Sex Hormone Binding Globulin	SHBG	B (TDL Tiny)	1 day	KT353
STI Profile by PCR (7 tests from 1 Sample)	DL12	Aptima urine or multisite swab	2 days	KT356 or KT357
STI Profile: MSM1 (Blood + Urine/Throat/Rectal Swabs)	MSM1	B (TDL Tiny) / Aptima Urine / Aptima multisite swab x 2	2 days	KT361
STI Profile: MSM2 (Blood + Urine/Throat/Rectal Swabs)	MSM2	B (TDL Tiny) / Aptima urine / Aptima multisite swab x 2	3 days	KT361
Syphilis IgG/IgM	TSYP	B (TDL Tiny)	1 day	KT353
Testosterone	TEST	B (TDL Tiny)	1 day	KT353
Testosterone (Free)	FTES	B (TDL Tiny)	3 days	KT353
Thyroid Abs (Thyroglobulin + Thyroid Peroxidase Abs)	THAB	B (TDL Tiny)	2 days	KT353
Thyroid Profile 1 (FT4/TSH)	TF	B (TDL Tiny)	1 day	KT353
Thyroid Profile 3 (FT3/FT4/TSH)	TF3	B (TDL Tiny)	1 day	KT353
Tissue Transglutaminase IgA (Coeliac)	TAA	B (TDL Tiny)	2 days	KT353

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.

Self-collection samples

TEST	CODE	SAMPLE REQS	TAT	KIT CODE
Trichomonas Vaginalis (TV) – Urine or Vaginal	TVPC	Aptima urine or multisite swab	2 days	KT356 or KT357
Triple Swab Female STI Profile (Vaginal/Throat/Rectal Swabs)	3SWA	Aptima multisite swab x 3 (label by site)	2 days	KT428
TSH	TSH	 (TDL Tiny)	1 day	KT353
Urea	UREA	 (TDL Tiny)	1 day	KT353
Urea/Creatinine/eGFR	TCU	 (TDL Tiny)	1 day	KT353
Urine Chemistry and Microscopy	UMIC	Urine (Universal). Mid stream.	1-2 days	KT385
Urine Chemistry, Microscopy and Culture	UCEM	Urine (Universal & Boric). Mid stream.	1-2 days	KT386
Vaginitis/BV Profile using Culture & PCR Swab	STD8	Aptima multisite swab and Blue gel Amies swab	3-5 days	KT441
Vitamin B12 (Active)	B12	 (TDL Tiny)	1 day	KT353
Vitamin D (25-OH)	VITD	 (TDL Tiny)	1 day	KT353

Screening for Drugs of Abuse/Alcohol

TEST	CODE	SAMPLE REQ	TAT
Alcohol Profile	AP	A B B G	5-7 days
Alcohol Profile 2	ALCP	A A B B G RU	5-7 days
Amphetamines – Blood	AMPB	B B	5 days
Cannabinoids (Urine) Screen	CANN	RU	1 day
Cocaine (Urine) Screen	UCOC	RU	1 day
Drugs of Abuse from Blood without Chain of Custody	DOAP	B	5 days
Drugs of Abuse Profile – Random Urine Sample/No Chain of Custody	DOA	RU	2 days (5 days with LC-MS/MS confirmation)
Drugs of Abuse Profile – Random Urine Sample/No Chain of Custody Plus Alcohol	DOA3	RU	2 days (5 days with LC-MS/MS confirmation)
Drugs of Abuse Profile – With Chain of Custody*	DOAL	RU/CoC Collection Containers^{1,2}	2 days (5 days with LC-MS/MS confirmation)
*Appointment required at 76 Whitfield Street and Photo ID to be shown.			
Drugs of Abuse Profile – Without Chain of Custody	DOAN	RU²	2 days (5 days with LC-MS/MS confirmation)
Ketamine Screen	KETA	RU	7-10 days
LSD	LSD	RU	5 days
Opiate Screen (Urine)	UOPI	RU	2 days
PEth (Phosphatidylethanol) (Venous/Self-collect)	PETH	A³⁸ / A (TDL Tiny)³⁸	5-7 days
Urine EtG (Ethyl glucuronide)	ETG	RU	1 week

Alcohol Profile

LFT
Alcohol Level
PEth
CDT
MCV

TAT: 5-7 days

AP

A B B G

Alcohol Profile 2

LFT
Alcohol Level
PEth
CDT
MCV
Urine Ethyl Glucuronide (EtG)

TAT: 5-7 days

ALCP

A A B B G RU

Drugs of Abuse from Blood without Chain of Custody

Amphetamines
Barbiturates
Tricyclic Antidepressants
Benzodiazepine
Cannabinoids
Opiates
Cocaine

TAT: 5 days

DOAP

B

Screening for Drugs of Abuse/Alcohol

Drugs of Abuse Profile – Random Urine Sample/ No Chain of Custody

Amphetamines
Barbiturates
Benzodiazepine
Cannabinoids
Cocaine
Codeine – opiate
Dihydrocodeine – opiate
MDMA
Methadone
Morphine – opiate

TAT: 2 days (5 days with LC-MS/MS confirmation)

DOA

RU

Drugs of Abuse Profile – Random Urine Sample/No Chain of Custody Plus Alcohol

Alcohol
Amphetamines
Barbiturates
Benzodiazepine
Cannabinoids
Cocaine
Codeine – opiate
Dihydrocodeine – opiate
MDMA
Methadone
Morphine – opiate

TAT: 2 days (5 days with LC-MS/MS confirmation)

DOA3

RU

Drugs of Abuse Profile – With Chain of Custody*

Alcohol
Amphetamines
Barbiturates
Benzodiazepine
Cannabinoids
Cocaine
Codeine – opiate
Dihydrocodeine – opiate
Ketamine
LSD
MDMA
Methadone
Methaqualone
Morphine – opiate
Phencyclidine
Propoxyphene

*Appointment required at Patient Reception and Photo ID to be shown

TAT: 2 days (5 days with LC-MS/MS confirmation)

DOAL

RU/CoC Collection Containers ^{1,2}

Drugs of Abuse Profile – Without Chain of Custody

Alcohol
Amphetamines
Barbiturates
Benzodiazepine
Cannabinoids
Cocaine
Codeine – opiate
Dihydrocodeine – opiate
Ketamine
LSD
MDMA
Methadone
Methaqualone
Morphine – opiate
Phencyclidine
Propoxyphene

TAT: 2 days (5 days with LC-MS/MS confirmation)

DOAN

RU ²

Occupational Health

Trace metals in blood

TEST	CODE	SAMPLE REQS	TAT
Aluminium (Blood)	ALUM	K	7 days
Arsenic (Blood)	ARS	A or H	5 days
Cadmium (Blood)	CADM	A or H	5 days
Chromium (Blood)	CHRO	A	5 days
Copper (Serum)	COPP	B or K	5 days
Lead (Blood)	LEAD	A	5 days
Lead Profile (Hb, ZPP, Lead)	LEAZ	A ¹³	3-5 days
Magnesium (Serum)	MG	B	4 hours
Manganese (Serum)	MANG	B	5 days
Mercury (Blood)	MERC	A or H	5 days
Nickel (Serum)	NICK	B	5 days
Silver (Blood)	SILV	B	5 days
Trace Metal (Blood) Profile	TRAC	A B H K	7-10 days
Zinc (Serum/Plasma) CHANGE	ZINC	K	2 days

Trace metals in urine

TEST	CODE	SAMPLE REQS	TAT
Aluminium (Urine)	ALUU	RU	1-2 weeks
Arsenic (Urine)	ARSE	RU ³⁰	5 days
Cadmium (Urine)	URCD	RU ³⁰	5 days
Chromium (Urine)	URCR	RU ³⁰	4 weeks
Cobalt (Urine)	COBA	RU ³⁰	5 days
Copper (Urine)	URCU	CU	5 days
Lead (Urine)	URPB	RU	5 days
Magnesium (Urine)	URMG	PU	1 day
Mercury (Urine)	URHG	RU ¹	5 days
Nickel (Urine)	NICU	RU	4 weeks
Silver (Urine)	USIL	RU	5 days
Zinc (Urine)	URZN	CU	5 days

Tests for specific exposure

TEST	CODE	SAMPLE REQ	TAT
2-Butanone GC	BUTA	RU	7 days
2-Furoic Acid	2FA	RU	10 days
Acetone – Blood	ACTB	A or H	2 weeks
Acetone – Urine	ACTU	RU	5 days
Alcohol Profile	AP	A B B G	5-7 days
Alcohol Profile 2	ALCP	A A B B G RU	5-7 days
Benzene	BENZ	J ^{1,6}	3 days
Beta 2 Microglobulin (Serum)	B2MG	B	2 days
Beta 2 Microglobulin (Urine)	UB2M	RU	3 days
Bromide	BROM	B	3 days
Cholinesterase (Serum/Pseudo)	CHPS	B	4 hours
Doxepin Level (Sinequan)	DOXE	A	10 days
MBOCA in Urine	MBOC	RU	10 days
Molybdenum (Serum)	MOLY	B	5 days
Thallium (Blood)	THAL	A / H	1 week
Thallium (Urine)	URTH	RU	1 week
Toluene (Blood)	TOL	J	10 days
Toluene (Urine)	UTOL	RU	10 days
Trichloracetic Acid (Urine)	UTCA	RU	5 days
Xanthine – Blood	XANB	A	2 weeks
Xylene – Urine	UXYL	RU ³⁰	2 weeks
Zinc Protoporphyrin	ZNPR	A	5 days

Alcohol Profile

LFT
Alcohol Level
PEth
CDT
MCV

TAT: 5-7 days

AP

A B B G

Alcohol Profile 2

LFT
Alcohol Level
PEth
CDT
MCV
Urine Ethyl Gluconaride (EtG)

TAT: 5-7 days

ALCP

A A B B G RU

Trace Metal (Blood) Profile

Aluminium Manganese
Iron (TIBC included)
Calcium Zinc
Magnesium Copper
Cadmium Mercury
Lead Chromium

TAT: 7-10 days

TRAC

A B H K

Cervical Screening

The cervical cytology laboratory provides a rapid service for liquid based cervical samples. All Diagnostic (Non-Gynaecological) Cytology samples are referred to a UKAS accredited laboratory for reporting.

Human papilloma virus (HPV), Chlamydia and Gonorrhoea testing is carried out routinely from ThinPrep vials and can be requested at the time the cervical sample is taken.

Laboratory hours

The laboratory department is open 9.00am to 6.00pm. Out-of-hours results are available on 020 7307 7373.

Urgent samples

It is helpful if requests for urgent samples can be discussed with the Senior Management Team. Please telephone **020 7307 7387**.

Use of service/Information required

Request forms must include 3 identifiers (this can be patient's full name = 1, date of birth, hospital number or reference number). Samples will not be processed without a request form. TDL Request Forms do not include the information required for NHS requests for cervical cytology and should not be used for NHS requests.

Appropriate clinical information providing previous treatment/histological diagnosis is essential to ensure correct management recommendations can be given in the patient report. Tick boxes are provided to assist you.

The specimen container must be clearly labelled with patient details. Forms and samples which are mismatched will result in the sample being returned to the sender for correction and will delay the report turn around time.

Clinical advice

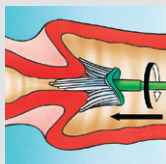
The Consultant Cytopathologists and the Consultant Biomedical Scientist work together to provide clinical and technical advice, including recommendations for follow-up, HPV testing and management of complex cases. TDL will provide recommendation for patient management, but not undertake to provide a direct referral. No result will be entered onto the NHS CSP database and will therefore not be part of an individual's NHS screening record. Failsafe and management of the patient and their follow up, including referral for colposcopy where indicated, would need to be arranged by their referring clinician. To contact the department directly, please **020 7307 7387**.

Cervical Screening



RECORD...

...the patient's 3 identifiers to include date of birth on the vial, and the patient information and medical history on the cytology requisition form. TDL Request Forms do not include the information required for NHS requests and should not be used for NHS requests.



OBTAIN...

...an adequate sample from the cervix using a Cervex Brush (broom-like device). Insert the central bristles of the brush into the endocervical canal deep enough to allow the shorter bristles to fully contact the ectocervix. Push gently and rotate the brush in a clockwise direction five times.



RINSE...

...the Cervex Brush immediately into the PreservCyt Solution vial by pushing it into the bottom of the vial 10 times, forcing the bristles apart. As a final step, swirl the brush vigorously to further release material. Visually inspect the Cervex Brush to ensure that no material remains attached. Discard the brush.

Do not leave the head of the Cervex Brush in the vial. Check the vial is in date before use.



TIGHTEN...

...the cap so that the black torque line on the cap passes the black torque line on the vial. Do not over-tighten.



PLACE...

...the vial and request form in a specimen bag for transportation to TDL.

ThinPrep® PAP Test Cervex Brush Protocol

Prepare all equipment before starting the procedure

- Note expiry date on sample collection vial. Do not use expired vials.
- Ensure the entire plastic seal is removed from the lid of the vial and discarded.
- Complete patient details on both the request form and the vial.
Specimens may be returned or discarded if details are missing from the vial.
- Remove the lid from the vial before taking the sample.
- Use of lubricant is not recommended.

DO

- If excessive mucus is present, this should be gently removed before sampling.
- Use either the Cervex Brush (broom-like device) on its own or a Plastic spatula and endocervical brush combination.
- The Cervex Brush should be rotated 5 times in a clockwise direction. The Plastic spatula should be rotated through 360 degrees and the endocervical brush rotated through one quarter to one half turn.
- Immediately rinse the collected material into the vial.
- Replace the lid and tighten so that the black torque line on the cap passes the black torque line on the vial to avoid leakage.
- Keep the unlabelled portion of the sample vial free of labels so that the contents can be seen.
- If barcoded labels are used these must be applied horizontally around the vial.
- Samples should be sent to the laboratory without delay.

DON'T

- DO NOT leave the head of the Cervex Brush in the vial.
- DO NOT routinely clean the cervix or take a cervical swab before taking a cervical sample.
- An endocervical brush should never be used in isolation.
- DO NOT under any circumstances use a wooden spatula.
- DO NOT leave the collection device sitting in the vial whilst dealing with the patient.
- DO NOT over-tighten the lid on the vial.
- DO NOT place multiple labels on the outside of the vial.
- DO NOT apply barcoded labels vertically on the vial.
- DO NOT use expired vials.
- DO NOT delay the sending of vials to the laboratory. The sample needs to be processed within 3 weeks of collection.
- DO NOT use excessive lubricant – please avoid if possible.

Cervical Screening

Gynaecological Samples

The Cytology department processes cervical samples directly referred from all sectors of practice – Health screening, Occupational health, GP’s, Consultants, Colposcopy units, Clinics, Hospitals and other Laboratories.

Liquid Based Cytology (LBC) is processed using the Hologic ThinPrep system. The Doctors Laboratory uses the Hologic Imaging system as an enhanced Quality Control.

Information for sample takers is available by contacting the department. Important: the head of the cervical broom must NOT be left in the vial.

The use of lubricant interferes with LBC sampling and may result in an inadequate sample. Use of lubricant is NOT recommended as it can affect the processing quality of the sample. Supplies of thin prep vials are available from TDL.

STI Screening from Hologic Thin Prep Vial

Tests are priced individually. Please request tests individually. Requests for additional test can be made by contacting the laboratory by telephone on **020 7307 7373** or by email to **addons@tdlpathology.com**.

Infection by PCR (single tests)

TEST	CODE	SAMPLE REQ	TAT
Chlamydia	TPCR	TPV	2 days
Chlamydia/Gonorrhoea	TCG	TPV	2 days
Chlamydia/Gonorrhoea/Trichomonas	TCGT	TPV	2 days
Gardnerella vaginalis	GVPC	TPV	2 days
Gonorrhoea	TGON	TPV	2 days
Herpes Simplex I/II	HERD	TPV	5 days
Mycoplasma genitalium	MGEN	TPV	2 days
Mycoplasma genitalium/Ureaplasma	MUPC	TPV	2 days
Trichomonas vaginalis	TVPC	TPV	2 days
Ureaplasma urealyticum	UGEN	TPV	2 days

Multiple tests from a single sample

TEST	CODE	SAMPLE REQ	TAT
7 STI Profile by PCR (7 tests from 1 Sample) Chlamydia trachomatis, Neisseria gonorrhoea, Mycoplasma genitalium, Ureaplasma species, Trichomonas vaginalis, Gardnerella vaginalis, Herpes Simplex I/II	PP12	TPV	2 days

Cervical Screening

Human papillomavirus (HPV)

Human papillomavirus (HPV) is a common virus transmitted through sexual contact. High Risk sub-types of HPV (HR-HPV) are linked to the development of abnormal cells and can cause cervical cancer. HPV is a necessary cause of invasive cervical cancer. Evidence shows HPV testing is a more effective way to identify women at risk of cervical cancer than by screening microscopically for abnormal cells from a PAP test.

HR-HPV testing has been used as the primary cervical screening test in the UK since 2019 to identify women with low grade cytology abnormalities and as a follow up test of cure in women who have received treatment. In 2017 the UK NHSCSP recommended that **testing for HPV should replace cytology as the first (primary test) in cervical screening**. Primary HR-HPV testing has higher sensitivity for high grade CIN than primary cytology. HR-HPV testing also has a lower false negative rate than cytology. Primary HR-HPV testing was fully implemented in the UK during 2020. Sample-taking remains unchanged: HR-HPV testing is carried out from Thin Prep samples. Cytology will be undertaken as a triage if HPV is DETECTED.

What does this change mean?

It means that HPV testing is the **FIRST LINE TEST**. It will be carried out as a single test, with a single result reported as Detected/Not Detected.

- If HR-HPV is **NEGATIVE** (Not Detected) – this means no further testing is needed for your patient: she returns to Routine Recall
- If HR-HPV is **POSITIVE** (Detected) – this means that **CYTOLOGY** will be processed from the same Thin Prep Vial.
A further specimen is not required.

- **If the result from the sample is HR-HPV NOT DETECTED** – the patient Recall will be determined by the screening history and will either be a repeat HR-HPV test in 12 months' time or, if HR-HPV remains persistent, a referral to colposcopy will be recommended.
- **If the CYTOLOGY result from the sample is ABNORMAL** the recommendation is to refer this patient for colposcopy or manage at the clinician's discretion.

<https://www.gov.uk/government/publications/cervical-screening-programme-and-colposcopy-management/2-providing-a-quality-colposcopy-clinic>

All TDL requests for HPV are processed as follows:

- If HPV is requested as a single test and the result is Negative/Not Detected, cervical cytology (PAPT) would only be processed if specifically requested. Should HPV and PAPT be undertaken, there would be a charge for both the HPV and the PAPT.
- If the HPV result is HR-HPV Detected, cervical cytology (PAPT) will be processed, even if the PAPT has not been requested. The PAPT will not be charged.

Understanding the significance of HPV testing

The benefit of a negative HPV result is its negative predictive value. A negative HPV result indicates that a patient is a very low risk of developing cervical disease. However neither HPV testing nor negative cervical cytology are able to reduce the risk to zero. The negative predictive value of both DNA and mRNA testing is the same. DNA tests detect the presence of viral oncogenic expression.

Cervical Screening

Requests for Cervical Cytology as a single test are no longer processed without testing for HPV. In these circumstances, the HPV test will be charged in addition to the Cervical Cytology.

Requests for HPV as the PRIMARY TEST will reflex to Cervical Cytology if HR-HPV is Detected/Positive at no additional charge.

Requests for HPV Primary Screening as a single test

TEST	CODE	SAMPLE REQS	TAT
HPV (HR mRNA types 16, 18 + others)	HPVH	TPV	3 days

If HR-HPV is DETECTED/POSITIVE, cervical cytology (PAPT) will be processed **without charge**. The PAPT will be processed from the same vial.

Requests for HP20 as a single test

TEST	CODE	SAMPLE REQS	TAT
HPV (Individually typed low & high risk DNA subtypes)	HP20	TPV/PCR Swab	3 days

HPV low and high risk DNA subtypes will be reported individually (9 low and 19 high risk). If High Risk DNA subtypes are positive then Cervical Cytology (PAPT) using the same vial will be processed **without charge**.

Requests for HPV T as a single test

TEST	CODE	SAMPLE REQS	TAT
HPV (DNA and reflexed mRNA)	HPVT	TPV	5 days

If one or more of DNA types 16, 18, 31, 33, 45 are DETECTED/POSITIVE, reflex testing for expression of E6/E7 oncoproteins will be undertaken and Cervical Cytology (PAPT) will be processed **without charge**. The PAPT will be processed from the same vial.

Requests for Cervical Cytology (PAPT)

TEST	CODE	SAMPLE REQS	TAT
Cervical Cytology	PAPT	TPV	6 days (combined report)
Cervical Cytology + HPV H	PAPT + HPV H	TPV	6 days (combined report)

If PAPT is requested as a single test, HR-HPV will be undertaken additionally, and a combined report will be issued. **PAPT and HPV H will be charged as two separate tests.**

Requests for Cervical Cytology (PAPT) with selected HPV (HPV H or HP20 or HPV T)

TEST	CODE	SAMPLE REQS	TAT
Cervical Cytology + HPV H	PAPT + HPV H	TPV	6 days (combined report)
Cervical Cytology + HP20	PAPT + HP20	TPV/PCR Swab	6 days (combined report)
Cervical Cytology + HPV T	PAPT + HPV T	TPV	6 days (combined report)

Where HPV result is reported with Cervical Cytology, a recommendation for patient management will be given, based on the combined findings.

Self-collection HPV samples

TDL Self-Collection HPV Test

Human Papillomavirus (HPV) is the primary cause of nearly all cervical cancer. In most cases, the HPV virus is harmless and causes no symptoms. Most women who acquire HPV are able to clear the infection through their own immune systems. Persistent presence of high-risk types of HPV can cause cervical lesions which over time may develop into cancer if untreated. Testing for HPV determines the presence, or absence, of HPV and will determine whether the HPV type present is high risk for CIN and cervical cancer.

The Self-Collection HPV Test provides women with the option to self-collect a vaginal specimen that is then sent to the laboratory for testing. There is well documented high level of concordance between the HPV DNA results from self-collected and clinician-collected specimens.

The Self-Collection HPV Test is validated, using a CE marked sample collection device for vaginal cell collection. This sample is then sent to the laboratory for processing for 19 high risk HPV DNA subtypes. A negative result means that these high-risk subtypes HPV were not detected and the patient is at extremely low risk of developing high-grade cervical disease/CIN2+ before their next routine visit.

A positive HPV result might indicate an increased risk of developing CIN/cervical cancer, and the report from the laboratory will provide a clear recommendation for follow-up/colposcopy.

The value of HPV DNA testing in cervical cancer screening and disease detection has been proven over and over again. Self-collection of specimens for HPV testing is not intended to replace existing patient management pathways but allows for:

- Those who wish to test following a change of sexual partner
- Option for identifying individual high risk DNA subtypes
- Personal preference to self-collect vaginal samples
- An acceptable option for women who avoid having regular cervical smears
- Self-collection for HPV increases acceptability and coverage rate of cervical cancer prevention

Results will always be sent to the requesting clinician, clinic or healthcare organisation.

HPVY

Self-Collected HPV DNA incorporating a collective of high risk subtypes.

HPVZ

Self-Collected HPV DNA with **individual** reporting of all High Risk subtypes (16, 18, 31, 33, 45, 35, 39, 51, 52, 56, 58, 59, 66, 68, 26, 53, 69, 73, 82).

For more information, or to order Self-Collection HPV Test Packs, please contact Annette Wilkinson on **020 7307 7373** or annette.wilkinson@tdlpathology.com

TEST	CODE	SAMPLE REQS	TAT
HPV (Individually typed high risk DNA subtypes) (Self-collect)	HPVZ	Qvintip vaginal swab	3 days
HPV (mRNA all high risk subtypes) (Self-collect)	HPVY	Qvintip vaginal swab	3 days

Non-Gynae Cytology

Non-Gynaecological Cytology

Cerebrospinal fluid (CSF)

Ideally CSF should be submitted fresh or as an air dried cytospin slide, unstained and in a plastic transport slide box. A minimum of 3mls should be submitted either in fresh form or spun on multiple slides for cytopathologists' review and opinion. Please contact TDL Cytology for advice if required on 020 7307 7323 /7373.

Fluids

All available material should be submitted in a sterile container without fixative as quickly as possible. If any delay is anticipated, the material should be submitted in cytolyt fixative.

Urines

To prevent cell degeneration it is advisable to collect urine samples in a sample pot containing preservative (available from TDL Supplies). Use of preservative will ensure the cellular material is preserved up to 48 hours.

Ideally 10 mls (excluding preservative)

from a freshly fully voided urine (when the bladder is emptied) mid-morning sample should be submitted for cytological assessment. If microbiology or chemistry investigations are also required, **please submit separate urine samples** and mark the vials accordingly. A mid-stream urine sample is NOT recommended for cytological assessment as it could lead to a low cellular yield. If a delay of greater than 24 hours in reaching the laboratory is anticipated samples should be refrigerated at 4°C.

Sputum

Sputum should be collected on at least three occasions if underlying lung carcinoma is suspected. A single sputum is sufficient for microbiological assessment. Sputum should be sent to the laboratory immediately following production, or stored in a universal container containing cytolyt cell fixative if there is a likely delay. Please note that this is only acceptable if sputum is only for Cytology. Microbiology cannot be performed on fixed material. Early morning sputum is ideal, but contamination with food, toothpaste and tobacco should be avoided.

TEST	CODE	SAMPLE REQs	TAT
Fluid Cytology	CATF	Fluid ⁴	3 days
Urine Cytology (Urine cytology containers available from TDL Supplies)	URCY	Urine (30mls) ²¹	2 days

Histopathology

TDL's Histopathology service supports a full range of pathology sub-specialities.

To prevent tissue degeneration, it is advisable to collect histopathology samples in sample pot(s) containing preservative, usually formalin, to at least ten times the volume of the tissue sample (available from TDL Supplies). Use of preservative will ensure that the tissue architecture and microscopic appearances of specimens are preserved.

Patient demographics, together with clinical and sample details need to be provided with the specimens. Testicular investigations for reproductive investigations are best submitted fixed in Bouins solution. Requests for products of conception require the patient's signed consent/instruction regarding sensitive disposal when the histopathology is complete. Please contact **020 7307 7380** or **020 7307 7373** for information or any query relating to histopathology.

All specimens are initially stained with H&E. However special stains and immunohistochemistry (IHC) may be recommended if additional information is needed to provide a more detailed analysis. The choice of stain depends on the findings on initial assessment, the clinical context and the preference of the pathologist within their specialist expertise. IHC may be added when routine or regular histological testing is not sufficient to form a diagnosis. There are additional charges for special stains and immunohistochemistry.

CATEGORY	CODE	TISSUE SAMPLE
Breast	HIS1	Breast Capsule
Breast	HIS4	Breast Reduction (Bilateral)
Breast	HIS3	Breast Reduction (Unilateral)
Breast	HIS2	Breast Tissue
Breast	HIS2	Cavity Shavings
Breast	HIS1	Core Biopsy (1 Specimen)
Breast	HIS2	Core Biopsy (2 Specimens)
Breast	HIS3	Core Biopsy (3 Specimens)
Breast	HIS4	Core Biopsy (4 Specimens)
Breast	HIS3	Lumpectomy
Breast	HIS5	Mastectomy (simple)/Wide Local Excision (WLE)
Breast	HIS5+HIS4	Mastectomy + Axillary Clearance
Breast	HIS4	Microdochectomy
Breast	HIS2	Nipple
Breast	HIS5	Sentinal Nodes
Cardiac	HIS3	Aorta
Cardiac	HIS2	Cardiac Biopsy
Cardiac	HIS3	Cardiac Tumour Excision

Histopathology

CATEGORY	CODE	TISSUE SAMPLE
Cardiac	HIS2	Heart Valves
Cardiac	HIS2	Mediastinal Tissue
Cardiac	HIS2	Pericardium
Cardiac	HIS2	Temporal Artery Biopsy
Endocrine	HIS5	Adrenal
Endocrine	HIS4	Parathyroid
Endocrine	HIS4	Thyroid (Lobe)
Endocrine	HIS5	Thyroid (Total)
ENT – Biopsy	HIS2	Bronchial Biopsy
ENT – Biopsy	HIS1	Cholesteatoma
ENT – Biopsy	HIS1	Dental Cyst
ENT – Biopsy	HIS1	Ear Canal Biopsy
ENT – Biopsy	HIS1	Ear Polyp
ENT – Biopsy	HIS1	Epiglottis
ENT – Biopsy	HIS1	Gingival Tissue
ENT – Biopsy	HIS1	Laryngeal Biopsy
ENT – Biopsy	HIS2	Laryngeal Nodule (Bilateral)
ENT – Biopsy	HIS1	Laryngeal Nodule (Unilateral)
ENT – Biopsy	HIS2	Mandible Biopsy
ENT – Biopsy	HIS2	Maxillary Mucosa
ENT – Biopsy	HIS2	Mucocele
ENT – Biopsy	HIS1	Nasal Biopsy
ENT – Biopsy	HIS1	Nasal Polyps
ENT – Biopsy	HIS1	Oral Biopsy
ENT – Biopsy	HIS1	Palatal Biopsy
ENT – Biopsy	HIS1	Pharyngeal Biopsy
ENT – Biopsy	HIS2	Pleural Biopsy
ENT – Biopsy	HIS1	Thyroid Biopsy
ENT – Biopsy	HIS1	Tongue Biopsy
ENT – Biopsy	HIS1	Tonsil (1 Specimen)
ENT – Biopsy	HIS2	Tonsil Biopsy
ENT – Biopsy	HIS2	Tonsils (2 Specimens)
ENT – Biopsy	HIS2	Uvelectomy
ENT – Biopsy	HIS1	Vocal Chords
ENT – Resections	HIS5+HIS2	Glossectomy

Histopathology

CATEGORY	CODE	TISSUE SAMPLE
ENT – Resections	HIS5	Laryngectomy
ENT – Resections	HIS5+HIS2	Maxillectomy
ENT – Resections	HIS5+HIS2	Neck Dissection
ENT – Resections	HIS5+HIS5	Neck Dissection (Bilateral)
ENT – Resections	HIS4	Parotidectomy
ENT – Resections	HIS4	Partial Thyroidectomy
ENT – Resections	HIS5+HIS5	Pharyngectomy
ENT – Resections	HIS5+HIS2	Rhinectomy
ENT – Resections	HIS3	Submandibular Gland – Excision
ENT – Resections	HIS2	Thyroglossal Cyst
GI Endoscopic – Biopsy	HIS1	Bile Duct Biopsy
GI Endoscopic – Biopsy	HIS1	Colonic Polyp
GI Endoscopic – Biopsy	HIS1	Endoscopic Biopsy (1 specimen)
GI Endoscopic – Biopsy	2H1	Endoscopic Biopsy (2 specimens)
GI Endoscopic – Biopsy	3H1	Endoscopic Biopsy (3 specimens)
GI Endoscopic – Biopsy	4H1	Endoscopic Biopsy (4 specimens)
GI Endoscopic – Biopsy	5H1	Endoscopic Biopsy (5 specimens)
GI Endoscopic – Biopsy	6H1	Endoscopic Biopsy (6 specimens)
GI Endoscopic – Biopsy	7H1	Endoscopic Biopsy (7 specimens)
GI Endoscopic – Biopsy	8H1	Endoscopic Biopsy (8 specimens)
GI Endoscopic – Biopsy	9H1	Endoscopic Biopsy (9 specimens)
GI Endoscopic – Biopsy	10H1	Endoscopic Biopsy (10-15 specimens)
GI Endoscopic – Biopsy	HIS5	Liver Biopsy – Medical
GI Endoscopic – Biopsy	HIS3	Liver Biopsy – Tumour
GI Endoscopic – Biopsy	HIS3	Omental Biopsy
GI Endoscopic – Biopsy	HIS1	Pancreatic Biopsy
GI Endoscopic – Biopsy	HIS1	Perianal Biopsy
GI-Resection – Small	HIS2	Anal Fistula
GI-Resection – Small	HIS2	Appendix
GI-Resection – Small	HIS3	Endo Mucosal Resection (EMR/ESD)
GI-Resection – Small	HIS2	Gallbladder
GI-Resection – Small	HIS2	Haemorrhoidectomy
GI-Resection – Small	HIS2	Hernia Sac
GI-Resection – Small	HIS3	Meckel's Diverticulum
GI-Resection – Small	HIS2	Mesentery

Histopathology

CATEGORY	CODE	TISSUE SAMPLE
GI-Resection – Small	HIS2	Perianal Biopsy / Warts
GI-Resection – Small	HIS2	Pilonidal Sinus
GI-Resection – Small	HIS2	Polypectomy
GI-Resection – Small	HIS2	Umbilical Lesion
GI Resection – Large	HIS5	Biliary Resection
GI Resection – Large	HIS5+HIS2	Colon
GI Resection – Large	HIS5	Distal Pancreatectomy
GI Resection – Large	HIS5+HIS2	Gastrectomy
GI Resection – Large	HIS5	Gastric Wedge Resection
GI Resection – Large	HIS5	Ileoanal Pouch Resection
GI Resection – Large	HIS4	Ileostomy
GI Resection – Large	HIS3	Ileum
GI Resection – Large	HIS5+HIS2	Large Bowel Resection – Benign / Malignant
GI Resection – Large	HIS4	Liver Wedge Resection
GI Resection – Large	HIS5+HIS2	Oesophagectomy
GI Resection – Large	HIS5	Partial Hepatectomy
GI Resection – Large	HIS5	Small Bowel Resection – Benign / Malignant
GI Resection – Large	HIS5+HIS5	Whipple's Procedure / Pancreatectoduodenectomy
Gynaecology	HIS2	Cervical Biopsy
Gynaecology	HIS1	Cervical Polyp
Gynaecology	HIS4	Cervix
Gynaecology	HIS1	Curettings – Endocervical
Gynaecology	HIS1	Curettings – Endometrial
Gynaecology	HIS2	Endometrial Biopsy
Gynaecology	HIS1	Endometrial Pipelle
Gynaecology	HIS1	Endometrial Polyp
Gynaecology	HIS2	Fallopian Tube
Gynaecology	HIS3	Fibroids
Gynaecology	HIS2	Fimbrial Cyst
Gynaecology	HIS4	LLETZ and/or Cone Biopsy
Gynaecology	HIS2	Mastoid
Gynaecology	HIS2	Ovarian Biopsy
Gynaecology	HIS2	Ovarian Cyst
Gynaecology	HIS1	Ovarian Pipelle
Gynaecology	HIS5	Ovaries (Bilateral)

Histopathology

CATEGORY	CODE	TISSUE SAMPLE
Gynaecology	HIS3	Ovary (Unilateral)
Gynaecology	HIS4	Ovary and Tube (Unilateral)
Gynaecology	HIS5	Ovary and Tube (Bilateral)
Gynaecology	HIS2	Pelvic Mass
Gynaecology	HIS1	Peritoneal Biopsy
Gynaecology	HIS5	Placenta
Gynaecology	HIS2	Pouch of Douglas
Gynaecology	HIS1	Products of Conception
Gynaecology	HIS2	Uterine Polyp
Gynaecology	HIS4	Uterus
Gynaecology	HIS5	Uterus and Cervix
Gynaecology	HIS5	Uterus, Tubes and Ovaries
Gynaecology	HIS1	Vulval Biopsy
Haemato-Oncology	HIS5	Bone Marrow
Haemato-Oncology	HIS2	Lymph Node
Haemato-Oncology	HIS3	Lymph Node (Lymphoma)
Haemato-Oncology	HIS3	Lymph Node (Metastatic Disease)
Haemato-Oncology	HIS5	Spleen
Haemato-Oncology	HIS5	Thymus
Lung – Biopsy	HIS3	Lung Biopsy
Lung – Resections	HIS3	Lung Lesion Small Wedge Resection
Lung – Resections	HIS5+HIS5	Lung Resection
Lung – Resections	HIS5	Lung Tumour Resection +/- Nodes
Neurosurgery	HIS3	Brain Biopsy
Neurosurgery	HIS3	Brain Resection
Neurosurgery	HIS5+HIS5	Muscle Biopsy
Neurosurgery	HIS3	Pituitary Gland – Resection
Neurosurgery	HIS3	Spinal Tumour Biopsy
Neurosurgery	HIS3	Spinal Tumour Resection
Neurosurgery	HIS4	Vertebrae
Ophthalmic	HIS1	Conjunctival Biopsy
Ophthalmic	HIS1	Cornea
Ophthalmic	HIS4	Globe/Removal of Eye
Ophthalmic	HIS2	Lacrimal Gland Biopsy/Excision
Ophthalmic	HIS1	Orbit Contents of Eye



































Histopathology

CATEGORY	CODE	TISSUE SAMPLE
Orthopaedic	HIS1	Bone Biopsy
Orthopaedic	HIS2	Bone Currettings
Orthopaedic	HIS2	Bursa
Orthopaedic	HIS2	Duputrenes Contracture
Orthopaedic	HIS3	Femoral Head Resection
Orthopaedic	HIS1	Ganglion Cyst
Orthopaedic	HIS3	Joint Resurfacing/ Redo Prosthesis Capsule
Orthopaedic	HIS1	Neuroma
Orthopaedic	HIS2	Synovial Biopsy
Orthopaedic	HIS3	Tendon
Skin and Soft Tissue	HIS2	Abscess
Skin and Soft Tissue	HIS3	Alopecia Biopsies
Skin and Soft Tissue	HIS1	Cyst Excision
Skin and Soft Tissue	HIS1	Fossa
Skin and Soft Tissue	HIS1	Granuloma
Skin and Soft Tissue	HIS3	Lipoma
Skin and Soft Tissue	HIS2	Skin Excision BCC/SCC
Skin and Soft Tissue	HIS1	Nail
Skin and Soft Tissue	HIS1	Pilonidal Sinus
Skin and Soft Tissue	HIS5	Sentinel Nodes in Skin Cancer (Melanoma)
Skin and Soft Tissue	1SK	Skin Biopsy (1 specimen)
Skin and Soft Tissue	2SK	Skin Biopsy (2 specimens)
Skin and Soft Tissue	3SK	Skin Biopsy (3 specimens)
Skin and Soft Tissue	4SK	Skin Biopsy (4 specimens)
Skin and Soft Tissue	5SK	Skin Biopsy (5 specimens)
Skin and Soft Tissue	6SK	Skin Biopsy (6 specimens)
Skin and Soft Tissue	7SK	Skin Biopsy (7 specimens)
Skin and Soft Tissue	8SK	Skin Biopsy (8 specimens)
Skin and Soft Tissue	9SK	Skin Biopsy (9 specimens)
Skin and Soft Tissue	10SK	Skin Biopsy (10 specimens)
Skin and Soft Tissue	11SK	Skin Biopsy (11-15 specimens)
Skin and Soft Tissue	HIS3	Soft Tissue Tumour Biopsy
Skin and Soft Tissue	HIS3	Soft Tissue Tumour Resection
Urology – Biopsy	HIS1	Bladder Biopsy
Urology – Biopsy	HIS1	Core Biopsy (Urology)

Histopathology





































CATEGORY	CODE	TISSUE SAMPLE
Urology – Biopsy	HIS2	Hydrocele
Urology – Biopsy	HIS2	Penile Biopsy
Urology – Biopsy	HIS1	Prostate Biopsy
Urology – Biopsy	2H1	Prostate Biopsies x 2
Urology – Biopsy	3H1	Prostate Biopsies x 3
Urology – Biopsy	4H1	Prostate Biopsies x 4
Urology – Biopsy	5H1	Prostate Biopsies x 5
Urology – Biopsy	6H1	Prostate Biopsies x 6
Urology – Biopsy	7H1	Prostate Biopsies x 7
Urology – Biopsy	8H1	Prostate Biopsies x 8
Urology – Biopsy	9H1	Prostate Biopsies x 9
Urology – Biopsy	10H1	Prostate Biopsies x 10-12
Urology – Biopsy	HIS5	Testicular Biopsy (Bilateral)
Urology – Biopsy	HIS4	Testicular Biopsy (Unilateral)
Urology – Biopsy	HIS1	Urethral Biopsy
Urology – Biopsy	HIS2	Vasectomy
Urology – Resection	HIS5+HIS5	Cystoprostatectomy
Urology – Resection	HIS3	Epididymis
Urology – Resection	HIS1	Foreskin / Circumcision
Urology – Resection	HIS5	Nephrectomy / Kidney
Urology – Resection	HIS5+HIS5	Prostatectomy
Urology – Resection	HIS5+HIS5	Radical Cystectomy
Urology – Resection	HIS3	Testis
Urology – Resection	HIS3 – HIS5+	TURBT (dependent on number of blocks)
Urology – Resection	HIS3 – HIS5	TURP (dependent on number of blocks)

Alphabetical test index

TEST	CODE	SAMPLE REQS	TAT	PAGE
1,25 Vitamin D	D3		5-8 days	149
2-Butanone GC	BUTA	RU	7 days	164
2-Furoic Acid	2FA	RU	10 days	164
5 HIAA	RU5H	PU (collect on acid) ¹	5 days	29
5' Nucleotidase	5NT		5 days	29
6-Thioguanine Nucleotides	TGN	 	2 weeks	29
7 STI Profile by PCR (7 tests from 1 Sample) (Self-collect)	DL12	Aptima urine or multisite swab	2 days	69, 73, 156
7 STI Profile by PCR (7 tests from 1 Sample)	DL12	FCRU / PCR Swab / TPV or Aptima urine / multisite swab	2 days	69, 73
7 STI Profile by PCR (7 tests from 1 Sample) (Thin Prep)	PP12	TPV	2 days	168
11 Deoxycorticosterone	DEOX		10 days	55
11 Deoxycortisol	11DC	 (Frozen)	10 days	55
16S rRNA Bacterial Gene	16S	J	1 week	45
17 Hydroxyprogesterone	17OH		5 days	55
18S rRNA Fungal Gene	18S	J	1 week	45
21 Hydroxylase Ab's	21HA	 (Frozen)	10 days	29
Acetone – Blood	ACTB	 or 	2 weeks	164
Acetone – Urine	ACTU	RU	5 days	164
Acetylcholine Receptor Autoantibodies	ACRA	RU ⁴	5 days	29
Acid Phosphatase – Total	APT		5 days	29
ACTH (Adrenocorticotrophic Hormone)	ACTH	 (Plasma, spun and frozen within 2 hours) ⁴¹	1 day	55
Activated Protein C Resistance	APCR	 (Frozen) ^{4,18}	3 days	41
Acute Viral Hepatitis Screen	AHSC		4 hours	79, 85
ADAMTS-13 Antibody	A13A	 (Frozen) ^{9,18}	1 month	41
Adenosine Deaminase	AD	 /  / Fluid	3 weeks	29
Adenovirus by PCR	ADV	 / PCR / VS / SC	7 days	98
Adiponectin	ADIP		2 weeks	29
Adrenal Cortex Antibodies	ACTX		2 days	79
Albumin	ALB		4 hours	29
Alcohol (Medical) [Do not use alcohol swab prior to sample taking]	ALCO	 ¹	4 hours	29
Alcohol (Urine)	UALC	RU	4 hours	29
Alcohol Profile	AP	   	5-7 days	161, 164
Alcohol Profile 2	ALCP	    RU	5-7 days	161, 164
Aldolase	ALDO		5 days	29
Aldosterone	ALDN	 or 	5 days	55
Aldosterone (Urine)	UALD	PU	5 days	55
ALEX ² Allergy Test (Self-collect)	ALEX	 (TDL Tiny)	3-4 days	139, 144, 156

Turnaround times are from the point at which samples are entered into TDL's laboratory information management systems, and provide a guide for the issue of results. Some tests are run in laboratory departments that do not operate at weekends.








































Alphabetical test index

TEST	CODE	SAMPLE REQ	TAT	PAGE
ALEX ² Allergy Test (Venous)	ALEX	 (Serum)	3-4 days	139, 144
Alkaline Phosphatase	ALP		4 hours	29
Alkaline Phosphatase Isoenzymes	APIE		5 days	29
Allergic Rhinitis/Asthma Profile	ALRN		2 days	139, 144
Allergy – Individual Allergens	ALLE		2 days	139
Allergy – 5 x Single Individual Allergens	5AL		2 days	139
Allergy – 10 x Single Individual Allergens	10AL		2 days	139
Allergy Profile 1 (Food & Inhalants)	1A	 	2 days	139, 142
Allergy Profile 2 (UK Aero Allergen)	2A		2 days	139, 142
Allergy Profile 3 (Food)	3A		2 days	139, 142
Allergy Profile 4 (Nuts & Seeds)	4A		2 days	139, 142
Allergy Profile 5 (Children's Panel)	5A		2 days	139, 142
Allergy Profile 6 (Shellfish)	6A		2 days	139, 143
Allergy Profile 7 (Finfish)	7A		2 days	139, 143
Allergy Profile 8 (Cereal – singles)	8A		2 days	139, 143
Allergy Profile 9 (Antibiotics)	9A		2 days	139, 143
Allergy Profile 10 (Insects)	10A		2 days	139, 143
Allergy Profile 11 (Combined Shellfish/Finfish)	11A		2 days	139, 143
Allergy Profile 12 (Milk & Milk Proteins)	12A		2 days	139, 143
Allergy Profile 13 (Stone fruit/Rosaceae family)	13A		2 days	139, 144
Alpha Gal Components (related to red meat)	ZZ37		2 days	140
Alpha-1-Antitrypsin (Serum)	A1AT		1 day	29
Alpha-1-Antitrypsin (Stool)	A1AF	RF	10 days	29
Alpha-1-Antitrypsin Genotype – PI*M, PI*S, PI*Z	GENE	 ³	5 weeks	29
Alpha-1-Glycoprotein	OROS	 (Frozen)	5 days	29
Alpha-1-Microglobulin	A1MG	RU ^{1,22}	10 days	29
Alpha-2-Macroglobulins	A2MG		5 days	29
Alpha-Fetoprotein	AFP		4 hours	29, 55, 102
ALT (Alanine Aminotransferase) (SGPT)	ALT		4 hours	29
Alternaria Components	ZZ1		2 days	140
Aluminium (Blood)	ALUM		7 days	29, 163
Aluminium (Urine)	ALUJ	RU	1-2 weeks	163
Amenorrhoea Profile (Self-collect) CHANGE	TAME	 (TDL Tiny)  (TDL Tiny)	1 day	55, 60, 156
Amenorrhoea Profile (Venous) CHANGE	AMEN		4 hours	55, 60
Amikacin Level (State dose)	AMIK	 ⁴	4 hours	135
Amino Acid (EDTA Plasma)	AMIN	 (Frozen EDTA Plasma)	7 days	29
Amino Acid Quantitative (Urine)	UAAQ	RU (Frozen)	7 days	29
Aminolevulinic Acid (Urine)	RUAL	100mls PU	5 days	29
Amitriptyline	AMTR	 ⁴	5 days	136



































Alphabetical test index

TEST	CODE	SAMPLE REQS	TAT	PAGE
AML/ALL Molecular MRD – NPM1, PML-RARA, CBFB-MYH11, RUNX1-RUNX1T1, ETV6-RUNX1	GENE	Bone Marrow / A	5 days	112
Ammonia	AMMO	A (Frozen) ¹⁵	4 hours	29
Amniocentesis – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	ABK	AF ⁹	5-15 days	112
Amniocentesis – rapid PCR diagnosis for common aneuploidies (2 days) + culture (10-15 days)	APCC	AF ⁹	2-15 days	112
Amoebic (E. histolytica) Antibodies	AFAT	B	1 week	89
Amoebic (E. histolytica) PCR	AMAG	RF	2 days	89
Amphetamines – Blood	AMPB	B B	5 days	161
Amylase (Self-collect)	AMY	B (TDL Tiny)	1 day	29, 156
Amylase (Urine)	UAMY	CU	4 hours	29
Amylase (Venous)	AMY	B	4 hours	29
Amylase Isoenzymes	AMYI	B	5 days	29
Amyloidosis (Amyloid A Protein)	SAA	B	5 days	29
Anaemia Profile	ANAE	A A B	2 days	40, 43
Anafranil (Clomipramine)	CHLO	A	7 days	136
ANCA (Anti-Neutrophil Cytoplasmic Abs)	ANCA	B	2 days	79
Andropause Profile	ANDP	B B	8 hours	55, 60
Androstenediol Glucuronide	ANDG	B	3 weeks	29
Androstenedione	ANDR	B (Frozen)	5 days	55
Angiotensin II	ANG2	A (Frozen plasma)	2 weeks	30
Angiotensin Converting Enzyme	ACE	B	4 hours	30
Angiotensin Converting Enzyme – CSF	ACEF	CSF (Frozen)	2 weeks	30
Antenatal Profile	ANTE	A A ³³ B B B G	3 days	40, 43
Anti-Actin Antibodies	AAA	B	5 days	79
Anti-Basal Ganglia Antibodies	ABGA	B	3 weeks	79
Anti-CCP Antibodies	CCP	B	2 days	79
Anti-Liver Cytosol Antibodies	ALCA	B	5 days	79
Anti-MOG [Myelin Oligodendrocyte Glycoprotein] Antibodies	AMOG	B	3 weeks	79
Anti-MUSK Antibodies	MUSK	B	2 weeks	79
Anti-Nuclear Antibodies (titre & pattern)	ANAB	B	2 days	79
Anti-Phosphatidylserine Antibodies	PHTS	B	5 days	79
Anti-Phospholipase A2 Receptor	AA2R	B	6 weeks	79
Anti-Ri Antibodies	RIAB	B	3 days	79
Anti-SLA (Soluble Liver Antigen) Abs	LSA	B	10 days	79
Anti-Staphylococcal Titre (SGOT)	ASTT	B	3 days	79
Anti-Streptolysin Titre/ASOT	ASLT	B	2 days	79
Anti-Sulfatide Antibodies	ASA	B	5 weeks	79

Alphabetical test index



































TEST	CODE	SAMPLE REQ	TAT	PAGE
Anti-Xa Apixaban Monitoring	APIX	 (Frozen)* ¹⁸	3 days	41
Anti-Xa Edoxaban Monitoring	EDOX	 (Frozen)* ¹⁸	3 days	41
Anti-Xa Fondaparinux Monitoring	FOND	 (Frozen)* ¹⁸	3 days	41
Anti-Xa LMWH Monitoring	LMWX	 (Frozen)* ¹⁸	3 days	41
Anti-Xa Rivaroxaban Monitoring	RIVA	 (Frozen)* ¹⁸	3 days	41
Antidiuretic Hormone	ADH	  (Plasma Frozen) ⁴	10 days	55
Antimony (Urine)	ANTI	RU ³⁰	10 days	30
Antimullerian Hormone (AMH) (Self-collect)	AMH	 (TDL Tiny)	1 day	30, 55, 156
Antimullerian Hormone (AMH) (Venous)	AMH		4 hours	30, 55
Antithrombin III	A111	 (Frozen) ^{4,9,18}	3 days	41
AP50 Alternative Hemolytic Complement	AP50	 (Frozen)	2 weeks	30
Apolipoprotein A1	APOA		3 days	30
Apolipoprotein B	APOB		3 days	30
Apolipoprotein C	APOC		3 months	30
Apolipoprotein E (12 hours fasting)	APOE	 (fasting)	5 days	30
Apolipoprotein E genotype – E2/E3/E4	APEG	 ⁹	2 weeks	113
Apple Components	ZZ36		2 days	140
APTT/KCCT	KCCT	 ¹⁸	4 hours	40
Aquaporin 4 Antibodies (Neuromyelitis Optica)	AQUA		2 weeks	79
Arbovirus Antibodies/Abs	ARBO	 ^{9,14}	3 weeks	98
Arsenic (Blood)	ARS	 or 	5 days	30, 163
Arsenic (Urine)	ARSE	RU ³⁰	5 days	30, 163
Arylsulphatase A	ARYL	 ^{5,6}	8 weeks	30
Ascariasis Serology	ASC		5 days	79
Ashkenazi Jewish Carrier Screen	GENE	 ⁹	4 weeks	113
Aspartate Transaminase (AST) (SGOT)	AST		4 hours	30
Aspergillus Components	ZZ2		2 days	140
Aspergillus Precipitins	ASPP		5 days	45
Atopic Dermatitis/Eczema Profile (14 allergens)	ALEC		2 days	139, 144
Atypical Antibody Screen (handwritten tube label)	AASC	 ^{22,33}	2 days	40
Atypical Pneumonia Screen	APS		2 days	98, 100
Autoantibody Profile I	AUTO		2 days	79, 85
Autoantibody Profile II	ENDO		2 days	79, 85
Avian Precipitins (11 Species)	AVIA		5 days	79
Babesia PCR	PCRB		7 days	79
Bancroftia/Oncerciasis/Filarial Antibodies	TFIF	 ¹⁴	2 weeks	89
BCR/ABL Quantitative – fusion gene sizes p190 + p210	BCRQ	  ⁹	10 days	113
Becker/Duchenne Muscular Dystrophy – deletions/duplications	DMD1	 ⁹	10 days	113

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Behcet's Disease – HLA Tissue Typing B*51	B51	 ⁹	10 days	114
Bence-Jones Protein	RBJP	RU or CU	5 days	30
Benzene	BENZ	J ^{1,6}	3 days	164
Beta 2 Glycoprotein 1 Abs	B2GP		5 days	79
Beta 2 Microglobulin (Serum)	B2MG		2 days	30, 164
Beta 2 Microglobulin (Urine)	UB2M	RU	3 days	30, 164
Beta Carotene	CARO		5 days	149
Beta D Glucan	XBDG		3 days	45
Beta-Glucuronidase (Sly Disease)	BGLU	  ^{9,4}	8 weeks	30
Bicarbonate	HCO3		4 hours	30
Bile Acids – Serum	BILE		4 hours	30
Bilharzia (Schistosome) Antibody Screen	BILH	 ¹⁴	10 days	89
Bilharzia (Urine)	USCH	Mid-morning terminal urine following exercise ¹⁴	1-2 days	89
Bilirubin (Direct)	DBIL		4 hours	30
Bilirubin (Total)	BILI		4 hours	30
Bilirubin (Urine)	UBIL	RU	1 day	30
Biotin CHANGE	BIOS	 ⁷	5 days	149
Biotinidase	BIOT	 (Frozen plasma) ⁴	3 weeks	30
Birch Components	ZZ3		2 days	140
Bismuth	BISM		5 days	30
BK Polyoma Virus by PCR	BKPV	 / RU	5 days	98
Bleeding and Platelet Gene Panel	R90U	  ⁹	12 weeks	114
Bleeding Disorder of Unknown Cause	R90U	 	12 weeks	114
Blood Culture [#]	BCUL	2 x BC ⁴	6 days +	45
Blood Film Examination	FILM		1 day	40
Blood Group [†]	ABO	 ^{22,33}	2 days	40
Blood PCR for Chromosome 13, 18, 21 and sex chromosomes	BPCR		5 days	114
BNP (NT-pro BNP)	BNP		4 hours	30, 55
Bone Alkaline Phosphatase	BALP	 (Frozen)	2 weeks	30
Bone Marrow (Aspirate)	BMAS	J ¹	14 days	43
Bone Marrow (Trephine Biopsy)	BMI	J ¹	3 days	43
Bone Screen	BONE	 CU	4 hours	30, 38
Bone Screen (Bloods only)	BON2		4 hours	30, 38
Borrelia Antibodies (Lyme Disease) IgG, IgM	BORR	 ^{9,14}	2 days	79, 89
Borrelia Antibodies (Lyme Disease) IgM	BORM		2 days	79, 89
Borrelia Confirmation (Immunoblot)	BORC	 ^{9,14}	10 days	79, 89
Brazil Components	ZZ4		2 days	140
Breast Cancer – BRCA1 + BRCA2 genes only	GENE		4 weeks	114
Breast Cancer NGS Panel	GENE	  ^{9,11}	4 weeks	102, 114
Bromide	BROM		3 days	164

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Brucella Serology	BRUC	 ⁹	2-3 weeks	79
BUN (Blood Urea Nitrogen)	BUN		4 hours	30
C-KIT D816V variant – Mastocytosis	GENE	Bone Marrow / 	4 weeks	114
C Peptide	CPEP		3 days	55
C Reactive Protein (Self-collect)	CRP	 (TDL Tiny)	1 day	30, 156
C Reactive Protein (Venous)	CRP		4 hours	30
C Reactive Protein (High Sensitivity) (Self-collect)	HCRP	 (TDL Tiny)	1 day	30, 156
C Reactive Protein (High Sensitivity) (Venous)	HCRP		4 hours	30
C1 Esterase Inhibitor	C1EI		5 days	79
C1 Esterase: Function & Total	FC1E	  (Plasma Frozen) ^{4,18}	10 days	30
C1q Binding Immune Complex	IMCP		5 days	31
C3 Complement	C3		4 hours	79
C3/C4 Complement	COMP		4 hours	79
C4 Complement	C4		4 hours	79
CA 15-3	C153		4 hours	102
CA 19-9	C199		4 hours	102
CA 50	CA50		5 days	102
CA 72-4	C724		5 days	102
CA 125 (Self-collect)	C125	 (TDL Tiny)	1 day	102, 156
CA 125 (Venous)	C125		4 hours	102
Cadmium (Blood)	CADM	 or 	5 days	31, 163
Cadmium (Urine)	URCD	RU ³⁰	5 days	31, 163
Caeruloplasmin	CERU		1 day	31, 150
Calcitonin	CATO	 (Frozen) ⁴	1 day	55
Calcium (24 hour Urine)	UCA	PU or acid urine	4 hours	31
Calcium (Self-collect)	CA	 (TDL Tiny)	1 day	31, 157
Calcium (Venous)	CA		4 hours	31
Calcium + Vitamin D (Self-collect)	CALD	 (TDL Tiny)	1 day	31, 157
Calcium + Vitamin D (Venous)	CALD		1 day	31
Calcium/Creatinine Ratio	CACR	RU 	4 hours	31
Calprotectin	CALP	QFIT sample collection device	5 days	79, 157
Calprotectin/QFIT Profile (Combined)	QCAL	QFIT sample collection device	5 days	45, 48, 80, 85, 157
Campylobacter Jejuni Antibodies	CJAB		5 days	45
Candida (Culture)	CANC	STM/CS	2-4 days	45
Candida Antibodies	CANA		5 days	45
Cannabinoids (Urine) Screen	CANN	RU	1 day	161
Carbamazepine (Tegretol)	CARB		4 hours	136
Carbapenemase producing organism screen	MDR	STM (rectal)	4-5 days [†]	45
Carbohydrate Deficient Glycoprotein	CDG		2 weeks	31

Please ensure all specimens and forms are labelled with given Forename, Surname, DOB, Date and Time of sample collection.

See page 25 for sample-taking and special handling instructions.

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Carbohydrate Deficient Transferrin (CDT) (Self-collect)	CDT	 (TDL Tiny) ⁴	3 days	31, 157
Carbohydrate Deficient Transferrin (CDT) (Venous)	CDT	 ⁴	3 days	31
Carboxyhaemoglobin	CBHB		1 week	40
Carcino Embryonic Antigen	CEA		4 hours	102
Cardiolipin Antibodies (IgG+IgM)	ACAB		2 days	80
Cardiovascular Risk Profile 1	PP10	 	3 days	31, 38
Cardiovascular Risk Profile 2	PP11	    ³⁴	3 days	31, 38
Carotenes	CARO	 ¹³	5 days	149
Carrier Screen (Ashkenazi Jewish)	GENE	 ⁹	4 weeks	114, 131
Carrier Screen (Ashkenazi Jewish) – Partnered Report	GENE	 ⁹	4 weeks	115, 131
Carrier Screen (Pan-Ethnic)	GENE	 ⁹	4 weeks	115, 131
Carrier Screen (Pan-Ethnic) – Partnered Report	GENE	 ⁹	4 weeks	115, 131
Cashew Components	ZZ35		2 days	140
Cat Components	ZZ5		2 days	140
Cat Scratch Fever (Bartonella IgG)	CAT		5 days	98
Catecholamines (Plasma)	CATE	  (Plasma Frozen) ⁴	5 days	55
Catecholamines (Urine)	UCAT	PU (collect on acid) ¹	5 days	55
CCP Antibodies (RF)	CCP		2 days	80
CD3/CD4/CD8	LYSS	 ¹⁰	1 day	43, 97-98
CD16	CD16	 ⁴	1 day	43
CD19 B Cells	CD19	 ⁴	1 day	43
CD20	CD20	 ¹⁰	2 days	43
CD25	CD25	 ¹⁰	2 days	43
CD56	CD56	 ⁴	1 day	43
CD57	CD57		1 day	43
Celery Components	ZZ6		2 days	140
Centromere Autoantibodies	CENT		2 weeks	80
Cervical Cytology (PAPT)	PAPT	TPV	6 days (combined report)	170
Cervical Cytology + HP20	PAPT + HP20	TPV / PCR SWab	6 days (combined report)	170
Cervical Cytology + HPVH	PAPT + HPVH	TPV	6 days (combined report)	170
Cervical Cytology + HPV T	PAPT + HPV T	TPV	6 days (combined report)	170
CH50 (Classical pathway)	CH50	 (Frozen) ⁴	4 days	80
Chagas Disease Serology (S.American Trypanosomiasis) T. Cruzi	CHGA	 ^{9,14}	10 days	80
Chest Pain Profile	CPP		STAT	31, 38
Chikungunya Virus Abs	CHIK	 ^{9,14}	10 days	98
Chlamydia – PCR swab	SPCR	PCR	2 days	69

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Chlamydia – Thin Prep	TPCR	TPV	2 days	69, 168
Chlamydia – Urine	CPCR	FCRU	2 days	69
Chlamydia Species Specific (MIF) Ab Screen	CHAB	B	2 days	80, 85
Chlamydia/Gonorrhoea – Vaginal (PCR)	SCG	PCR	2 days	69
Chlamydia/Gonorrhoea – Vaginal (Self-collect)	SCG	Aptima multisite swab	2 days	69, 157
Chlamydia/Gonorrhoea – Rectal (PCR)	RSCG	PCR	2 days	69
Chlamydia/Gonorrhoea – Rectal (Self-collect)	RSCG	Aptima multisite swab	2 days	69, 157
Chlamydia/Gonorrhoea – Thin Prep	TCG	TPV	2 days	69, 168
Chlamydia/Gonorrhoea – Throat (Self-collect)	TSCG	Aptima multisite swab	2 days	69, 157
Chlamydia/Gonorrhoea – Throat (PCR)	TSCG	PCR	2 days	69
Chlamydia/Gonorrhoea – Urine (Self-collect)	CCG	Aptima urine	2 days	69, 157
Chlamydia/Gonorrhoea – Urine (FCRU)	CCG	FCRU	2 days	69
Chlamydia/Gonorrhoea/Trichomonas – PCR Swab	SCGT	PCR	2 days	69
Chlamydia/Gonorrhoea/Trichomonas – Thin Prep	TCGT	TPV	2 days	69, 168
Chlamydia/Gonorrhoea/Trichomonas – Urine	CCGT	FCRU	2 days	69
Chloride	CL	B	4 hours	31
Cholesterol	CHO	B	4 hours	31
Cholesterol (Familial Hypercholesterolaemia)	GENE	A A ⁹	7 weeks	31
Cholinesterase (Serum/Pseudo)	CHPS	B	4 hours	31, 164
Chromium (Blood)	CHRO	A	5 days	31, 163
Chromium (Urine)	URCR	RU ³⁰	4 weeks	31, 163
Chromogranin A	CGA	B	5 days	31
Chromogranin A & B	MTAB	A (Plasma Frozen)	3 weeks	31
Chromosome Analysis (Amniocentesis) – culture only	ACUL	AF ⁹	10-15 days	115
Chromosome Analysis (Amniocentesis) – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	ABK	AF ⁹	5-15 days	115
Chromosome Analysis (Amniocentesis) – rapid PCR diagnosis for common aneuploidies (2 days) + culture (10-15 days)	APCC	AF ⁹	2-15 days	115
Chromosome Analysis (Blood)	KARY	H ⁹	2-3 weeks	115
Chromosome Analysis (Chorionic Villus) – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	CBK	CVS ⁹	5-15 days	115
Chromosome Analysis (Chorionic Villus) – rapid PCR diagnosis for common aneuploidies (2 days) + culture (10-15 days)	CVPC	CVS ^{1,9}	2-15 days	115
Chromosome Analysis (Chorionic Villus) – culture only	CVSC	CVS ^{1,9}	10-15 days	115
Chromosome Analysis (Products of Conception)	PROC	Placental Sample ^{1,9}	20-25 days	115

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Chromosome Analysis (Products of Conception) – BOBs rapid aneuploidy diagnosis for all chromosomes (10 days) + culture (25 days)	PBK	Placental Sample ^{1,9}	10-25 days	116
Chromosome Analysis (Solid Tissue)	PROC	Fetal tissue ^{1,9}	4-5 weeks	116
Chronic Fatigue Syndrome Profile	VIP1	A + B ¹⁰	5 days	80, 85
Citrate (Blood)	CITR	B	5 days	31
Citrate (Urine)	UCIT	CU (Frozen)	5 days	31
CK (MB Fraction)	CKMB	B	4 hours	31
CK Isoenzymes	CKIE	B	5 days	31
Clobazam	CLOB	A	5 days	136
Clomipramine (Anafranil)	CHLO	A	7 days	136
Clonazepam	CLON	A	7 days	136
Clostridium Difficile Toxin by PCR	CLOS	RF *	2 days	45
Coagulation Profile 1	CLPF	C ¹⁸	4 hours	40, 43
Coagulation Profile 2	CLOT	A C ¹⁸	4 hours	40, 43
Cobalt (Blood)	COB	A	5 days	31
Cobalt (Urine)	COBA	RU ³⁰	5 days	31, 163
Cocaine (Urine) Screen	UCOC	RU	1 day	161
Coeliac Disease – HLA DQ2/DQ8 Genotype	Q2Q8	A ⁹	10 days	80
Coeliac/Gluten Genetic Profile 2 CHANGE	GSA2	A B	10 days	80, 85
Coeliac/Gluten Sensitivity Profile CHANGE	GSA	B	2 days	80, 85
Coenzyme Q10	CQ10	B	2 weeks	31
Cold Agglutinin	CAGG	J ¹	5 days	31
Collagen (Type I, II, IV) Antibodies	COAB	B	10 days	31
Collagen Type 1 Cross-Linked N-Telopeptide – NTX	NTX	2nd EMU	2 weeks	32
Colloid Antigen-2 Antibodies	CA2A	B	2 weeks	80
Colorectal Cancer NGS Panel	GENE	A A ^{9,11}	4 weeks	116
Comparative Genomic Hybridisation (Array CGH)	CGH	CVS / AF / A H ⁹	10 days	116
Complement C1q	C1Q	B	5 days	32
Complement C2	C2	B	10 days	32
Complement C5	C5A	B	2 weeks	32
Complement C6	C6	B (Frozen)*	5 weeks	32
Complement C7	C7	B (Frozen)*	5 weeks	32
Complement C8	C8	B (Frozen)*	5 weeks	32
Complement C9	C9	B (Frozen)*	5 weeks	32
Complement Factor H	FACH	B	3 weeks	32
Complex PSA (Prostate Specific Ag)	CPSA	B	3 days	102
Congenital Absence of Vas Deferens – karyotype + cystic fibrosis screen + polyT(5T) + Y deletions	GRP	A H ⁹	10-15 days	116
Coombs (Direct Antiglobulin Test)	COOM	A	2 days	42

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Copper (Serum)	COPP	 or 	5 days	32, 150, 163
Copper (Urine)	URCU	CU	5 days	32, 163
Cortisol (Self-collect)	CORT	 (TDL Tiny)	1 day	55, 157
Cortisol (Urine)	UCOR	CU	5 days	55
Cortisol (Venous)	CORT		4 hours	55
Cortisol Binding Globulin	CBG	 (Frozen)	1 month	32
Cotinine (Serum)	COT		4 days	80
Cotinine (Urine)	COTT	RU	2 days	32
COVID-19 (SARS-CoV-2) Rapid RNA Sequencing	COSQ	RNA or PCR swab ⁴³	48-72 hours	98
COVID-19 (SARS-CoV-2) (PCR)	NCOV	PCR Swab (nasal/pharyngeal)	1 day	98
COVID-19 (SARS-CoV-2) RNA by PCR (Self-collect)	NCOV	Throat and nose swab	1 day	98, 157
COVID-19 (SARS-CoV-2) Roche Elecsys Anti-SARS-CoV-2 S (SPIKE) (Self-collect)	SCOV	 (TDL Tiny)	1 day	80, 157
COVID-19 (SARS-CoV-2) Roche Elecsys Anti-SARS-CoV-2 S (SPIKE) (Venous)	SCOV	SST/Serum  (Venous)	1 day	80
Cow's Milk Components	ZZ7		2 days	140
Creatine Kinase (CK, CPK)	CKNA		4 hours	32
Creatinine (including eGFR) (Self-collect)	CREA	 (TDL Tiny)	1 day	32, 157
Creatinine (including eGFR) (Venous)	CREA		4 hours	32
Creatinine (Urine)	UCR	CU	4 hours	32
Creatinine Clearance	CRCL	 CU	4 hours	32
Cri du Chat Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF /   ⁹	5-15 days	116
Cri du Chat Syndrome – BOBs only	PBOB	CVS / AF /  ⁹	5 days	116
Crosslaps (Serum DPD)	SDPD	 (Freeze within 24 hours)	4 days	32
Cryoglobulins	CRYO	J ⁶	10 days	32
Cryptococcal Antigen	CRYC	Serum or CSF	1 day	45
Cryptosporidium	CRPO	RF	2 days	45
Cryptosporidium Detection by PCR	CRPA	RF	2 days	89
CSF for Microscopy and Culture	CSF	CSF	1-3 days	45
CSF Screen by PCR	VPCR	CSF	2 days	98, 100
CT/GC/Trichomonas/Mgen – PCR Swab	SGTM	PCR Swab	2 days	69, 73
CT/GC/Trichomonas/Mgen – Thin Prep	TGTM	TPV	2 days	69
CT/GC/Trichomonas/Mgen – Urine	CGTM	FCRU	2 days	69, 73
Culture (Any site)	CULT		up to 5 days	45
CVS PCR for common aneuploidies (2 days) + culture (10-15 days)	CVPC	CVS ^{1,9}	2-15 days	116
CVSBOBs – rapid BOBs aneuploidy diagnosis for all chromosomes (5 days) + culture (10-15 days)	CBK	CVS ⁹	5-15 days	116
CVSBOBs only – rapid aneuploidy diagnosis for all chromosomes + common microdeletion syndromes	CBOB	CVS ⁹	5 days	116

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Cyclosporin	CYCL	A	1 day	32
Cyfra 21-1	CY21	B	4 days	102
Cystatin C	CYCC	B	5 days	32
Cystic Fibrosis (139 common variants) – reflex to Poly T when required	CFS	A ⁹	5-7 days	116
Cystine – Quantitative (Beta-CTX)	QCYS	PU	5 days	32
Cytomegalovirus (CMV-DNA) Amnio	CMVD	AF	5 days	98
Cytomegalovirus (IgG/IgM) Antibodies	CMV	B	4 hours	98
Cytomegalovirus (PCR) Semen	SCVM	Semen	7 days	98
Cytomegalovirus (PCR) Urine	CMVU	RU	5 days	98
Cytomegalovirus Avidity	CMAV	B	10 days	98
Cytomegalovirus DNA (PCR)	CMVP	A	5 days	98
Cytomegalovirus Resistance	CMVR	A A (2 x 6mls)	21 days	98
D-Dimers (Fibrinogen Degradation Products)	DDIT	C ⁴	4 hours	40
Dengue Fever PCR	DPCR	A or B ^{9,14}	2 weeks	98
Dengue Virus Serology	DENG	B ^{9,14}	5 days	89
Deoxypyridinoline (DPD) – Serum	SDPD	B (Freeze within 24 hours)	4 days	32
Deoxypyridinoline (DPD) – Urine	DPD	EMU	4 days	32
DHEA	DHEX	B	7-10 days	55
DHEA – Urine (Dehydroepiandrosterone)	UDHE	CU	3 weeks	55
DHEA Sulphate (Self-collect)	DHEA	B (TDL Tiny)	1 day	55, 157
DHEA Sulphate (Venous)	DHEA	B	4 hours	55
Diabetes – Obesity NGS Panel	GENE	A	6 weeks	116
Diabetic Profile 1	DIAB	A G	8 hours	32, 38
Diabetic Profile 2	DIA2	A G RU	2 days	32, 38
Diamine Oxidase Activity	DIAM	B	2 weeks	32
Diazepam (Valium)	DIAZ	A	7 days	136
DiGeorge Syndrome (22q11 & 10p14 deletion) – BOBs (5 days) + karyotype (15 days)	DGB, KARY	CVS / AF / A H ⁹	5-15 days	116
DiGeorge Syndrome (22q11 & 10p14) – BOBs only	DGB	CVS / AF / A ⁹	5 days	117
Digoxin	DIGO	B	4 hours	136
Dihydrotestosterone	DHT	B B	7 days	55
Diphtheria Antibodies	DIPH	B	5 days	80
DL1–DL12 Screening Profiles				26-27
DL12 7 STI Profile by PCR (7 PCR tests from 1 Sample) (Self-collect)	DL12	Optima urine or multisite swab	2 days	157
DNA (Double Stranded) Antibodies IgG	DNAA	B	2 days	80
DNA (Single Stranded) Antibodies	DNAS	B	5 days	80
DNA Extraction & Storage – 3 years (longer upon request)	XDNA	A ⁹	20 days	117
DNA Identity Profile – 15 STR markers	DNAF	A ^{9,11}	10 days	117

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Dog Components	ZZ8		2 days	140
Down Syndrome Risk Bloods only (Risk to be calculated by clinician)	HCGF/ PAPA		4 hours	55
Down Syndrome Risk Profile (2nd trimester) Quad	DRP	 DRP form ^{7,8}	5 days	55
Down Syndrome Risk Profile with risk calculation first trimester	DRP	 DRP form + image of scan ^{7,8}	5 days	55
Doxepin Level (Sinequan)	DOXE		10 days	164
Drugs of Abuse from Blood without Chain of Custody	DOAP		5 days	161
Drugs of Abuse Profile – Random Urine Sample/No Chain of Custody	DOA	RU	2 days (5 days with LC-MS/MS confirmation)	161-162
Drugs of Abuse Profile – Random Urine Sample/No Chain of Custody Plus Alcohol	DOA3	RU	2 days (5 days with LC-MS/MS confirmation)	161-162
Drugs of Abuse Profile – With Chain of Custody*	DOAL	RU/CoC Collection Containers ^{1,2}	2 days (5 days with LC-MS/MS confirmation)	161-162
Drugs of Abuse Profile – Without Chain of Custody	DOAN	RU ²	2 days (5 days with LC-MS/MS confirmation)	161-162
Duchenne Muscular Dystrophy – deletions/duplications only	DMD1	 ⁹	10 days	117
DVT/Pre-travel Screen	DVT1	    ⁹	5 days	40, 44, 89-90, 117
Echinococcus (Hydatid) Antibodies	EFAT	 ^{9,14}	5 days	80, 89
Egg Components	ZZ9		2 days	140
Ehrlichiosis Antibodies	EHRL	 ^{9,14}	10 days	80
Elastase (RF)	ELAS	RF*	5 days	32
Elastase (Self-collect)	ELAS	Stool/faecal container*	5 days	32, 157
Electrolytes	ELEC		4 hours	32
Electrolytes (Urine)	UELE	CU	4 hours	33
ELF/Enhanced Liver Fibrosis	ELF		5 days	33
Endometrial Biopsy Immune Profiling	23RF	J (Contact Referrals)	2 weeks	59
Endomysial Antibodies (IgA) (Self-collect)	AEAB	 (TDL Tiny)	2 days	80, 157
Endomysial Antibodies (IgA) (Venous)	AEAB		2 days	80
Enteric Organism Rapid Detection	EORD	RF	2 days	89-90
Eosin-5 Maleimide Dye binding test for Hereditary spherocytosis (EMA)	EMA		2 days	42
Eosinophil Cationic Protein	ECP		7 days	33
Epanutin (Phenytoin)	PHEN		4 hours	136
Epstein-Barr Virus Antibodies IgG/IgM	EBVA	 or 	2 days	98
Epstein-Barr Virus PCR	EBVQ		5 days	98
Erectile Dysfunction Profile	IMPO	    	3 days	55, 60
Erythropoietin	ERY		4 days	42, 136

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TEST	CODE	SAMPLE REQS	TAT	PAGE
ESR	ESR	A	4 hours	40
Essential Fatty Acid Profile (Red Cell)	EFAR	A ⁴	10 days	150
Ethosuximide	ETH0	A	7 days	136
Extractable Nuclear Antibodies (nRNP, Sm, Ro, La, Jo1, Scl70) CENP-B	ENA	B	2 days	80
Factor II Assay	FAC2	C (Frozen) ^{9,18}	5 days	41
Factor II Prothrombin – G20210A Variant	FX2	A ⁹	5 days	117
Factor V Assay	FAC5	C (Frozen) ^{9,18}	5 days	41
Factor V Leiden – G1691A Variant	FX5	A ⁹	5 days	117
Factor VII Assay	FAC7	C (Frozen) ^{9,18}	5 days	41
Factor VIII Assay	FAC8	C (Frozen) ^{9,18}	5 days	41
Factor VIII Inhibiting Antibody	F8IA	C C ¹⁸	2 weeks	41
Factor IX Assay	F1X	C (Frozen) ^{9,18}	5 days	41
Factor IX Inhibiting Antibody	F9IA	C C ¹⁸	2 weeks	41
Factor X Assay	FX	C (Frozen) ^{9,18}	5 days	41
Factor XI Assay	FX1	C (Frozen) ^{9,18}	5 days	41
Factor XII Assay	FX11	C (Frozen) ^{9,18}	5 days	41
Factor XIII Assay	FA13	C (Frozen) ^{9,18}	5 days	41
Faecal Fat (1 Day Collection)	TFFA	LF ⁶	5 days	33
Faecal Fat (3 day)	FFAT	LF ⁶	5 days	33
Faecal Lactoferrin	FLAC	RF	5 days	33
Faecal Sugar Chromatography	FCRO	RF (Frozen)	3 weeks	33
Familial Hypercholesterolaemia NGS panel	GENE	A A ⁹	6 weeks	118
Farmers Lung Precipitins	FARM	B	5 days	80
Fasciola Hepatica Antibodies (Liver Fluke)	FASC	B	2 weeks	80
FAST Chlamydia – PCR Swab	FSCT	PCR Swab	4 hours	75
FAST Chlamydia – Urine	FCT	FCRU	4 hours	75
FAST CT/GC – PCR Swab	FSCG	PCR Swab	4 hours	75
FAST CT/GC – Rectal PCR Swab	FRCG	PCR Swab	4 hours	75
FAST CT/GC – Throat PCR Swab	FTCG	PCR Swab	4 hours	75
FAST CT/GC – Urine	FCG	FCRU	4 hours	75
FAST Gonorrhoea – PCR Swab	FSGN	PCR Swab	4 hours	75
FAST Gonorrhoea – Urine	FGN	FCRU	4 hours	75
FAST Screen SHORT with Swab	FSSS	B PCR Swab	4 hours	75
FAST Screen SHORT with Urine	FSSC	B FCRU	4 hours	75
FAST Screen with Swab	FSWS	B PCR Swab	4 hours	75
FAST Screen with Urine	FUSC	B FCRU	4 hours	75
Fasting Insulin Resistance Index (FIRI)	FIRI	B G	4 hours	55
Female Hormone Profile (Self-collect)	TFIP	F (TDL Tiny) B (TDL Tiny)	1 day	56, 157
Female Hormone Profile (Venous)	FIP	B	4 hours	56, 61
Ferritin (Self-collect)	FERR	B (TDL Tiny)	1 day	33, 157
Ferritin (Venous)	FERR	B	4 hours	33

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Fibrinogen	FIB	 ^{4,18}	4 hours	40
Fibrotest (Liver Fibrosis)	FIBT		2 weeks	33
Filaria (Lymphatic and Non-Lymphatic) Antibodies	FIFA	 ^{9,14}	10 days	89
First Trimester Antenatal Screen (Risk to be calculated by requesting clinician)	HCGF/ PAPA		4 hours	56, 61
Fish Components	ZZ10		2 days	140
FK506 (Tacrolimus/Prograf)	FK5	 ⁴	1-2 days	136
Flecainide (Tambocor)	FLEC		5 days	136
Fluid Culture	FLUD	SC	2-7 days	45
Fluid Cytology	CATF	Fluid ⁴	3 days	172
Fluid for Crystals + Culture	FLU2	SC	1 day	45
Fluoride (Urine)	UFL	RU	5 days	33
Fluoxetine (Prozac)	PROZ	 ⁴	5 days	136
Folate (Red Cell)	RBCF		2 days	33, 150
Folate (Serum)	FOLA		1 day	33
Fragile X Syndrome screen – FMR1 repeat analysis PCR	GENE	   ⁹	5 weeks	118
Free Fatty Acids	FFA	 (Frozen) ¹	10 days	33
Free T3 (Self-collect)	FT3	 (TDL Tiny)	1 day	56, 157
Free T3 (Venous)	FT3		4 hours	56
Free T4 (Self-collect)	FT4	 (TDL Tiny)	1 day	56, 157
Free T4 (Venous)	FT4		4 hours	56
Fructosamine	FRUC		1 day	33
FSH (Self-collect)	FSH	 (TDL Tiny)	1 day	56, 157
FSH (Venous)	FSH		4 hours	56
Full Blood Count	FBC		4 hours	40
Fungal ID + Sens	FUID	Fungal sample / STM	14 days	45
Fungal investigations (non-superficial extended culture)	FUN	All specimens other than Skin, Hair and Nails	From 3 days	45
Fungal investigations (superficial/dermatophyte PCR test)	DERM	Skin, Hair, Nails	3-7 days	45
FXIII A Subunit	F13S	 (Frozen) ^{9,18}	14 days	41
G6PD	G6PD		4 days	42
Gabapentin	GABA	 ⁴	5 days	136
Galactomanan (Aspergillus Antigen)	SGAL		2 weeks	45
Galactose-1-Phosphate Uridyltransferase	GAL1	 ^{5,6}	2 weeks	33
Galactosidase – Alpha*	GALA	J*	6 weeks	33
Gall Stone Analysis	RSTA	STONE	10 days	33
Gamma GT	GGT		4 hours	33
Ganglionic Acetylcholine Receptor Antibodies	GACA		1 month	80
Ganglioside GM1, GD1B, GQ1B Abs	GANG		5 days	80

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Gardnerella vaginalis (Thin Prep)	GVPC	TPV	2 days	168
Gardnerella vaginalis by PCR	GVPC	FCRU / PCR / TPV	2 days	69
Gastric Parietal Autoantibodies	GASP	B	2 days	80
Gastrin	GAST	A (Plasma)	5 days	33
Gastrointestinal Pathogen PCR (Self-collect)	EORD	Stool/faecal container	2 days	89, 157
Genetics: TDL Genetics				105-134
Genetic Reproductive Profile (Male)	GRP	A H ⁹	10-15 days	118
Gentamicin Assay	GENT	B ⁴	4 hours	135
Giardia Serology	GIAR	B	5 days	80
Gliadin Antibodies (IgG) (deamidated) (Self-collect)	AGAB	B (TDL Tiny)	2 days	80, 157
Gliadin Antibodies (IgG) (deamidated) (Venous)	AGAB	B	2 days	80
Globulin	GLOB	B	4 hours	33
Glomerular Basement Membrane Abs	AGBM	B	2 days	80
Glucagon	GLUG	A (Plasma)	10 days	33
Glucose	RBG	G	4 hours	33
Glucose Challenge Test/Mini-GTT	RBGM	G	1 day	135
Glucose Tolerance Test (Extended Plus)	GTTX	7 x G , 7 x RU	1 day	135
Glucose Tolerance Test (Extended)	GTTE	5 x G , 5 x RU	1 day	135
Glucose Tolerance Test (Short)	GTTS	2 x G , 2 x RU	1 day	135
Glucose Tolerance Test/OGTT	GTT	3 x G , 3 x RU	1 day	135
Glucose Tolerance with Growth Hormone	GTT + GHDF	3 x B ³⁵ , 3 x G , 3 x RU	1 day	135
Glucose Tolerance with Insulin	GTTI	3 x B , 3 x G , 3 x RU	1 day	135
Glutamic Acid Decarboxylase Antibodies (GAD 65)	GAD	B	5 days	81
Gluten Sensitivity Evaluation CHANGE	GSA	B	2 days	81
Gluten Sensitivity Profile CHANGE	GLUT	A B B	10 days	81, 86 139, 144
Gluten/Coeliac Genetic Profile 2 CHANGE	GSA2	A B	10 days	81
Glycan Determinants	ZZ27	B	2 days	140
Gonorrhoea	TGON	TPV	2 days	168
Gonorrhoea – Culture	GONN	CS ⁺⁺⁺	2-3 days	45, 69
Gonorrhoea – PCR swab	SGON	PCR	2 days	69
Gonorrhoea – Thin Prep	TGON	TPV	2 days	69
Gonorrhoea – Urine	CGON	FCRU	2 days	69
Granulocyte Immunology	GRIM	A A (or 10ml) B	2 weeks	81
Group B Strep – Vaginal and Rectal (Self-collect)	GBSX	Blue gel Amies swab x2	3-5 days	46, 157
Group B Strep – Vaginal and Rectal (STM)	GBSX	2 x STM	3-5 days	46
Growth Hormone (Fasting)	GH	B ^{7,35}	4 hours	56

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Gut Hormone Profile	GUTP	A A (Frozen within 15 minutes) ⁴¹	3 weeks	56
H. pylori Antibodies (IgG)	HBPA	B	2 days	81
H. pylori Antigen – Breath	HBQT	J	5 days	81
H. pylori Antigen – Stool (Self-collect)	HBAG	Stool/faecal container	3 days	46, 158
H. pylori Antigen – Stool (RF)	HBAG	RF	3 days	46
H. pylori Culture	HPCU	J	3 weeks	46
Haematology Profile	PP3	A	4 hours	40, 44
Haemochromatosis – HFE common variants C282Y + H63D	HMD	A ⁹	3 days	33
Haemoglobin	HB	A	4 hours	40
Haemoglobin Electrophoresis	HBEL	A	4 days	42
Haemophilus B Influenzae Antibodies	HINF	B	5 days	81
Haemophilus ducreyi by PCR	DUCR	PCR	7 days	69
Haemosiderin (Urine)	HSID	EMU	2 weeks	33
Hantavirus Serology	HANV	B ⁹	10 days	98
Haptoglobin	HAPT	B	5 days	33
Hazelnut Components	ZZ11	B	2 days	140
HbA1c (Self-collect)	GHB	A (TDL Tiny)	1 day	33, 158
HbA1c (Venous)	GHB	A	6 hours	33
HCG (Oncology)	HCGQ	B	4 hours	102
HCG (Quantitative)	QHCG	B	4 hours	56
HDL Cholesterol	HDL	B	4 hours	33
HE4 + ROMA (Earlier Detection of Ovarian Tumour)	HE4	B	1 day	102, 104
Hepatitis (Acute) Screen	AHSC	B	4 hours	91, 100
Hepatitis A (IgM)	HAVM	B	4 hours	91
Hepatitis A Immunity (IgG/IgM)	HAIM	B	4 hours	91
Hepatitis A Profile	HEPA	B	4 hours	69, 91
Hepatitis A RNA by PCR	HAVR	A or B	3 weeks	91
Hepatitis A, B & C Profile	ABC	B	4 hours	91, 100
Hepatitis B 'e' Antigen and Antibody	HEPE	B	4 hours	91
Hepatitis B (PCR) Genotype	BGEN	A	7 days	91
Hepatitis B Core Antibody – IgM	HBCM	B	4 hours	91
Hepatitis B Core Antibody – Total	HBC	B	4 hours	91
Hepatitis B DNA (Viral load)	DNAB	A	5 days	91
Hepatitis B Immunity	HBIM	B	4 hours	91
Hepatitis B Immunity (IgG) (Self-collect)	THBI	B (TDL Tiny)	1 day	91, 158
Hepatitis B Immunity (IgG) (Venous)	THBI	B	1 day	91
Hepatitis B Profile	HEPB	B	4 hours	92, 100
Hepatitis B Resistant Mutation	HBRM	A or B	7 days	92

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Hepatitis B Surface Antigen (Self-collect)	THBA	B (TDL Tiny)	1 day	69, 92, 158
Hepatitis B Surface Antigen (Venous)	AUAG	B	4 hours	69, 92
Hepatitis C Abs Confirmation (RIBA)	RIBA	B	5 days	92
Hepatitis C Antibodies (Self-collect)	THCV	B (TDL Tiny)	1 day	69, 92, 158
Hepatitis C Antibodies (Venous)	HEPC	B	4 hours	69, 92
Hepatitis C Antigen (Early detection) (Self-collect)	TCAG	B (TDL Tiny)	1 day	92, 158
Hepatitis C Antigen (Early detection) (Venous)	HCAG	B	4 hours	92
Hepatitis C Genotype	CGEN	A	5 days	92
Hepatitis C Quantification (Viral Load)	QPCR	A or B	5 days	92
Hepatitis Delta Antibody	HEPD	B	5 days	92
Hepatitis Delta Antigen	HDAG	B	5 days	92
Hepatitis Delta RNA	DRNA	A (Frozen plasma)	5 days	92
Hepatitis E (PCR)	EHEP	A	2 weeks	92
Hepatitis E IgG/IgM	HBE	B	5 days	92
Hepatitis G (PCR)	HEPG	A (Frozen plasma)	2 weeks	92
Herpes Simplex (HSV) 1 & 2 – Genital lesion	HERS	Aptima multisite swab	5 days	70, 98, 158
Herpes Simplex (HSV) 1 & 2 – Oral lesion	HERS	Aptima multisite swab	5 days	70, 98, 158
Herpes Simplex (HSV) 1 & 2 (PCR)	HERS	PCR	5 days	70, 98
Herpes Simplex I/II (Thin Prep)	HERD	TPV	5 days	168
Herpes Simplex I/II Antibody Profile (IgG)	HERP	B	2 days	98
Herpes Simplex I/II by PCR (Urine)	HERD	FCRU	5 days	70, 98
Herpes Simplex I/II IgM	HERM	B	2 days	98
HFE gene (Haemochromatosis) – common variants C282Y + H63D	HMD	A ⁹	3 days	42
Hirsutism Profile	HIRP	B	4 hours	56, 61
Histamine (Blood)	HITT	A (Frozen plasma)	5 days	81
Histamine (Urine)	HITU	RU	5 days	81
Histamine Releasing Urticaria Test	CURT	B	3 weeks	81, 139
Histone Antibodies	HISA	B	5 days	81
Histopathology				173-179
Histoplasmosis	HISP	B	10 days	81
HIV 1 & 2 Abs/p24Ag (Self-collect)	THIV	B (TDL Tiny)	1 day	70, 97, 158
HIV 1 & 2/p24Ag (Venous)	HDUO	B	4 hours	70
HIV Confirmation of Positive Screens (Using 3 methodologies)	HIVC	B	1 day	97
HIV Rapid RNA HIV-1 QUALITATIVE	LHIV	A (Vacutainer only)	4 hours	70, 74, 97, 100

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TEST	CODE	SAMPLE REQ	TAT	PAGE
HIV Rapid RNA HIV-1 QUANTITATIVE	RHIV	 (Vacutainer only)	4 hours	70, 74, 97, 101
HIV Screening: HIV1 & 2 Abs/p24 Ag (4th Gen)	HDUO		4 hours	97
HIV Therapeutic Drug Monitoring	TDM	J	21 days	97
HIV-1 Genotypic Resistance (Integrase)	INTE	  (2 x 6ml whole blood)	21 days	97
HIV-1 Genotypic Resistance (RT & Protease)	HIVD	  (2 x 6ml whole blood)	21 days	97
HIV-1 Proviral DNA	HIVP	 Whole blood	7 days	97
HIV-1 RNA Viral Load by PCR	HIV1	  (2 x 6ml whole blood)	3 days	97
HIV-1 Tropism	TRPM	  (2 x 6ml whole blood)	28 days	97
HIV-2 RNA by PCR	HIV2		21 days	97
HIV/HBV/HCV Screen by PCR/NAAT (10 days post exposure)	STDx	 10mls or 2 x 4mls (Vacutainer only)	3 days	70, 73, 97-98, 100
HIV/HBV/HCV (Early detection by PCR/NAAT) with Syphilis	STXX	  10mls or 2 x 4mls	3 days	70, 73
HLA A, B, C	14RF	 	2 weeks	59
HLA B*57:01	HL57	 ⁹	10 days	97
HLA B27	HLAB	 ⁹	3 days	81
HLA DQ Alpha Antigens	10RF	 	2 weeks	59
HLA DQ Beta Antigens	11RF	 	2 weeks	59
HLA DR Antigens	9RF	 	2 weeks	59
HLA-C	26RF	 	2 weeks	59
HLA Tissue Typing A	HLA	 ⁹	10 days	119
HLA Tissue Typing A+B	HLBA	 ⁹	10 days	119
HLA Tissue Typing A+B+C (Class I)	HABC	 ⁹	10 days	119
HLA Tissue Typing A/B/DRB1/3/4/5	HLAF	 ⁹	10 days	119
HLA Tissue Typing A/B/DRB1/3/4/5/DQB1	HLF	 ⁹	10 days	119
HLA Tissue Typing A/B/C/ DRB1/3/4/5/DQB1 (Class I & II)	HLFC	 ⁹	10 days	120
HLA Tissue Typing B	HLB	 ⁹	10 days	120
HLA Tissue Typing B*27 only	HLAB	 ⁹	3 days	120
HLA Tissue Typing B*51 (Behcet's Disease)	B51	 ⁹	10 days	120
HLA Tissue Typing B*57:01 high resolution	HL57	 ⁹	10 days	120
HLA Tissue Typing C	HLC	 ⁹	10 days	120
HLA Tissue Typing Coeliac Disease – DQ2/DQ8	Q2Q8	 ⁹	10 days	120
HLA Tissue Typing DRB1/3/4/5	DRB1	 ⁹	10 days	120
HLA Tissue Typing DRB1/3/4/5/DQB1 (Class II)	HLDQ	 ⁹	10 days	120
HLA Tissue Typing Narcolepsy – DQB1*06:02	GENE	 ⁹	3 weeks	120
Homocysteine (Quantitative)	HOMO	 ¹⁷ or  (Plasma)	1 day	33
Homocysteine (Urine)	HCYS	CU	2 weeks	33
Homovanillic Acid (HVA)	HVA	PU	5 days	33
Horse Components	ZZ38		2 days	140

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TEST	CODE	SAMPLE REQS	TAT	PAGE
House Dust Mite Components	ZZ12		2 days	140
HPV (DNA and reflexed mRNA)	HPVT	TPV	5 days	70, 170
HPV (HR mRNA types 16, 18 + others)	HPVH	TPV	3 days	70, 170
HPV (Individually typed low & high risk DNA subtypes)	HP20	TPV / PCR swab	3 days	70, 170
HPV (Individually typed high risk DNA subtypes) (Self-collect)	HPVZ	Qvintip vaginal swab	3 days	70, 158, 171
HPV (mRNA all high risk subtypes) (Self-collect)	HPVY	Qvintip vaginal swab	3 days	70, 158, 171
HRT Profile 1	HRT		4 hours	56, 61
HRT Profile 2	HRT2	 	4 hours	56, 61
HTLV 1 & 2 Abs. (Human T Lymphotropic Virus Type I-II)	HTLV		8 hours	97
HTLV by PCR	HTLP	 Whole blood	21 days	97
Hughes Syndrome	LUPA	   4,18	2 days	41
Human Herpes Virus – 6 by PCR	HHV6		5 days	98
Human Herpes Virus – 8 (IgG)	HHV8		10 days	98
Human Herpes Virus – 8 by PCR	HV8D		5 days	99
Human Parvovirus B19 – DNA	PCR P		2 weeks	99
HVS	HVS	STM/CS***	2-4 days	46
Hyaluronic Acid	AHT		1 week	33
Hydroxybutyrate Dehydrogenase	HBD	 (Frozen)	1 week	33
Hydroxyprolene	UHYD	CU	2 weeks	33
Identity Profile (DNA) – 15 STR markers	DNAF	 9,11	10 days	120
IgE (Total)	IGE		1 day	81
IGF-1 (Somatomedin)	SOMA	 (Frozen) ⁴	1 day	56
IGF-BP3	IGF3	 (Frozen) ⁴	5 days	56
IgG Subclasses	IGSC		5 days	34
Imipramine	IMIP	 ⁴	4 days	136
Immune Function Evaluation (Total)	TIE	 +  ^{5,10}	7 days	40
Immune-Complexes	IMCP		5 days	81
Immunoglobulin A	IGA		4 hours	34
Immunoglobulin D	IGD		5 days	34
Immunoglobulin E – Total	IGE		1 day	34
Immunoglobulin G	IGG		4 hours	34
Immunoglobulin M	IGM		4 hours	34
Immunoglobulins (IgG, IgM, IgA)	IMM		4 hours	34, 81
Impotence Profile	IMPO	   	3 days	56, 61
Individual Semen Parameters	SPOD	Semen ¹	1 day	64
Inhibin A	INIA		1 month	56
Inhibin B	INIB	 (Day 3 of cycle, frozen)	5 days	56
INR	PTIM	 ¹⁸	4 hours	40

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TEST	CODE	SAMPLE REQ'S	TAT	PAGE
Insect/Worm/Ova/Cysts	FLEA	Send Specimen ^{9,14}	5 days	89
Insulin	INSU	B	4 hours	56
Insulin Antibodies	INAB	B	5 days	81
Insulin-Like Growth Factor 2	IGF2	B ⁶	1 month	34
Interleukin 1 Beta	ILB	B (Frozen) ^{4,7}	1-2 weeks	81
Interleukin 2	IL2	B (Frozen) ^{4,7}	1-2 weeks	81
Interleukin 4	IL4A	B (Frozen) ^{4,7}	1-2 weeks	81
Interleukin 6	IL6	B (Frozen) ^{4,7}	1-2 weeks	81
Interleukin 8	IL8	B (Frozen) ^{4,7}	1-2 weeks	81
Interleukin 10	IL10	B (Frozen) ^{4,7}	1-2 weeks	81
Interleukin 28b Genotype	IL28	A	2 weeks	81
Intrinsic Factor Antibodies	IFAB	B	2 days	81
Iodide – Urine	UIOD	RU	1 week	34
Iodine – Serum	IODI	B	1 week	34
Ionised Calcium	ICPA	B	5 days	34
Iron (TIBC included) (Self-collect)	FE	B (TDL Tiny)	1 day	34, 158
Iron (TIBC included) (Venous)	FE	B	4 hours	34
Iron Overload Profile	IOP	A B ⁹	3 days	34, 38
Iron Status Profile (Self-collect)	ISP	B (TDL Tiny)	1 day	34, 38, 158
Iron Status Profile (Venous)	ISP	B	4 hours	34, 38
ISAC Panel (Self-collect)	ISAC	B (TDL Tiny)	3 days	139, 144, 158
ISAC Panel (Venous)	ISAC	B	3 days	139, 144
Islet Cell Antibodies	ICAB	B	3 days	81
IUCD for Culture	IUCD	Send Device	11-12 days	46
JC Polyoma Virus by PCR	JCPV	A B /CSF	5 days	99
Ketamine Screen	KETA	RU	7-10 days	161
KIR (Killer-like Immunoglobulin-like Receptors) Genotyping	17RF	A A A	2-3 weeks	59
Kiwi Components	ZZ32	B	2 days	140
Lactate (Plasma)	LACT	G ¹⁶	1 day	34
Lactate Dehydrogenase (LDH)	LDH	B	4 hours	34
Lactate Pyruvate Ratio	LPR	J ¹	4-6 weeks	34
Lactose Intolerance Gene	LACG	A	2 weeks	121
Lactose Tolerance Test	LTT	By appointment only	1 day	34, 135
Lamotrigine	LAMO	B ⁴	5 days	136
Langer-Giedion Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF / A H ⁹	5-15 days	121
Langer-Giedion Syndrome – BOBs only	PBOB	CVS / AF / A ⁹	5 days	121
Latex Components	ZZ13	B	2 days	140
LDL7 Subfractions	LDL7	B	10 days	34

Please ensure all specimens and forms are labelled with given Forename, Surname, DOB, Date and Time of sample collection.

See page 25 for sample-taking and special handling instructions.

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Lead (Blood)	LEAD	A	5 days	34, 163
Lead (Urine)	URPB	RU	5 days	34, 163
Lead Profile (Hb, ZPP, Lead)	LEAZ	A ¹³	3-5 days	163
Legionella Antibodies	LEGO	B	2 days	81
Legionella Urine Antigen	LEGA	RU	1 day	46, 81
Leishmania Antibodies	LEIS	B	5 days	89
Leptin	LEPT	B (height and weight required) ¹⁹	5 days	34
Leptospirosis (Weil's Disease) Abs (IgM)	LEP	B	5 days	81
Leucocyte Antibody Detection Panel FEMALE	8RF	B	1 week	59
Leucocyte Antibody Detection Panel MALE	7RF	H H H ^{6,34}	1 week	59
Leukaemia Immunophenotyping	LYPT	A ^{4,5}	5 days	43
Leukotriene E4	LTE4	CU (Frozen)	3 weeks	81
Levetiracetam (Keppra)	LEVE	B ⁴	3 days	136
Lipase (Self-collect)	LIPA	B (TDL Tiny)	1 day	34, 158
Lipase (Venous)	LIPA	B	4 hours	34
Lipid Profile (Self-collect)	LIPP	B (TDL Tiny)	1 day	34, 39, 158
Lipid Profile (Venous)	LIPP	B	4 hours	34, 39
Lipid Transfer Proteins	ZZ23	B	2 days	140
Lipocalins	ZZ28	B	2 days	140
Lipoprotein (a) (Self-collect)	LPOA	B (TDL Tiny)	1 day	34, 158
Lipoprotein (a) (Venous)	LPOA	B	4 hours	34
Lipoprotein Electrophoresis	LEL	B	5 days	34
Lithium (take 12 hours after dose)	LITH	B	4 hours	34, 136
Liver Fibrosis (Enhanced Liver Fibrosis ELF)	ELF	B	5 days	34
Liver Fibrosis Fibrotest	FIBT	B	2 weeks	34
Liver Function Tests (Excluding AST/ALT) (Self-collect)	TLFT	B (TDL Tiny)	1 day	34, 39, 158
Liver Function Tests (Venous)	LFT	B	4 hours	34, 39
Liver Immunoblot	LIVI	B	3 days	81
Liver Kidney Microsomal Antibodies	LKM	B	2 days	81
Lorazepam	LORA	A ⁴	10 days	136
Lp-PLA2 (PLAC) Test	PLA2	B	2 days	34
LSD	LSD	RU	5 days	161
Lupus Anticoagulant and Anticardiolipin Abs	LUPA	B C C ^{4,9,18}	2 days	41, 81
Lupus Anticoagulant only	LUPC	C C ^{9,18}	2 days	41
Luteinising Hormone (LH) (Self-collect)	LH	B (TDL Tiny)	1 day	56, 158
Luteinising Hormone (LH) (Venous)	LH	B	4 hours	56
Lyme Disease (Borrelia Abs) IgG, IgM	BORR	B ^{9,14}	2 days	82
Lyme Disease (Borrelia Abs) IgM	BORM	B	2 days	82

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Lymphocyte Subsets (CD3/CD4/CD8)	LYSS	A ¹⁰	1 day	40
Lymphogranuloma Venerium (LGV) (PCR)	LGVP	PCR ⁴²	1-2 weeks	70
Lymphogranuloma Venerium (LGV) – Rectal (Self-collect)	LGVP	Aptima multisite swab	1-2 weeks	70, 158
Lysosomal Enzyme Screen	LE	H H ⁶	2 months	34
Lysozyme	LYSO	B	5 days	34
Macrolide Resistance Test (Mgen)	MGR	FCRU / PCR	1-2 weeks	70
Macroprolactin	PRLD	B	4 days	56
Magnesium (Serum)	MG	B	4 hours	35, 163
Magnesium (Urine)	URMG	PU	1 day	35, 163
Magnesium (Whole blood)	RCMG	A or H	4 days	150
Malarial Antibodies (PI. falciparum)	MALA	B ^{9,14}	5 days	89
Malarial Antibodies (species specific)	MALS	B ^{9,14}	10 days	89
Malarial Parasites	MALP	A ^{4,9,14}	STAT	40
Malarial Parasites (visa, non-urgent)	MP48	A	2 days	40
Male Genetic Reproductive Profile	GRP	A H ⁹	10-15 days	121
Male Hormone Profile	MIPR	B	4 hours	56, 61
Manganese (Serum)	MANG	B	5 days	35, 163
MBOCA in Urine	MBOC	RU	10 days	164
Mean Cell Volume (MCV)	MCV	A	4 hours	40
Measles Antibodies (IgG) Immunity	MEAS	B	1 day	91, 99
Measles Antibodies (IgM)	MEAM	B ⁹	2 days	91, 99
Measles PCR	MEAP	Buccal swab	48 hours	99
Measles, Mumps, Rubella (MMR)	MMR	B	1 day	91
Melatonin (Serum)	MEL	B (Frozen)	5 days	56
Melatonin (Urine)	UMEL	CU ¹³	2 weeks	56
Meningococcal Serology (only serogroup C)	MENI	B	6 weeks	82
Menopausal Profile (Self-collect)	TMEN	F (TDL Tiny) B (TDL Tiny)	1 day	56, 61, 158
Menopause Profile (Venous)	MENO	B	4 hours	56, 61
Mercury (Blood)	MERC	A or H	5 days	35, 163
Mercury (Urine)	URHG	RU ¹	5 days	35, 163
MERS Coronavirus Test	MERS	J	1 day	99
Metabolic Syndrome Profile	METS	A B B G	9 days	56, 61
Metanephrines (Plasma)	PMET	A (Frozen plasma, must be frozen within 2 hours)	7 days	56
Metanephrines (Urine)	UMEX	PU (collect on acid) ¹	5 days	56
Methaqualone	METQ	RU	5 days	35
Methotrexate	METX	B	2 days	136
Methylmalonic Acid – Serum	MMAS	B	5 days	35
Methylmalonic Acid – Urine	MMA	CU	2 weeks	35
Metronidazole Level	METR	B ⁴	7 days	135





















































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See page 25 for sample-taking and special handling instructions.































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TEST	CODE	SAMPLE REQS	TAT	PAGE
Microdeletion (common) Syndromes – BOBs only	PBOB	CVS / AF / A ⁹	5 days	122
Microfilaria Blood Film	MICF	A	STAT	40
Miller-Dieker Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF / A H ⁹	5-15 days	122
Miller-Dieker Syndrome – BOBs only	PBOB	CVS / AF / A ⁹	5 days	122
Mineral Screen	MINE	B K	5 days	150-151
Mineral Screen (Whole blood)	RMIN	H H	5 days	150-151
Mineral Screen and Industrial Heavy Metal Screen (Trace Metals)	TRAC	A B H K	7-10 days	150-151
Miscarriage/Thrombotic Risk Profile	PROP	A A B C C C ¹⁸	5 days	41, 44
Mitochondrial Antibodies	AMIT	B	3 days	82
Mitochondrial Antibodies M2	MAM2	B	2 days	82
Molybdenum (Serum)	MOLY	B	5 days	164
Monkeypox Virus – Lesion (Self-collect)	MPXV	Aptima multisite swab	2 days	70, 158
MRSA (Rapid PCR) one swab per site	MRSA	Blue Micro Swab	4 hours	46
MRSA (Rapid PCR) one swab per site x 2	MRS2	Blue Micro Swab x 2	4 hours	46
MRSA Culture – Nose/Groin	MRW2	Purple liquid Amies swab x2	2 days	158
MRSA Culture – Nose/Groin (Self-collect)	MRW2	Purple liquid Amies swab x2	2 days	46
MRSA Culture – Nose/Groin/Axilla	MRW3	Purple liquid Amies swab x3	2 days	158
MRSA Culture – Nose/Groin/Axilla (Self-collect)	MRW3	Purple liquid Amies swab x3	2 days	46
MRSA Culture one swab per site	MRSW	Blue Micro Swab	2 days	46
MRSA Culture one swab per site x 2	MRW2	Blue Micro Swab x 2	2 days	46
MRSA PCR – Nose/Groin	MRS2	Purple liquid Amies swab x2	1 day	158
MRSA PCR – Nose/Groin (Self-collect)	MRS2	Purple liquid Amies swab x2	1 day	46
MRSA PCR – Nose/Groin/Axilla	MRS3	Purple liquid Amies swab x3	1 day	158
MRSA PCR – Nose/Groin/Axilla (Self-collect)	MRS3	Purple liquid Amies swab x3	1 day	46
Mucopolysaccharides	MPS	RU (Frozen)	3 weeks	35
Mumps Antibodies (IgG)	MUMP	B	1 day	91
Mumps Antibodies (IgM)	MUMM	B	1 day	91, 99
Myasthenia Gravis Evaluation	MGE	B	5 days	82
Mycology/Skin Scrapings by PCR	DERM	Submit Sample	3-7 days	46
Mycophenolic Acid (Cellcept)	MYCP	A	5 days	136
Mycoplasma genitalium (Thin Prep)	MGEN	TPV	2 days	168
Mycoplasma genitalium by PCR	MGEN	FCRU / PCR / TPV	2 days	70
Mycoplasma genitalium Detection – Urine or Vaginal (Self-collect)	MGEN	Aptima urine or multisite swab	2 days	70, 159
Mycoplasma genitalium Resistance – Urine or Vaginal (Self-collect)	MGR	Aptima urine or multisite swab	1-2 weeks	70, 159
Mycoplasma genitalium/Ureaplasma (Thin Prep)	MUPC	TPV	2 days	168
Mycoplasma genitalium/Ureaplasma by PCR	MUPC	FCRU / PCR / TPV	2 days	70
Mycoplasma species – DNA	MPCR	A	5 days	99


















































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TEST	CODE	SAMPLE REQ	TAT	PAGE
Myelin Associated Glycoprotein Antibodies	MAG		5 days	82
Myelin Basic Protein Antibodies	MBPA		2 weeks	82
Myeloma Screen	MYEL	   	5 days	35, 39
Myeloperoxidase Antibodies	MPO		2 days	82
Myocardial Antibodies	MYO		1 week	82
Myoglobin (Serum)	SMYO		4 hours	35
Myoglobin (Urine)	UMYO	RU	5-10 days	35
Myositis Panel	MYOS		3 days	82
Mysoline (Primidone)	PRIM	 ⁴	3 days	136
Nail Clippings	DERM	Nail clippings	3-7 days	46
Natural Killer Profile 2	NKP2	 ¹⁰	2 days	40, 44
Needle Stick Injury Profile	NSI	 	4 hours	99, 101
Neurological Viral Screen	NVIR	 	2 days	99, 101
Neuronal Antibody (Hu, Ri, Yo, Cv2, Ma2)	NEUR		10 days	82
Neurone Specific Enolase	NSE		5 days	102
Newborn Screening Panel	GUTH	J ¹	2 weeks	35
Nickel (Serum)	NICK		5 days	35, 163
Nickel (Urine)	NICU	RU	4 weeks	35, 163
NK (CD69) and NK Cytotoxicity	69C	   *	Send Mon-Thurs only	60
NK (CD69) Cell Assay	CD69	 *	Send Mon-Thurs only	60
NK Assay Follow-Up Panel	5RF	  	1 week	59
NK Assay Panel + Intralipids	16RF	  	1 week	59
NK Assay/Cytotoxicity Panel	4RF	  	1 week	59
NK Cytotoxicity Assay	HSNK	   *	Send Mon-Thurs only	60
NK Cytotoxicity with suppression with steroid, IVIg and intralipin, and NK (CD69) cell assay	69CI	   *	Send Mon-Thurs only	60
NK Cytotoxicity with suppression, steroid, IVIg & Intralipin	NKCY	   *	Send Mon-Thurs only	60
NMDA Receptor Antibodies	NMDA		3 weeks	82
Non-Invasive Prenatal Testing (NIPT) – common aneuploidy screening from maternal blood NEW	NIPT	J / Special tube ¹	2-4 days	123, 132
Nucleic Acid Antigen Antibodies	DNA		2 days	82
Oestradiol (Self-collect)	TOES	 (TDL Tiny)	1 day	56, 159
Oestradiol (Venous)	OEST		4 hours	56
Oestriol (Estriol)	E3	 	4 days	56
Oestrone	E1	 	4 days	57
Olanzapine	OLAN	 ⁴	5 days	137
Oligoclonal Bands	CSFO	CSF + 	5 days	82
Oligosaccharides	UOLI	RU	6 weeks	35
Olive Components	ZZ14		2 days	140

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Omega 3/Omega 6 (Self-collect)	OMG3	 (TDL Tiny)	5 days	150, 152, 159
Omega 3/Omega 6 (Venous)	OMG3	 ⁴	5 days	150, 152
Opiate Screen (Urine)	UOPI	RU	2 days	161
Orosomucoid (A1AG – Alpha 1 Glycoprotein)	OROS	 (Frozen)	5 days	35
Osmolality (Serum)	OSMO		1 day	35
Osmolality (Urine)	ROSM	RU	1 day	35
Osteocalcin	OST	 (Frozen) ⁴	4 days	57, 102
Osteoporosis Screen	OPS	 	4 days	35, 39
Ovarian Autoantibodies	OVAB		2 days	82
Oxalate (Plasma)	POXA	 (Frozen)	7 days	35
Oxalate (Urine)	UOXA	PU	5 days	35
Oxidative Stress in Semen (ROS + MIOXSYS)	SROS	Semen ¹	1 day	64
P2Y12 Receptor Platelet Function Analysis (Clopidogrel Resistance)	P2Y	J ^{**1}	1 day	41
PAI-1 4G/5G Polymorphism	PAIP		2 weeks	40, 59
Pancreatic Peptide	PP	J	4 weeks	35
Paracetamol	PARA		4 hours	137
Paragomius Serology	PRGM		2 weeks	82
Parathyroid Antibodies	PTHA		1 week	82
Parathyroid Hormone (Whole)	PTHI	 ⁴	1 day	57
Parathyroid Related Peptide	PTRP	2ml  Plasma frozen (Freeze immediately) ¹	2 weeks	35
Parvalbumins	ZZ29		2 days	140
Parvovirus Antibodies (IgM)	PARV		2 days	99
Parvovirus IgG Antibodies	PARG		2 days	99
Parvovirus IgG/IgM Abs	PARP		2 days	99
Paternity Testing (postnatal and prenatal) – sample required from each person being tested (3 people)	PATT	 / AF / CVS ^{1,12} Contact Genetics lab	5 days	124
Paul Bunnell (Monospot)	PAUL	 or 	8 hours	40
Peach Components	ZZ15		2 days	140
Peanut Components	ZZ16		2 days	140
Pemphigus/Pemphigoid Autoantibodies	SKAB		2 days	82
Pertussis (Whooping Cough) Antibodies	PERS		5 days	82, 91
PEth (Phosphatidylethanol) (Self-collect)	PETH	 (TDL Tiny) ³⁸	5-7 days	35, 159, 161
PEth (Phosphatidylethanol) (Venous)	PETH	 ³⁸	5-7 days	35, 161
Phelan-McDermid Syndrome – karyotype + FISH	KARY, FISH	CVS / AF /  ⁹	12-17 days	124
Phencyclidine (PCP)	DUST	RU	5 days	35
Phenobarbitone	PHB		4 hours	137

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Phenytoin (Epanutin)	PHEN		4 hours	137
Phosphate	PHOS		4 hours	35
Phosphate (24 hour Urine)	UPH	PU	4 hours	35
Pituitary Antibodies	PITU	 ⁴	1 month	82
Pituitary Function Profile CHANGE	PITF	  ⁷	1 day	57, 62
PLAC Test (Lp-PLA2) (Self-collect)	PLA2	 (TDL Tiny)	2 days	35, 159
PLAC Test (Lp-PLA2) (Venous)	PLA2		2 days	35
Plasminogen	PLAS	 (Frozen plasma) ⁴	5 days	35
Plasminogen Activator Inhibitor – 1	PAI1	 (Frozen plasma)	2 weeks	35
Platelet Aggregation Studies	PLAG	J** ¹	3 days	42
Platelet Function Test Screen – PFA-100/200	PFAT	J** ¹	1 day	42
Pleural Fluid for Culture	FLUP	SC	7 days	46
Pneumococcal Antibodies – Serotype Specific	PASS		5 weeks	82
Pneumococcal Antibody Screen	PNEU		5 days	82, 91
Pneumococcal Antigen	PNAG	RU	1 day	46
Pneumocystis Jiroveci (PCP) Examination	PCYS	BAL ^{††}	2-3 days	46
Pneumonia (Atypical) Screen	APS		2 days	99
Polcalcins	ZZ25		2 days	141
Polycystic Ovary Syndrome Profile	PCOP	      ⁷	5 days	57, 62
Polycystic Ovary Syndrome SHORT	PCOS	 	4 hours	57, 62
Porphyria (Blood)	PORP	 ³	15 days	35
Porphyria (Stool)	FPOR	RF ³	3 weeks	35
Porphyria (Urine)	RPOR	RU ³	3 weeks	35
Porphyria Full Screen (Total: Urine, Stool, Blood)	PORS	 RU, RF ³	3 weeks	36, 39
Post-Travel Screen 1 (Prior to 6 weeks)	PTS	     ¹⁴	10 days	89, 90
Post-Travel Screen 2 (Prior to 6 weeks)	PTS2	       ¹⁴	10 days	89, 90
Postnatal array CGH	CGH	  ⁹	10 days	124, 130
Potassium	K		4 hours	36
PR-10 Proteins	ZZ22		2 days	141
Prader-Willi Syndrome (Primary Screen) – methylation PCR	PWAM	 ⁹	10 days	124
Prealbumin	PALB		3 days	139
Pregnancy (Serum) [Quantitative]	QHCG		4 hours	36, 57
Pregnancy Test (Urine)	PREG	RU	4 hours	36
Pregnenolone	PREN		15 days	57
Prenatal array CGH	CGH	Amniotic fluid, CVS or POC ⁹	10 days	124, 130
Pre-Travel Screen (DVT)	DVT1	   ⁹	5 days	40, 44, 89, 124
Primidone (Mysoline)	PRIM	 ⁴	3 days	137
Procalcitonin	PCAL	 (Frozen) ^{4,7}	1 day	36
Procollagen 1 Peptide N-Terminal (NTX)	P1NP		5 days	36

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See page 25 for sample-taking and special handling instructions.

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Procollagen 3 Peptide	PRCO	B	5 days	36
Products of Conception – rapid BOBs aneuploidy diagnosis for all chromosomes (10 days) + culture (25 days)	PBK	Placental Sample ^{1,9}	10-25 days	125
Products of Conception (BOBs + Culture)	PBK	Placental Sample ^{1,9}	10-25 days	125
Products of Conception BOBs only – rapid aneuploidy diagnosis for all chromosomes	KBOB	Placental Sample or Solid Tissue ^{1,9}	10 days	125
Profilins	ZZ24	B	2 days	141
Progesterone (Self-collect)	PROG	B (TDL Tiny)	1 day	57, 159
Progesterone (Venous)	PROG	B	4 hours	57
Proinsulin	PROI	A (Frozen plasma) ⁴	5 days	57
Prolactin (Macro)	PRLD	B	4 days	57
Prolactin (Self-collect)	PROL	B (TDL Tiny)	1 day	57, 159
Prolactin (Venous)	PROL	B	4 hours	57
Propanalol	PRO	B ⁴	7 days	137
Propoxyphene	DPRO	RU	5 days	36
Prostate Profile (Total & Free PSA)	PR2	B	4 hours	102, 104
Prostate Specific Antigen (Total) (Self-collect)	PSPA	B (TDL Tiny)	1 day	102, 159
Prostate Specific Antigen (Total) (Venous)	PSPA	B	4 hours	102
Prostatic Acid Phosphatase	PACP	B (Frozen)	3 days	36
Protein (Urine)	UPRT	CU	4 hours	36
Protein 14.3.3 (Creutzfeldt–Jakob Disease)	CJD	J	5 weeks	36
Protein C	PRC	C (Frozen) ^{4,9,18}	3 days	42
Protein Electrophoresis incl. immunoglobulin	PRTE	B	5 days	36
Protein S Activity	PS1	C (Frozen) ^{4,9,18}	5 days	42
Protein S Free Ag	FPRS	C (Frozen) ^{4,9,18}	3 days	42
Protein Total (Blood)	PROT	B	4 hours	36
Protein/Creatinine Ratio (Urine)	UCPR	RU	4 hours	36
Proteinase 3 Ab	PR3	B	2 days	82
Prothrombin Time	PTIM	C ¹⁸	4 hours	40
Prothrombin Time + Dose	PT+D	C ¹⁸	4 hours	40
Purkinje Cell Antibody (Hu and Yo)	PURK	B	10 days	82
Pyruvate Kinase (M2-PK)	M2ST	RF ⁴	5 days	102
Pyruvate Kinase (M2-PK)	M2PK	A (Frozen plasma) ⁷	5 days	102
Q Fever (C Burnetti) Antibodies	QFEV	B ⁹	10 days	82
QF-PCR rapid common aneuploidy screen	APC	AF / A ⁹	2 days	125
QFIT/Calprotectin Profile (Combined)	QCAL	QFIT sample collection device	5 days	46, 82, 159
Quantitative Faecal Immunochemical Test (QFIT)	QFIT	QFIT sample collection device	1 day	46, 159
Rabies Antibody	RABI	B	20 days	91
Rapid Strep (incl. m/c/s)	RAPS	STM**	1-3 days**	46

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Rapid Xpert HIV-1 RNA Qualitative – Early Detection from 10 days	LHIV	A (Vacutainer only)	4 hours	70
Rapid Xpert HIV-1 RNS Viral Load – Rapid Testing for HIV-Positive Patient Prognosis and Response To Antiretroviral Therapy	RHIV	A (Vacutainer only)	4 hours	70
Recurrent Miscarriage Profile (female)	RMP	A A B C C C H 9,18	10-15 days	125
Renal Calculi Screen (Metabolic)	RSPR	J 6	5 days	36
Renal Stone Analysis	RSTA	STONE	10 days	36
Renin	RENI	A (Frozen plasma) ³⁶	5 days	57
Reproductive Immunophenotype Panel	3RF	H H H	1 week	59
Respiratory PCR Panel (COVID-19, Flu A/B and RSV) (Self-collect)	FLU4	Throat and nose swab	1 day	99-100, 159
Respiratory PCR Panel (COVID-19, Flu A/B and RSV) (PCR)	FLU4	PCR nasopharyngeal	1 day	99-100
Reticulocyte Count	RETC	A	4 hours	40
Retinol Binding Protein	RBP	B	3 days	36
Retrograde Ejaculation	RTRO	Contact lab	2 days	64
Reverse T3	RT3	B 7,37	15 days	57
Rheumatoid Factor (Latex Test)	RF	B	1 day	82
Rheumatology Profile 1 (Screen)	RH	A B	2 days	82, 86
Rheumatology Profile 2 (Connective tissue)	RH2	A A B B	3 days	82, 86
Rheumatology Profile 3 (Rheumatoid/Basic)	RH3	A B	2 days	82, 86
Rheumatology Profile 4 (Systemic Lupus)	RH4	A B B	2 days	82, 86
Rheumatology Profile 5 (Mono Arthritis)	RH5	A A B B	3 days	82, 86
Rheumatology Profile 6 (Rheumatoid Plus)	RH6	B	2 days	82, 87
Rheumatology Profile 7 (Sjogren's Syndrome)	RH7	B	10 days	83, 87
Rickettsial Species Antibody Profile	RICK	B	7 days	83, 89
Risperidone	RISP	A 4	7 days	137
RNA Polymerase Antibodies	RNAP	B	3 days	83
Rotavirus in Stool by PCR	ROTA	RF	1 day	99
RPR (Syphilis)	RPR	B	2 days	70, 83
Rubella Antibody (IgG)	RUBE	B	4 hours	91, 99
Rubella Antibody (IgM)	RUBM	B	4 hours	91, 99
Rubella Avidity	RUAV	B	1 week	99
Rubella PCR	RUBP	A / Amniotic Fluid	5 days	91
S100 Malignant Melanoma	S100	B	4 days	102
Saccharomyces Cerevisiae Antibodies	ASCA	B	2 weeks	83
Salicylates	SALI	B	4 hours	36
Salivary Duct Antibodies	SAB	B	12 days	83
Schistosoma (Urine)	USCH	Mid-morning terminal urine following exercise ¹⁴	1-2 days	47

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Schistosome (Bilharzia) Antibodies	BILH	 ¹⁴	10 days	89
Scleroderma Immunoblot	SCLI		3 days	83
Screening Profile 1 – Biochemistry	PP1	 	4 hours	26
Screening Profile 2 – Haematology/Biochemistry	PP2	  	4 hours	26
Screening Profile 3 – Haematology	PP3		4 hours	26
Screening Profile 4 – Haematology/ Biochemistry (Short)	PP4	  	4 hours	26
Screening Profile 5 – Haematology/ Biochemistry (Postal)	PP5	  	4 hours	26
Screening Profile 6 – Well Person	PP6	  	4 hours	26
Screening Profile 7 – Well Man	PP7	  	4 hours	27
Screening Profile 8 – Well Person	PP8	  	2 days	27
Screening Profile 9F – Senior Female	PP9F	     ⁴	2 days	27
Screening Profile 9M – Senior Male	PP9M	     ⁴	2 days	27
Screening Profile 10 – Cardiovascular Risk 1	PP10	 	3 days	27
Screening Profile 11 – Cardiovascular Risk 2	PP11	    ³⁴	3 days	27
Screening Profile 12 – Sexual Health Screen	PP12	FCRU / PCR / TPV	2 days	27
Seed Storage Proteins	ZZ26		2 days	141
Selenium (Serum) (Self-collect)	SELE	 (TDL Tiny)	4 days	36, 150, 159
Selenium (Serum) (Venous)	SELE		4 days	36, 150
Self-collection samples				153-160
Sellotape Test	SELL	Send Sample***	1 day	47
Semen Analysis, Comprehensive	SPER	Semen ¹	2 days*	64
Semen Analysis, Post-Vasectomy	PVAS	Semen ¹	2 days	64
Semen Analysis, Vasectomy Reversal	SPER	Semen ¹	2 days*	64
Semen Culture	SPCU	Semen	2-4 days	47, 64
Semen Fructose	SPCF	Semen	2 days	64
Semen Leucocytes	PMNS	Semen	2 days	64
Semen Zinc	SPCZ	Semen	up to 10 days	64
Serotonin	SERT	  (Frozen whole blood) ¹	10 days	57
Serotonin (Urine)	USER	PU 50mls (Frozen) ¹	5 days	57
Serum Albumins	ZZ30		2 days	141
Serum Free Light Chains	SLC		5 days	36
Sesame Components	ZZ39		2 days	141
Sex Hormone Binding Globulin (Self-collect)	SHBG	 (TDL Tiny)	1 day	57, 159
Sex Hormone Binding Globulin (Venous)	SHBG		4 hours	57
Shrimp Components	ZZ17		2 days	141
Silver (Blood)	SILV		5 days	36, 163
Silver (Urine)	USIL	RU	5 days	36, 163
Sinequan (Doxepin)	DOXE		10 days	137
Sirolimus	SIRO		3 days	137

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
































TEST	CODE	SAMPLE REQ	TAT	PAGE
Sjogren's Syndrome	RH7	B	10 days	83
Skin (Pemphigus/Pemphigoid) Autoantibodies	SKAB	B	2 days	83
Skin Antibodies by Immunofluorescence	STSK	B	1 month	83
Skin Scrapings/Mycology by PCR	DERM	Send Sample	3-7 days	47
Sleeping Sickness Serology (African Trypanosomiasis)	TRYP	B ⁹	10 days	83
Smith-Magenis Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF / A ⁹ H ⁹	5-15 days	126
Smith-Magenis Syndrome – BoBs only	PBOB	CVS / AF / A ⁹	5 days	126
Smooth Muscle Antibodies	ASMO	B	2 days	83
Sodium	NA	B	4 hours	36
Somatomedin (IGF-1)	SOMA	B (Frozen) ⁴	1 day	57
Soybean Components	ZZ18	B	2 days	141
Specific Gravity (Urine)	USG	RU	24 hours	47
Sperm Aneuploidy	SPPL	Semen ¹	4 weeks	64
Sperm Antibodies (Serum)	ASAB	B	5 days	64, 83
Sperm Antibodies/MAR Test (Semen) [†]	ASPA	Semen	1 day	64
Sperm Comet [®]	CMET	Semen ¹	1-2 weeks	64
Sperm Count (Post-Vasectomy)	PVAS	Semen ¹	2 days	64
Sperm DNA Fragmentation (SCSA)	SEXT	Semen ¹	1-2 weeks	64
Sperm Morphology (Kruger strict criteria)	MRPH	Semen ¹	2 days	64
Sports/Performance Profile	SPOR	A ⁴ A ⁴ A ⁴ B ⁴ B ⁴ B ⁴ B ⁴ G ⁴ K ⁴	5 days	150-151
Sputum for Routine Culture	SPU1	SC	2-4 days	47
Sputum for TB Culture (AFB)	SPU2	SC	up to 8 weeks	47
Squamous Cell Carcinoma	SCC	B	4 days	102
STD1 M/F STD Quad (Urine and Serology)	STD1	B FCRU	2 days	71-72
STD2 M/F STI Profile Plus (Urine and Serology)	STD2	B FCRU (If culture swabs are needed please request separately)	4 days	71-72
STD3 Female STD Quad (PCR Swab and Serology)	STD3	B PCR	2 days	71-72
STD4 Female STI Profile Plus (PCR Swab and Serology)	STD4	B PCR (If culture swabs are needed please request separately)	4 days	71-72
STD5 Serology only	STD5	B	4 hours	71-72
STD6 Serology only without HIV	STD6	B	4 hours	71-72
STD8 Vaginitis/BV Profile using Culture & PCR Swab	STD8	PCR and STM	3 days	71-72
STD9 Symptomatic lesion sample using PCR Swab from lesion & PCR Swab	STD9	2 x PCR Swab	7 days	71, 73
Steroid Cell Antibody	SCA	B	2 days	83
STI Profile by PCR (7 tests from 1 Sample) (Self-collect)	DL12	Aptima urine or multisite swab	2 days	71, 159

Alphabetical test index

































TEST	CODE	SAMPLE REQS	TAT	PAGE
STI Profile: MSM1 (Blood + Urine/ Throat/Rectal Swabs) (Self-collect)	MSM1	 (TDL Tiny) / Aptima Urine / Aptima multisite swab x 2	2 days	71, 74, 159
STI Profile: MSM1 (Venous)	MSM1	 / FCRU / PCR Swab Throat / PCR Swab Rectal	2 days	71, 74
STI Profile: MSM2 (Blood + Urine/ Throat/Rectal Swabs) (Self-collect)	MSM2	 (TDL Tiny) / Aptima urine / Aptima multisite swab x 2	3 days	71, 74, 159
STI Profile: MSM2 (Venous)	MSM2	 / FCRU / PCR Swab Throat / PCR Swab Rectal	3 days	71, 74
Stool for OCP and Culture	PENT	RF	2-3 days	47
Stool for OVA Cysts & Parasites by PCR	MOCP	RF	2 days	47
Stool Reducing Substances	STRS	RF ⁷	5 days	47
Streptomycin Levels	STRM		5 days	137
Striated/Skeletal Muscle Antibody	STRA		2 days	83
Strongyloides Antibodies	STGA		10 days	83
Sulpiride	SULP	 ⁴	4 days	137
Superoxide Dismutase Inhibitor	SODI	 	5 days	36
Suppression with steroid, IVIg and intralipin, NK (CD69) cell assay, TH1/TH2 cytokines CHANGE	NCIT	    *	Send Mon-Thurs only	60
Swab (Cervical)	CERS	STM / CS	2-4 days	47
Swab (Ear)	EARS	STM	2-4 days (Culture) 8-9 days (Fungal) – same swab	47
Swab (Eye)	EYES	STM	2-4 days	47
Swab (Nasal)	NASS	STM	2-4 days	47
Swab (Oral)	ORSW	STM/CS	2-4 days	47
Swab (Penile)	PENS	STM/CS	2-4 days	47
Swab (Rectal)	RECG	STM/CS	2-4 days	47
Swab (Skin)	SKIS	STM	2-4 days	47
Swab (Throat)	THRS	STM	2-4 days	47
Swab (Urethral)	URES	STM/CS	2-4 days	47
Swab (Vaginal)	VAGS	STM/CS	2-4 days	47
Swab (Vulval)	VULV	STM/CS	2-4 days	47
Swab (Wound)	WOUS	STM	2-4 days	47
Synacthen Stimulation Test	SYNA	By appointment only	1 day	135
Synovial Fluid (for microscopy and culture)	FLU2	SC ^{†††}	14 days	47
Syphilis by PCR (chancre)	SYPS	PCR	5 days	71
Syphilis IgG/IgM (Self-collect)	TSYP	 (TDL Tiny)	1 day	71, 83, 159
Syphilis IgG/IgM (Venous)	SERJ		4 hours	71, 83
T Regulatory Cells	25RF		3 days	59
T3	T3		4 hours	57
T3 (Reverse)	RT3	 ^{7,37}	15 days	57
Tacrolimus/Prograf (FK506)	FK5	 ⁴	1-2 days	137

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TEST	CODE	SAMPLE REQ	TAT	PAGE
Taipan Snake Venom Time	TTVT	  ^{9,18}	1 week	42
TB (Pleural Fluid)	TBCU	SC	up to 8 weeks	47
TB Culture	SPU2	SC	up to 8 weeks	47
TB Culture (Urine)	TBUR	3 x EMU	up to 8 weeks	47
TB Quantiferon®-TB Gold*	TBQ4	Special tubes or  ¹	3 days	83
TB Slopes – Confirmation and Sensitivity	TBSL	TB slope (LJ medium-green) ⁶	up to 8 weeks	48
Tegretol (Carbamazepine)	CARB		4 hours	137
Teicoplanin Assay	TEIC		5 days	135
Temazepam	TEMA	 ⁴	4 days	137
Testicular Tumour Profile (LDH, AFP, HCQG)	TTP		4 hours	102, 104
Testosterone (Self-collect)	TEST	 (TDL Tiny)	1 day	57, 159
Testosterone (Venous)	TEST		4 hours	57
Testosterone (Free) (Self-collect)	FTES	 (TDL Tiny)	3 days	57, 159
Testosterone (Free) (Venous)	FTES		3 days	57
Tetanus Antibody	TETA		5 days	83, 91
TH1/TH2 Cytokine Profile	1TH2	    *	Send Mon-Thurs only	60
TH1/TH2 Cytokine Ratio	6RF	    ⁵	1 week	59
TH1/TH2 Intracellular Cytokine Ratios with IVIG	21RF	    ⁵	1 week	59
TH1/TH2 Intracellular Cytokine Ratios with IVIG, Prednisolone	20RF	    ⁵	1 week	59
TH1/TH2 Intracellular Cytokine Ratios with Prednisolone	22RF	    ⁵	1 week	59
Thalassaemia Screen	HBEL		4 days	42
Thallium (Blood)	THAL	 / 	1 week	164
Thallium (Urine)	URTH	RU	1 week	164
Theophylline	THEO		4 hours	137
Thiopurine Methyl Transferase	TPMT	 ⁵	5 days	36
Thrombin Time	THRO	 ¹⁸	4 hours	41
Thrombotic Risk Profile	PROP	      ¹⁸	5 days	42, 44, 127
Thyroglobulin Abs	TGAB		1 day	57
Thyroglobulin Assay	TGA		1 day	57
Thyroid Abs (Thyroglobulin + Thyroid Peroxidase Abs) (Self-collect)	THAB	 (TDL Tiny)	2 days	57, 83, 159
Thyroid Abs (Thyroglobulin + Thyroid Peroxidase Abs) (Venous)	THAB		1 day	57, 83
Thyroid Peroxidase Antibodies/Anti TPO	TPEX		1 day	57, 83
Thyroid Profile 1 (FT4/TSH) (Self-collect)	TF	 (TDL Tiny)	1 day	57, 62, 159
Thyroid Profile 1 (FT4/TSH) (Venous)	TF		4 hours	57, 62
Thyroid Profile 2	TF2		2 days	57, 62

Alphabetical test index

TEST	CODE	SAMPLE REQS	TAT	PAGE
Thyroid Profile 3 (FT3/FT4/TSH) (Self-collect)	TF3	 (TDL Tiny)	1 day	57, 62, 159
Thyroid Profile 3 (FT3/FT4/TSH) (Venous)	TF3		4 hours	57, 62
Thyroxine (T4)	T4		4 hours	57
Thyroxine Binding Globulin	TBG	 (Frozen)	10 days	58
Timothy Grass Components	ZZ19		2 days	141
Tissue for culture	TISS	Tissue sample	up to 14 days	48
Tissue Polypeptide Antigen	TPA		1 week	36
Tissue Transglutaminase IgA (Coeliac) (Self-collect)	TAA	 (TDL Tiny)	2 days	83, 159
Tissue Transglutaminase IgA (Coeliac) (Venous)	TAA		2 days	83
Tissue Transglutaminase IgG	TAAG		5 days	83
Tobramycin Assay (Provide Clinical Details)	TOBR		3 days	135
Toluene (Blood)	TOL	J	10 days	164
Toluene (Urine)	UTOL	RU	10 days	164
Topiramate (Topamax)	TOPI	 ⁴	4 days	137
Torch Screen	TORC		2 days	99, 101
Total Acid Phosphatase	APT		5 days	36
Total Bile Acid/Bile Salts	BILS		1 week	36
Total IgE	IGE		1 day	36, 139
Total Immune Function Evaluation	TIE	 +  ^{5,10}	7 days	83
Total Immunoglobulin E	IGE		1 day	83
Toxocara Antibodies (IgG)	TFAT	 ⁹	5 days	83
Toxoplasma Antibodies (IgG+IgM)	TFAM	 ⁹	4 hours	83, 89
Toxoplasma Antibody Full Evaluation (IgM, Dye Test, IgG Avidity)	TDYE	 ⁹	10 days	83
Toxoplasma by PCR	TXAG		5 days	84
TPPA	TPPA		2 days	71, 84
Trace Metal (Blood) Profile	TRAC	   	7-10 days	163
Transferrin	TRAN		1 day	36
Transferrin Electrophoresis	TREL		2 weeks	36
Trichinella Serology	TRIC		5 days	84
Trichloroacetic Acid (Urine)	UTCA	RU	5 days	164
Trichomonas vaginalis	TVPC	FCRU / PCR / TPV	2 days	71
Trichomonas vaginalis (Thin Prep)	TVPC	TPV	2 days	168
Trichomonas vaginalis (TV) – Urine or Vaginal (Self-collect)	TVPC	Aptima urine or multisite swab	2 days	71, 160
Triglycerides	TRI		4 hours	36
Trimethylaminuria (Fish Odour Syndrome)	FOS	J	6 weeks	36
Trimipramine	TRIM		5 days	137
Triple Swab Female STI Profile (Vaginal/Throat/Rectal Swabs) (PCR)	3SWA	PCR swab x 3 (label by site)	2 days	71

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


































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TEST	CODE	SAMPLE REQS	TAT	PAGE
Triple Swab Female STI Profile (Vaginal/Throat/Rectal Swabs) (Self-collect)	3SWA	Aptima multisite swab x 3 (label by site)	2 days	71, 160
Tropical Screen (from 6 weeks post-travel)	TROP	B B ^{9,14}	10 days	89-90
Tropomyosins	ZZ31	B	2 days	141
Troponin T (High sensitive)	TROT	B	4 hours	36
Trypanosome (Chagas) Antibodies	CHGA	B ^{9,14}	10 days	84
Tryptase	STRY	B	2 days	37, 139
TSH (Self-collect)	TSH	B (TDL Tiny)	1 day	58, 160
TSH (Venous)	TSH	B	4 hours	58
TSH-Receptor Antibodies	TSI	B	4 days	58, 84
Tularaemia Antibodies	TULA	B ¹⁴	5 days	84
Tumour Necrosis Factor – Alpha	TNF	B (Frozen) ⁴	2 weeks	37
Urate (Uric acid)	UA	B	4 hours	37
Urea (Self-collect)	UREA	B (TDL Tiny)	1 day	37, 160
Urea (Urine)	UURE	CU	4 hours	37
Urea (Venous)	UREA	B	4 hours	37
Urea and Electrolytes	U/E	B	4 hours	37, 39
Urea Electrolytes (Urine)	UELE	CU	4 hours	37
Urea/Creatinine/eGFR (Self-collect)	TCU	B (TDL Tiny)	1 day	37, 160
Ureaplasma urealyticum (Thin Prep)	UGEN	TPV	2 days	168
Ureaplasma urealyticum by PCR	UGEN	FCRU / PCR / TPV	2 days	71
Uric Acid (Serum)	UA	B	4 hours	37
Uric Acid (Urine)	UURI	CU	4 hours	37
Urinary Bladder Cancer Antigen	UBC	RU (Freeze within 48 hours)**	5 days	37, 102
Urinary Methyl Histamine	UHIT	RU (Frozen)	2 weeks	84
Urine (Microscopy Only)	UMIC	RU	1 day	48
Urine Chemistry and Microscopy (Self-collect)	UMIC	Urine (Universal). Mid stream.	1-2 days	48, 160
Urine Chemistry, Microscopy and Culture (Self-collect)	UCEM	Urine (Universal & Boric). Mid stream.	1-2 days	48, 160
Urine Cytology (Urine cytology containers available from TDL Supplies)	URCY	Urine (30mls) ²¹	2 days	172
Urine EtG (Ethyl glucuronide)	ETG	RU	1 week	161
Urine for Extended Culture	UCXD	MSU	up to 7 days	48
Urine for Microscopy and Culture	UCEM	MSU ⁺⁺⁺⁺	1-2 days	48
Urine Microalbumin/Creatinine Ratio	UMA	RU	4 hours	37
Urine Organic Acids	UORG	RU (Frozen)	3 weeks	37
Urine Steroid Screen (Steroid Hormones)	USTE	CU ⁹	2 weeks	37
Urine Sugar Chromatography	UCRO	RU (Frozen)	3 weeks	37
Urticaria Test (Histamine Releasing)	CURT	B	3 weeks	84
Vaginitis/BV Profile (Culture & PCR)	STD8	PCR and STM	3 days	71
Vaginitis/BV Profile using Culture & PCR Swab (Self-collect)	STD8	Aptima multisite swab and Blue gel Amies swab	3-5 days	71, 160

Please ensure all specimens and forms are labelled with given Forename, Surname, DOB, Date and Time of sample collection.


































See page 25 for sample-taking and special handling instructions.

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TEST	CODE	SAMPLE REQS	TAT	PAGE
Valium (Diazepam)	DIAZ		7 days	137
Valproic Acid (Epilem)	VALP		4 hours	137
Vancomycin Hydrochloride	VANC		4 hours	135
Varicella zoster – DNA	VZPC		5 days	99
Varicella zoster Antibodies (IgG)	VZOS		1 day	91, 99
Varicella zoster Antibodies (IgM)	VZOM		1 day	91, 99
Vascular Endothelial Growth Factor	VEGF		14 days	84
Venom Components	ZZ33		2 days	141
Very Long Chain Fatty Acids	VLCF	 or  (Frozen) ⁹	4-6 weeks	37
Vigabatrin (Sabril)	VIGA		10 days	137
Viral Antibody Screen	VIRA	 	2 days	99, 101
Viral Eye by PCR	VPE	PCR	3 days	99, 101
Viral Respiratory RNA Screen by PCR	VPR	PCR or as specified on the form	2 days	99, 101
Viral Skin/Mucosa by PCR	VPSK	PCR	2 days	99, 101
Viscosity (Plasma)	VISC	 ^{4*}	3 days	42
Vitamin A (Retinol)	VITA		5 days	149
Vitamin B (Functional)	FUNC	  or 	5 days	149
Vitamin B Profile	VBP	  	5 days	149, 151
Vitamin B1 (Thiamine)	VIT1		5 days	149
Vitamin B2 (Riboflavin)	VIB2		5 days	149
Vitamin B3 (Nicotinamide)	VIB3		5 days	149
Vitamin B5 (Pantothenic Acid)	VB5S		5 days	149
Vitamin B6 (Pyridoxine)	VITB		5 days	149
Vitamin B7 (Biotin) CHANGE	BIOS	 ⁷	5 days	149
Vitamin B9 (Folic acid) – Red cell	RBCF		2 days	149
Vitamin B9 (Folic acid) – Serum	FOLA		1 day	149
Vitamin B12 (Active) (Self-collect)	B12	 (TDL Tiny)	1 day	37, 149, 160
Vitamin B12 (Active) (Venous)	B12		1 day	37, 149
Vitamin B12 (Active)/Red Cell Folate	B12F	 	2 days	37, 149
Vitamin B12 (Total)	TB12		1 day	37
Vitamin C (Active)	VITC	 (spun and frozen within 3 hours)*	5 days	149
Vitamin D (1, 25 Dihydroxy)	D3		5-8 days	149
Vitamin D (25-OH) (Self-collect)	VITD	 (TDL Tiny)	1 day	37, 149, 160
Vitamin D (25-OH) (Venous)	VITD		4 hours	37, 149
Vitamin E (Alpha Tocopherol)	VITE		5 days	149
Vitamin K (Nutritional)	VKN	Serum (SST or ) *	5 days	149
Vitamin K (With PIVKA II)	VITK	 ¹³	10 days	41
Vitamin Profile 1	VITS	   ⁷	5 days	149, 151

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TEST	CODE	SAMPLE REQ ^S	TAT	PAGE
Vitamin Profile 2	VIT2	     7,13	5 days	149, 151
VLDL Cholesterol	VLDL	 13	1 week	37
VMA	UVMA	PU ¹	5 days	37
Voltage Gated Calcium Channel Antibodies	CCAB		3 weeks	84
Voltage Gated Potassium Channel Antibodies	VPCA		3 weeks	84
Von Willebrand Profile	FVWF	   4,9,12	5 days	42, 44
Von Willebrands Multimers	VWM	   18	3 months	42
Wall Pellitory Components	ZZ20		2 days	141
Walnut Components	ZZ34		2 days	141
West Nile Virus Abs	WNV		2 weeks	99
Wheat Components	ZZ21		2 days	141
Whooping Cough (Pertussis) Antibodies	PERS		5 days	84
Whooping Cough (Pertussis) by PCR	PERP	Prenasal (posterior nasopharynx) swab	5 days	84
Wolf-Hirschhorn Syndrome – BOBs (5 days) + karyotype (15 days)	PBOB, KARY	CVS / AF /   9	5-15 days	127
Wolf-Hirschhorn Syndrome – BOBs only	PBOB	CVS / AF /  9	5 days	127
Xanthine – Blood	XANB		2 weeks	164
Xylene – Urine	UXYL	RU ³⁰	2 weeks	164
Xylose Tolerance Test	XTT	J ¹	7 days	150
Y chromosome microdeletions – AZFa + AZFb + AZFc + SRY	YDEL	 9	5 days	127
Yellow Fever Antibodies	YELL	 9,14	10 days	84
Yersinia Antibodies	YERS		4 days	84
Zika Abs IgM and IgG – Antibody detection from 15 days	ZKAB		Up to 14 days	84, 89, 99
Zika RNA by PCR in Semen	ZIKS	Semen	Up to 14 days	84, 89, 99
Zika RT PCR – Window of detection from 1-14 days from onset of symptoms	ZIKU	RU	Up to 14 days	84, 89
Zika RT PCR – Window of detection from 1-7 days from onset of symptoms	ZIKA		Up to 14 days	84, 89
Zinc (Serum/Plasma) CHANGE	ZINC		2 days	150, 163
Zinc (Urine)	URZN	CU	5 days	150, 163
Zinc (Whole Blood)	RBCZ	 or 	5 days	150
Zinc Protoporphyrin	ZNPR		5 days	164
Zygosity testing – comparative DNA profile	DNAC	 (From each twin and both parents) ⁹	5 days	127

TDL Referral laboratories

For certain specialist tests TDL has developed a selected network of TDL Group and Reference Laboratories. These Group or specialist laboratories can be identified by a code assigned to reports. The quality of these laboratories is recognised by UKAS, or similar accrediting bodies for the laboratories outside the UK.

TDL Referral laboratories

Addenbrooke's Hospital – BGU and Immunology [899]

Alder Hey Children's NHS Foundation Trust – Biochemistry Department [880]

Analytical Services International Ltd,
St George's University of London –
Forensic Toxicology Service [994]

Animal and Plant Health Agency – Veterinary labs [911]

Bio Predictive [Original report]

Bioscientia (Germany) [868]

Birmingham Children's Hospital NHS Foundation
Trust – Clinical Chemistry [970]

Birmingham University Hospital NHS
Foundation Trust [836]

Brucella Reference Unit – Liverpool
Clinical Laboratories, Royal Liverpool
and Broadgreen Hospital [947]

Cambridge Clinical Laboratory [867]

Cambridge Life Sciences [997]

Cambridge Nutritional Science Ltd [Original report]

Cardiff and Vale University Health Board –
The Analytical Toxicology Department [998]

Douglass Hanly Moir Pathology
(Australia) [Original report]

Epsom and St Helier University Hospital NHS
Trust – Biochemistry Department [968]

Epsom and St Helier University Hospital NHS
Trust – Immunology Department [968]

Epsom and St Helier University Hospital NHS
Trust – Microbiology Department [951]

Eurofins – Biomnis (France) [950]

Great Ormond Street Hospital –
Department of Chemical Pathology [964]

Great Ormond Street Hospital –
Enzyme Unit, Chemical Pathology [964]

Great Ormond Street Hospital –
Immunology Department [924]

Great Ormond Street Hospital –
Neurometabolic Unit [964]

Guildford RSCH Trace Element Laboratory,
SAS Trace Element Centre [955]

HCA Healthcare UK – HCA Laboratories [982]

HFL Sport Science (LGC Group) [861]

Igenomix UK [Original Report]

Imperial College Healthcare NHS Trust – Charing Cross
Hospital, Chemical Pathology Department [912]

Imperial College Healthcare NHS Trust – Charing Cross
Hospital, Infection and Immunity Department [962]

Imperial College Healthcare NHS Trust –
Charing Cross Hospital, Medical Oncology [912]

Imperial College Healthcare NHS Trust –
Hammersmith Hospital, Molecular Endocrinology [931]

Imperial College Healthcare NHS Trust,
St Mary's Hospital – Virology Department [912]

Institute of Aquaculture – University of Stirling [1000]

Institute of Neurology – Neurogenetics Unit [975]

King's College Hospital – HMDC Laboratory
for Molecular Haemato-Oncology [943]

Labor Augsburg MVZ GmbH (Germany) [900]

Latis Scientific [927]

London School of Hygiene & Tropical Medicine
– Diagnostic Parasitology Lab [933]

Matrix Diagnostics [896]

Mayo Clinic Laboratories (Netherlands) [894]

Meningococcal reference unit (Men RU)
Manchester – Manchester Royal Infirmary [949]

Micropathology Ltd [920]

National Blood Service – Colindale,
Red Cell Immuno Haematology Department [910]

TDL Referral laboratories

NHS Blood and Transplant – Birmingham [856]

NHS Blood and Transplant – H & I Laboratory [855]

NHS Blood and Transplant – Tooting [854]

Norfolk and Norwich University Hospital NHS Foundation Trust – SAS Metabolic Bone Laboratory [993]

Oxford Immunotec [841]

Oxford University Hospital NHS Foundation Trust – Churchill Hospital [983]

UKHSA – Bacteriology Reference Department (BRD), Colindale [910]

UKHSA – Virus Reference Department (VRD) – Colindale [910]

UKHSA Mycology Reference Laboratory – UKHSA South West Laboratory, Southmead Hospital, Bristol [903]

UKHSA National Mycobacterium Reference Service National Infection Service, Colindale [974]

UKHSA Rare and imported pathogens laboratory – Porton Down [981]

Queens University Hospital, Belfast – Institute of Clinical Science [853]

Reflab (Denmark) [988]

Reproductive Immunology Centre [839]

Rosalind Franklin University (USA) - [Original report]

Royal Berkshire Hospital NHS Foundation Trust – Clinical Biochemistry [847]

Royal Devon and Exeter NHS Foundation Trust [838]

Royal Surrey County Hospital – SAS Peptide Hormone Section [959]

Sandwell and West Birmingham NHS Trust – City Hospital Birmingham, Clinical Biochemistry Department [970]

SCSA Diagnostics (USA) [Original report]

Sheffield Children's NHS Trust – Clinical Chemistry [847]

Sheffield Teaching Hospital NHS Foundation Trust – Protein Reference Laboratory Unit and Immunology Department [966]

Southmead Hospital – Antimicrobial Reference Laboratory, Bristol [915]

St George's University Hospital NHS Foundation Trust – Cell Marker Department [846]

SYNLAB Laboratory Service – Abergavenny [941]

The Epilepsy Society (Chalfont Centre) [837]

The Leeds Teaching Hospital NHS Trust – Endocrinology Laboratory (including SAS Steroid Centre), Department of Specialist Laboratory Medicine, St James University Hospital [992]

The Leeds Teaching Hospitals NHS Trust – Mycology Reference Centre [973]

The Newcastle upon Tyne Hospitals – Royal Victoria Infirmary [878]

The Royal Marsden Hospital – Department of Haematology / Oncology [989]

The Royal Marsden Hospital – Department of Pathology [990]

Toxoplasma Reference Unit, Public Health Wales Microbiology ABM, Singleton Hospital – Swansea [969]

Trace Laboratories Ltd [955]

UCL Great Ormond Street Institute of Child Health [935]

UCL Queen Square Institute of Neurology – Department of Neuroimmunology [975]

University Hospital Birmingham NHS Foundation Trust – Heartlands Hospital [843]

University Hospital of Wales – Cardiff Medical Immunology Department [842]

Synnovis – Guy's Hospital, Biochemistry Genetics Laboratory [930]

Synnovis – King's College Hospital, Clinical Biochemistry [914]

Synnovis – St Thomas' Hospital Haemophilia Centre [956]

Synnovis – St Thomas' Hospital Immunohistology [961]

Synnovis – St Thomas' Hospital Purine Research Laboratory [925]

TDL Referral laboratories

Group laboratories

Royal Free London NHS Foundation Trust –
Haemostasis [984]

University College London Hospitals NHS Foundation
Trust (UCLH) – Cytology [Original report]

University College London Hospitals NHS Foundation
Trust (UCLH) – Hospital for Tropical disease [933]

University College London Hospitals NHS Foundation
Trust (UCLH) – Molecular Virology [999]

University College London Hospitals NHS Foundation
Trust (UCLH) – Special Chemistry [953]

TDL Genetics Referral laboratories

All Wales Medical Genetics Service

Anthony Nolan, Histocompatibility and Immunogenetics

Asper Biotech

Bioscientia GmbH

Bristol Genetics Laboratory (North Bristol NHS Trust)

CentoGene

DiaGenom GmbH

Douglass Hanly Moir Pathology

East Scotland Regional Genetics Service (NHS Tayside)

Exeter Clinical Laboratory – Department
of Molecular Genetics

Fulgent Diagnostics

Institute of Neurology, Queen's Square

International Blood Group Reference Laboratory

London South East Genetics Service

Medical Genetics Laboratory – Central Manchester
University Hospitals NHS Foundation Trust

Medical Neurogenetics Laboratory LLC

Micropathology Ltd

Molecular Genetics Laboratory –Liverpool's
Women NHS Foundation Trust

Molecular Vision Laboratory

Newcastle Mitochondrial NGC Diagnostic Service

North East Thames Regional Genetic Service

North West London Pathology

North West Thames Regional Genetic Service

Northern Genetics Service

Oxford Genetics Laboratory – Oxford
University Hospitals

Prevention Genetics

Progenika Biopharma Grifols

Protein Reference Unit & Immunology
Department – Sheffield Protein Unit

Purine Research Laboratory – St Thomas' Hospital

Royal Marsden – Haemato-Oncology Unit

Sheffield Diagnostic Genetics Service

SIHMDS – Cytogenetics Laboratory,
Great Ormond Street Hospital

South East Scotland Genetics Service (NHS Lothian)

South West Thames Regional Genetics Service

SYNLAB Budapest Diag Center

The Leeds Genetics Laboratory Viapath Analytics LLP

Wessex Region Genetics Service

West Midlands Regional Genetics Laboratory

West of Scotland Genetic Service
(NHS Greater Glasgow and Clyde)

TDL Terms and Conditions of Business from 1st Jan 2024

The definitions which apply to these Terms and Conditions are set out in clause 19.

1 THE SERVICES

- 1.1 These Terms and Conditions will apply to any services or consumables that The Doctors Laboratory Limited or TDL Genetics Limited provides to the Client, unless those services are the subject of a separate written agreement signed by TDL and the Client. These Terms and Conditions apply to the exclusion of any other terms presented by the Client or implied by custom or course of dealing.
- 1.2 By submitting a Pathology Request, a request for any other services described in the Laboratory Guide or in any other proposal provided by TDL, or an order for any Consumables described in the Laboratory Guide (in each case an **'Order'**), the Client offers to purchase those Tests, other services or Consumables on these Terms and Conditions from TDL. TDL may accept or reject any Order.
- 1.3 A contract between TDL and the Client for the provision of Services and / or Consumables, incorporating these Terms and Conditions and the Order (an **'Agreement'**) takes effect when TDL confirms acceptance of the Client's Order in writing, logs the relevant Pathology Request in its laboratory information management system, or begins performing the Services (whichever occurs first). Any request for add-on Tests (as described in the Laboratory Guide) constitutes a request for further Services under that Agreement, which TDL may accept or decline. In the event of a conflict between the Order and these Terms and Conditions, the Terms and Conditions will take priority.
- 1.4 TDL will provide the Services under the Agreement:
 - 1.4.1 in accordance with Good Industry Practice;
 - 1.4.2 in accordance with the UKAS medical laboratory accreditation standard (ISO 15189); and
 - 1.4.3 using suitably skilled and experienced staff.
- 1.5 TDL will use reasonable efforts to achieve the Test turnaround times quoted in the Laboratory Guide, but does not warrant that it will achieve those times in the case of any particular Sample.
- 1.6 The Laboratory Guide sets out Sample rejection criteria. If the Sample meets those criteria, or if TDL considers that the Sample is otherwise unsuitable for Testing or TDL is unable to conduct the Testing then TDL may decline to carry out the Testing under the Agreement and will be entitled to dispose of the Sample.
- 1.7 As part of its Services TDL will, on request, arrange for collection of Samples from locations within the M25 motorway. Such collection service is included within the price of the Test unless otherwise specified by TDL. Collection of Samples from locations outside

the M25 is by special arrangement, and may incur an additional charge. Where collection by TDL has not been requested and agreed, the Client will be responsible, at its own cost, for the transport of Samples to TDL. Where TDL arranges collection of Samples it will use reasonable efforts to achieve the timescales it quotes for collection, but does not warrant that it will achieve those timescales in the case of any particular collection.

- 1.8 TDL may destroy or dispose of a Sample after completing the Testing or on termination of the Agreement, unless otherwise agreed in writing with the Client.
- 1.9 In providing the Services, TDL shall comply with all Applicable Law relating to anti-bribery and anti-corruption, including the Bribery Act 2010. TDL shall not, and shall ensure that its staff do not, engage in any activity which would constitute an offence under the Bribery Act 2010.
- 1.10 TDL is committed to trading ethically, with zero tolerance for modern slavery (including forced labour or human trafficking of any kind), human rights violations, and child labour. In performing its obligations under the Agreement, TDL will comply with all Applicable Law and applicable internal policies relating to anti-slavery and human trafficking.
- 1.11 TDL's laboratories are operated by members of the TDL Group. TDL uses those laboratories to undertake the Tests, except where TDL refers the Tests to suitably accredited laboratories operated outside the TDL Group. The UKAS accreditation numbers for the TDL Group laboratories in the UK are as follows: 8059 (HSL Analytics LLP) Genetics and Molecular Sciences, 8169 (HSL Analytics LLP) Blood Sciences, 8860 (HSL Analytics LLP) Infection Sciences, 8812 (The Doctors Laboratory Limited) Haematology, Blood Transfusion, Biochemistry, Microbiology, Molecular Biology, 10199 (The Doctors Laboratory Limited) Andrology, 8511 (HSL Analytics LLP) Cytology, 9706 (The Doctors Laboratory Limited) Urine Cytology.

2 SUPPLY OF CONSUMABLES

- 2.1 TDL shall supply Consumables to the Client in accordance with the terms of the Agreement.
- 2.2 The Consumables shall: (i) be of satisfactory quality (within the meaning of the Sale of Goods Act 1979) and fit for any purpose held out by TDL; and (ii) comply with all Applicable Law.
- 2.3 TDL shall not be liable for Consumables' failure to comply with clause 2.2 if: (i) the Client makes any further use of those Consumables after notifying TDL of such failure; (ii) the defect arises because the Client failed to follow TDL's instructions for the storage, use or maintenance of the Consumables or (if there are none) good practice regarding the same; (iii) the Client alters or repairs those Consumables without TDL's

TDL Terms and Conditions of Business from 1st Jan 2024

- prior written consent; (iv) the defect arises as a result of fair wear and tear, deliberate damage, negligence, or abnormal storage or working conditions; or (v) the Consumables differ from their description as a result of changes made to ensure they comply with Applicable Law.
- 2.4 In the event the Consumables do not comply with clause 2.2, TDL shall provide replacement Consumables without undue delay. This shall be the Client's only remedy for such non-compliance. The terms of this clause 2 shall apply to any such replacement Consumables provided by TDL.
- 2.5 TDL shall ensure that the Consumables are properly packed and secured in a manner to enable them to reach their destination in good condition, and in a manner which complies with Applicable Law.
- 2.6 If the Client or the Client's carrier will collect the Consumables from TDL's premises, delivery shall be completed when TDL places the Consumables at the Client's disposal at TDL's premises. In all other cases, delivery shall be completed on the loading of the Consumables at the premises where they are loaded onto transport for carriage.
- 2.7 TDL may deliver Consumables by instalments, which may be invoiced and paid for separately. Time for delivery of Consumables is not of the essence of the Agreement and delays in the delivery of Consumables shall not entitle the Client to refuse to take delivery. TDL shall have no liability for any failure or delay in delivering Consumables to the extent that any failure or delay is caused by the Client's failure to comply with its obligations under the Agreement.
- 2.8 Title and risk in the Consumables shall pass to the Client on delivery, except that any biofreeze bottles provided by TDL shall remain the property of TDL at all times, regardless of any use by the Client of the biofreeze bottles.
- 2.9 The Client must not resell the Consumables or provide them to any third party without TDL's prior written consent.
- 2.10 The Client shall ensure that: (i) any Consumables provided by TDL are only used by healthcare professionals who are appropriately qualified and trained in the proper use of such Consumables; and (ii) the healthcare professionals use the Consumables in accordance with any instructions relating to the use of the Consumables provided by TDL and in any event with the degree of skill and care reasonably to be expected of a healthcare professional experienced in the use of such Consumables.
- ### 3 PRICE AND PAYMENT TERMS
- 3.1 The price payable by the Client for the Services and / or the Consumables will be the most recent price confirmed by TDL to the Client in writing or by telephone prior to the Client submitting its Order. If TDL has not confirmed the price for the Services and / or Consumables, the price will be that indicated in the Laboratory Guide.
- 3.2 As at the date of these Terms and Conditions many of TDL's services are VAT exempt. All of TDL's prices are stated exclusive of VAT and where VAT is chargeable on the Services and/or Consumables the Client will pay it at the applicable rate.
- 3.3 Invoices are normally issued on a monthly basis, but TDL reserves the right to issue them more frequently. The Client will pay TDL's invoices under the Agreement within 30 days of the date of the invoice, without any deduction or set off. At TDL's option, interest may be charged on late payments at the statutory rate prescribed from time to time by regulations under the Late Payments of Commercial Debts (Interest) Act 1998. Invoices paid from outside the UK must be paid by either direct bank transfer or by cheque drawn on a UK branch. All payments will be made in pounds sterling.
- 3.4 If the Client disputes any invoice: (i) the Client shall notify TDL in writing as soon as practicably possible and in any event not later than 90 days after the date of the invoice, specifying the reasons for disputing the invoice; (ii) the Client shall pay to TDL all amounts not disputed by the Client as set out in clause 3.3 above; and (iii) the parties shall attempt to resolve the dispute promptly and in accordance with clause 18.1 below.
- 3.5 If the Client does not dispute an invoice in accordance with clause 3.4 above then the amount stated on the invoice shall be deemed payable by the Client and the Client shall not be entitled to dispute the amount invoiced.
- 3.6 Without affecting any of its other rights, TDL may suspend or cease provision of the Services and / or Consumables if the Client fails to pay an invoice due to TDL, or if the total of the sums payable by the Client to TDL under any agreements between the Client and TDL meets or exceeds any credit limit that TDL communicates to the Client from time to time.
- ### 4 CONFIDENTIALITY
- 4.1 TDL agrees that it will hold and maintain the confidence of:
- 4.1.1 all information of a confidential nature which is received by TDL from the Client or its patients in connection with the Services; and

TDL Terms and Conditions of Business from 1st Jan 2024

- 4.1.2 all Test results, invoices and other information of a confidential nature issued by TDL to the Client or its patients in connection with the Services, and, save with the Client's consent or as otherwise permitted under the Agreement, will not disclose such information other than to its professional staff, independent consultants and/ or persons to whom it has delegated the performance of the Services and who require the information for such purpose. Where TDL has been provided with the details of a patient's private medical insurance in connection with the Services, TDL will be entitled to assume (and the Client so warrants) that both the Client and the patient consent to the disclosure of information relating to that patient to the insurer concerned.
- 4.2 The restrictions in clause 4.1 will not apply to information which: (i) was in TDL's possession prior to disclosure by the Client; or (ii) is now or hereafter comes into the public domain other than by default of TDL; or (iii) was lawfully received by TDL from a third party acting in good faith having a right of further disclosure; or (iv) is required by law to be disclosed by TDL; or (v) which is required by a regulatory or accreditation body to be disclosed to it for the purpose of regulating or accrediting the TDL Group.

5 CLIENT RESPONSIBILITIES

- 5.1 Except where TDL obtains the Sample directly from the patient during a home visit or at TDL's patient reception facility, the Client will ensure that the Sample is obtained from the patient, packaged, and labelled in accordance with Applicable Law good clinical practice and, if applicable, TDL's written instructions.
- 5.2 Except where TDL agrees to arrange transport of the Sample to TDL's laboratory, the Client will ensure that the Sample is transported to TDL's laboratory in accordance with Applicable Law and good clinical practice. Where TDL agrees to arrange transport of the Sample the Client will ensure that the Samples are ready for collection by TDL or its carrier at the agreed times.
- 5.3 The Client will ensure that all necessary consents and permissions are obtained and all necessary information provided to the patient, which is required under Applicable Law or good clinical practice in order to permit the performance of the Testing, and any other Services, and the use of the Protected Data as contemplated in the Agreement.
- 5.4 The Client will provide TDL with any information reasonably necessary for performing the Services and / or supplying Consumables, including by ensuring that the Pathology Request contains sufficient information regarding the Sample, the relevant patient, and the persons to whom the Test results are to be reported, and will ensure that any information the Client provides to TDL in connection with the Services and / or Consumables is accurate and complete.

6 LIABILITY

- 6.1 Nothing in the Agreement will limit or exclude liability for death or personal injury caused by negligence or any other liability that cannot be limited or excluded under Applicable Law.
- 6.2 In these Terms and Conditions 'liability' means any liability whether in contract, tort (including negligence), misrepresentation, breach of statutory duty or otherwise, which arises in connection with the Services, the Consumables or under or in connection with any Agreement.
- 6.3 The liability of TDL and the Client will each be limited to £2,000,000 in total. This limit applies per Agreement and in aggregate for all Agreements made in a calendar year.
- 6.4 Neither TDL nor the Client will have any liability for:
- 6.4.1 loss of profit or revenue;
- 6.4.2 loss of anticipated savings;
- 6.4.3 loss of reputation or goodwill; or
- 6.4.4 indirect, special or consequential loss.
- 6.5 TDL will have no liability for any delay or failure in performance of the Services or provision of the Consumables arising from the Client's delay or failure in performing its obligations under clause 5 (Client Responsibilities).
- 6.6 All of the warranties which TDL gives in relation to the Services and / or the Consumables are expressly set out in these Terms and Conditions. All other warranties, whether implied or express, are excluded from the Agreement where it is lawful to exclude them.
- 6.7 In this clause 6, references to TDL include the members of TDL's Group, and for the purpose of the limit in clause 6.3 the liabilities of TDL and the TDL Group Members will be counted in aggregate. The members of TDL's Group may enforce this clause 6.

7 FORCE MAJEURE

If the performance of any obligation under the Agreement (except for an obligation to pay) is prevented, restricted or interfered with by reason of circumstances beyond the reasonable control of that party obliged to perform it (a 'Force Majeure Event'), the party so affected will be excused from any resulting failure or delay in performance, and the time for performance will be extended by an amount of time equal to the duration of the Force Majeure Event. The party so affected will use reasonable endeavours to mitigate the effect of the Force Majeure Event on its performance of its obligations. If the Force Majeure Event delays or prevents performance of a party's obligations for more than three months, either party may terminate the Agreement on written notice to the other.

TDL Terms and Conditions of Business from 1st Jan 2024

8 DATA PROCESSOR AND DATA CONTROLLER

- 8.1 When TDL processes Protected Data on behalf of the Client in providing the Services the parties agree that the Client will be the controller and TDL will be the processor. The Annex to these Terms and Conditions sets out when TDL processes Protected Data on behalf of the Client. Clause 17 describes the circumstances where TDL will use Protected Data on its own behalf as controller.
- 8.2 When TDL processes Protected Data as processor, clauses 9 to 16 will apply in relation to the Protected Data. Where TDL processes Protected Data as controller, clause 17 will apply instead.
- 8.3 The Client will comply with the Data Protection Laws in relation to the Protected Data, and ensure that all instructions given by it to TDL in respect of Protected Data will at all times be in accordance with Data Protection Laws.

9 DATA PROCESSING INSTRUCTIONS

- 9.1 When TDL processes Protected Data as processor, TDL will comply with the obligations of processors under the Data Protection Laws.
- 9.2 Unless required to do otherwise by Applicable Law, TDL will (and will take steps to ensure each person acting under its authority will) process the Protected Data only in accordance with the Client's documented instructions as set out in the Order, pursuant to these Terms & Conditions, and in the Annex (the '**Processing Instructions**').
- 9.3 If Applicable Law requires TDL to process Protected Data other than in accordance with the Processing Instructions, TDL will notify the Client of any such requirement before processing the Protected Data (unless Applicable Law prohibits TDL from doing so).
- 9.4 TDL will promptly inform the Client if TDL becomes aware of a Processing Instruction that, in TDL's opinion, infringes Data Protection Laws. TDL will have no liability for any processing in accordance with those Processing Instructions after giving the notice. TDL's obligations under this clause 9.4 do not limit the Client's obligations under clause 8.3.

10 DATA SECURITY MEASURES

In relation to the processing of the Protected Data, TDL will implement and maintain, at its cost and expense, appropriate technical and organisational measures to ensure for the Protected Data a level of security appropriate to the risks presented by the processing, taking into account the state of the art, the cost of implementation and the nature, scope, context and purpose of the processing of the Protected Data, as well as the risk of varying likelihood and severity of the rights and freedoms of natural persons.

11 USING STAFF AND OTHER PROCESSORS

- 11.1 TDL will not engage any processor to process the Protected Data on the Client's behalf (a '**Sub-Processor**') without the Client's authorisation of that specific Sub-Processor. The Client will not unreasonably withhold, condition or delay such consent. By accepting these Terms and Conditions the Client authorises the appointment of the Authorised Sub-Processors.
- 11.2 TDL will ensure that each Sub-Processor is appointed under a written contract containing materially the same obligations as clauses 9 to 16 (inclusive).
- 11.3 TDL will ensure that all persons authorised to process Protected Data are subject to a binding obligation to keep the Protected Data confidential (except where disclosure is required in accordance with Applicable Law, in which case TDL will, where practicable and not prohibited by Applicable Law, notify the Client of any such requirement before such disclosure).

12 ASSISTANCE WITH THE CLIENT'S COMPLIANCE AND DATA SUBJECT RIGHTS

- 12.1 Taking into account the nature of the processing, TDL will implement and maintain reasonable measures to assist the Client to respond to the Data Subject Requests relating to the Protected Data that TDL processes on the Client's behalf. TDL will refer such Data Subject Requests it receives to the Client promptly, and in any event within five Business Days of receipt of the request.
- 12.2 TDL will provide such assistance as the Client reasonably requires (taking into account the nature of processing and the information available to TDL) to the Client in ensuring compliance with the Client's obligations under Data Protection Laws with respect to: (i) security of processing, (ii) data protection impact assessments, (iii) prior consultation with the relevant regulator regarding high risk processing, and (iv) notifications to the regulator and / or communications to data subjects by the Client in response to any Personal Data Breach. The Client will pay TDL's charges for providing the assistance in this clause 12, such charges to be calculated on a time and materials basis at TDL's applicable daily or hourly rates in force from time to time.

13 INTERNATIONAL DATA TRANSFERS

- 13.1 The Client agrees that TDL may transfer Protected Data to countries outside the United Kingdom for the purpose of providing the Services, provided all transfers by TDL of Protected Data to such recipients are in accordance with such safeguards or other mechanism(s) for transfers of personal data as may be permitted under the Data Protection Laws from time to time. The Client agrees that TDL may implement such safeguards by entering into standard data protection clauses authorised under the Data Protection Laws, subject to clause 13.2

TDL Terms and Conditions of Business from 1st Jan 2024

- 13.2 Where the Client requires TDL to transfer Protected Data for the purpose of providing the Services to a country outside the United Kingdom which is not subject to an adequacy regulation under the Data Protection Laws (a **Third Country**) then:
- 13.2.1 the Client will enter into (or where relevant use reasonable endeavours to procure that the applicable third party recipient of the Protected Data enters into) standard data protection clauses with TDL authorised under the Data Protection Laws for the international transfer of personal data that provide sufficient safeguards for the relevant transfer, on terms acceptable to TDL (acting reasonably); and
- 13.2.2 where the data protection clauses referred to in clause 13.2.1 are not entered into, the Client will procure that prior to the transfer the relevant data subjects provide valid consent to the transfer for the purposes of the Data Protection Laws, and the Client will provide evidence of such consents to TDL on request.

14 RECORDS, INFORMATION AND AUDIT

- 14.1 TDL will maintain, in accordance with the Data Protection Laws binding on TDL, written records of all categories of processing activities carried out on behalf of the Client.
- 14.2 TDL will, in accordance with the Data Protection Laws, make available to the Client such information as is reasonably necessary to demonstrate TDL's compliance with its obligations as a processor under these Terms and Conditions and the Data Protection Laws and allow for and contribute to audits, including inspections, by the Client (or another auditor mandated by the Client) to the extent reasonably necessary for that purpose, subject to the Client:
 - 14.2.1 giving TDL reasonable prior notice and in any event not less than 30 days' notice of such information request, audit and/or inspection required by the Client;
 - 14.2.2 ensuring that all information obtained or generated by the Client or its auditor(s) in connection with such information requests, inspections and audits is kept strictly confidential (save for disclosure to the relevant regulator or as otherwise required by Applicable Law); and
 - 14.2.3 ensuring that such audit or inspection is undertaken during normal business hours, with minimal disruption to TDL's business, any Sub-Processor's business and the business of other customers of TDL.

15 BREACH NOTIFICATION

TDL will, without undue delay, notify the Client of a personal data breach involving the Protected Data, and provide the Client with details of the personal data breach.

16 DELETION OR RETURN OF PROTECTED DATA AND COPIES

TDL will, at the Client's written request, either delete or return all of the Protected Data to the Client in such form as the Client reasonably requests within a reasonable time after the end of the provision of the relevant Services related to processing, and delete existing copies (unless storage of any data is required by Applicable Law, in which case TDL will inform the Client of any such requirement). Where TDL will process that Protected Data as controller under clause 17, TDL may retain the Protected Data.

17 PROTECTED DATA THAT TDL PROCESSES AS A CONTROLLER

- 17.1 TDL may process Protected Data as controller in the circumstances and for the purposes set out in TDL's Privacy Notice. In particular TDL may:
 - 17.1.1 retain and submit the Protected Data to a Health Authority in the United Kingdom for the purposes of a Public Health Programme operated by that Health Authority, or to a regulator for the purpose of complying with regulatory obligations; and
 - 17.1.2 retain and process Protected Data in its laboratory records in order to meet the requirements of the UKAS medical laboratory accreditation standard (ISO 15189) and implement the guidelines of the Royal College of Pathologists for the retention and storage of pathological records and specimens.
- 17.3 When TDL processes Protected Data to provide Non-Invasive Prenatal Tests, TDL does so as a controller.
- 17.4 When TDL processes personal data on its own behalf as controller, it will do so in accordance with the obligations of data controllers under the Data Protection Laws and with the applicable terms of the Agreement.

18 GENERAL

- 18.1 Disputes
 - 18.1.1 If any dispute arises relating to the Agreement or any breach or alleged breach of the Agreement, the parties will make a good faith effort to resolve such dispute without recourse to legal proceedings. If, notwithstanding such good faith efforts, the dispute is not resolved either party may submit the dispute to the jurisdiction of the English Courts.
 - 18.1.2 Except to the extent clearly prevented by the area of dispute, the parties will continue to perform their respective obligations in respect to any existing Agreements while such dispute is being resolved.

TDL Terms and Conditions of Business from 1st Jan 2024

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| <p>18.2 Variation</p> <p>18.2.1 TDL may amend these Terms and Conditions by updating the Laboratory Guide and providing the Client with a copy of the update or publishing it on TDL's website. Such amendments will only apply to an Order submitted after the date of the update, and the Client will be deemed to accept those amendments by submitting an Order after that date.</p> <p>18.2.2 Except as set out in clause 18.2.1, any amendments to the Agreement will not be effective unless in writing and signed by an authorised signatory on behalf of each of the parties. The terms of the Agreement may be varied by agreement of the parties but without the consent of any third party whether or not the rights of such third party are affected by such variation. The Client will not unreasonably withhold, delay or condition its agreement to any variation to the Agreement requested by TDL in order to ensure the Services and TDL (and each Sub-Processor) can comply with any change in Applicable Laws.</p> <p>18.3 Rights and waiver</p> <p>All rights granted to either of the parties will be cumulative and not exhaustive of any rights and remedies provided by law. The failure of either party to enforce (or delay in enforcing) at any time for any period any one or more of the terms of the Agreement will not be a waiver of such term or of the right of such party at any time subsequently to enforce all the terms of the Agreement.</p> <p>18.4 Severability</p> <p>If any provision of the Agreement is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions will not be in any way affected.</p> <p>18.5 Sub-contracting and Assignment</p> <p>TDL may assign or sub-contract the performance of the Agreement (in whole or in part) or any one or more of the Tests to be performed hereunder to any member of the TDL Group or any suitably accredited laboratories including those listed in the Laboratory Guide. The Client may not assign the Agreement or any of its rights or obligations hereunder without the prior approval of TDL.</p> <p>18.6 Relationship of the parties</p> <p>It is acknowledged and agreed that TDL and the Client are independent contractors and nothing in the Agreement will create or be construed as creating a partnership or a relationship of agent and principal between the parties. The Client acknowledges and agrees that, in requesting Services from TDL, it is not acting as agent for any patient or patients to which the Services relate.</p> | <p>18.7 Notices</p> <p>All notices given under the Agreement will be in writing and will be delivered by hand or sent by prepaid first class post or by prepaid first class recorded delivery or by email transmission. All notices will be delivered at or sent, in the case of TDL, to: post The Halo Building, 1 Mabledon Place, London WC1H 9AX, email notices@tdlpathology.com and, in the case of the Client to the address and/or email address set out in the Order (or such other address as that party will notify in writing to the other for this purpose). A notice sent by post will be deemed to be served at 9.00 am on the second Business Day following the date of posting; a notice sent by email transmission will (provided the sender receives no error message indicating that delivery has been unsuccessful) be deemed to have been served at the time it is transmitted, if transmitted within business hours (9.00 am to 6.00 pm on a Business Day) or, if transmitted outside business hours, as soon thereafter as such business hours commence. This clause does not apply to the service of any proceedings or any documents in any legal action or, where applicable, any arbitration or other method of dispute resolution.</p> <p>18.8 Entire agreement</p> <p>The Agreement is the entire agreement between the Client and TDL and supersedes and extinguishes all prior and contemporaneous agreements, promises, assurances, discussions, representations and understandings between them, whether written or oral, relating to its subject matter. Each party acknowledges that it has not entered into the Agreement in reliance on, and will have no remedies in respect of, any statement, representation, assurance or warranty (whether made innocently or negligently) that is not expressly set out in the Agreement except in the case of fraudulent misrepresentation.</p> <p>18.9 Third parties</p> <p>The Agreement is not intended to create any rights for, nor be enforceable by, any third party except as set out in clause 6, and where the Client and The Doctors Laboratory Limited agree that these Terms and Conditions will apply to any Orders, that agreement is also for the benefit of and enforceable by TDL Genetics Limited.</p> <p>18.10 Governing law</p> <p>The Agreement and any dispute arising out of or in connection with it (including non-contractual disputes and claims) or its subject matter or formation will be governed by and construed in accordance with English law and each of the parties submits to the exclusive jurisdiction of the English Courts.</p> |
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19 INTERPRETATION

19.1 In these Terms and Conditions and the Annex:

- 'Agreement' has the meaning given in clause 1.3;
- 'Annex' means the annex to the Terms and Conditions;
- 'Applicable Law' means the laws, regulations and judgments binding on the relevant party, as amended from time to time;
- 'Authorised Sub-Processors' means:
- a) Health Service Laboratories LLP and any other member of the TDL Group which provides the applicable Test or Service;
 - b) accredited specialist centres for onward referral of esoteric assays as identified in the TDL Laboratory Guide;
 - c) persons who provide information technology services that TDL uses in the course of providing the Services; and
 - d) any Sub-Processor referred to in the Annex;
- 'Business Day' means a day other than a Saturday, Sunday, or public holiday in England;
- 'Client' means the person or organisation requesting Services and / or Consumables from TDL and for whom TDL has agreed to provide the Services and / or Consumables;
- 'controller', 'data subject', 'data protection impact assessment', 'personal data', 'personal data breach', 'process' and 'processor' have the meanings given to those terms in the Data Protection Laws;
- 'Consumables' means any goods to be provided by TDL in order for the Client to benefit from the Services;
- 'Data Protection Laws' means the UK GDPR, the Data Protection Act 2018, and any other Applicable Law having effect in the United Kingdom concerning privacy or the use of personal data;
- 'Data Subject Request' means a request made by a data subject to exercise any rights of data subjects under Data Protection Laws;
- 'Good Industry Practice' means the standard of skill and care reasonably to be expected from a professional provider of the Services;
- 'Group' in respect of any undertaking, means such undertaking and its group undertakings ('undertaking' and 'group undertaking' having the meanings given in the Companies Act 2006);
- 'Health Authority' means (i) a department of the UK government or of a devolved administration, (ii) an executive agency of such department, or (iii) a body exercising statutory functions in relation to public health in the UK or any part of the UK;

- 'Laboratory Guide' means TDL's Laboratory Guide current at the time the Client submits the Order, as supplied to the Client or, if not so supplied, available on request from TDL, including any updates or supplements issued by TDL;
- 'Order' has the meaning given in clause 1.2;
- 'Pathology Request' means a request for Testing submitted by the Client in a format TDL accepts from time to time and by any of the methods TDL accepts from time to time, whether in hard copy or via one of TDL's electronic portals;
- 'Privacy Notice' means TDL's detailed Privacy Notice available at tdlpathology.com;
- 'Processing Instructions' has the meaning given to that term in paragraph 8.2;
- 'Protected Data' means personal data provided to TDL by the Client or a third party on the instructions of the Client, or collected or generated by TDL in the course of providing the Services or Consumables;
- 'Public Health Programme' means a programme administered by a Health Authority to monitor or analyse health data for the purpose of public health or for statistical, scientific or research purposes in the public interest;
- 'Sample' means a pathology sample provided by the Client to TDL for Testing;
- 'Services' means the services to be provided under the Agreement;
- 'Sub-Processor' has the meaning given in clause 11.1;
- 'TDL' means (i) The Doctors Laboratory Limited or, (ii) TDL Genetics Limited in the case of services offered under the TDL Genetics name;
- 'TDL Group' means TDL Genetics Limited and The Doctors Laboratory Limited and its Group and Health Service Laboratories LLP and its Group;
- 'Test' means a laboratory test to be carried out by TDL on a Sample, and 'Testing' means the process of conducting that Test and reporting the results;
- 'UKAS' means the United Kingdom Accreditation Service, or any successor to it;
- 'UK GDPR' has the same meaning as it does in section 3(10) of the Data Protection Act 2018, read with section 205(4) of that Act.
- 19.2 References to the singular include the plural and vice versa.
- 19.3 Clause headings and paragraph headings are for ease of reference only and are not part of these Terms and Conditions for the purpose of construction.
- 19.4 References to paragraphs are to paragraphs of the Annex.

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19.5 Words following the terms 'including', 'include', 'in particular', 'for example' or any similar expression shall be construed as illustrative and shall not limit the sense of the words, preceding those terms.

19.6 The Annex is incorporated into these Terms and Conditions.

ANNEX

1 Subject matter and nature of processing

1.1 TDL processes Protected Data as processor on behalf of the Client:

1.1.1 in the case of Testing, when TDL receives a Pathology Request and Sample and processes the corresponding Protected Data to carry out the Test and report the Test results in accordance with the Processing Instructions;

1.1.2 when TDL carries out the Client's 'fee to patient' instructions, as described below; and

1.1.3 in the case of any other Services or the provision of Consumables, when TDL is required to process Protected Data on the Client's behalf to fulfil the Client's instructions.

1.2 The subject matter and nature of TDL's processing of the Protected Data are:

1.2.1 Samples and Test results for the purpose of providing clinical pathology Services;

1.2.2 information about clinicians who order Tests, for the purposes of reporting the Test results to the Client;

1.2.3 information about a patient's health insurance for the purposes of administering payment for the Services; and

1.2.4 billing information for a patient where the Client has asked TDL to direct TDL's invoice to the patient.

2 Duration of processing

The duration of the processing is the time necessary to carry out the Services or provide the Consumables.

3 Types of personal data

3.1 The Protected Data may comprise the following types of personal data:

3.1.1 name

3.1.2 gender

3.1.3 date of birth

3.1.4 address

3.1.5 identity numbers assigned by TDL or the Client

3.1.6 types of Tests conducted

3.1.7 results of Tests

3.1.8 health insurance policy details

3.1.9 billing information

3.1.10 the types of data referred to in the TDL Laboratory Guide

4 Categories of data subjects

The Protected Data concerns patients in respect of whom TDL conducts Tests, and clinicians who request Tests.

5 Reporting Test results

5.1 TDL will report Test results using the method selected by the Client from the range of options offered by TDL or, if no method is selected by the Client, using a method selected by TDL from that range of options.

5.2 TDL will report the Test results using the contact details supplied to TDL in the relevant section of the Pathology Request. The Client will be responsible for ensuring that those contact details are correct.

5.3 Where TDL supplies Test results electronically it will ensure that the results are supplied in the format selected by the Client (from the range of options offered by TDL) and are supplied to the address indicated when the Client selects electronic results reporting. The Client will be responsible for ensuring that the selected format is compatible with the Client's information systems and for making the results available to the users of those systems.

6 Fee to patient

Where the Client selects the 'fee to patient' option in a Pathology Request form, the Client instructs TDL to seek payment from the patient of the fees owed by the Client in respect of that test. The Client confirms that the patient has agreed with the Client to pay those fees to TDL for the Client. The Client instructs TDL to recover the fees by invoicing the patient using the personal data provided by the Client. The Client instructs TDL on the Client's behalf to appoint debt collectors to recover the fees from the patient if the patient does not pay the invoice by the date payment falls due. The Client authorises TDL to appoint those debt collectors as Sub-Processors in accordance with clauses 9 to 16.

Request forms

Visit the TDL website to download:

- Maternal Screening Request Form:
For Down, Edwards and Patau
Syndromes screening
- Leukaemic Studies Request Form
(Cytogenetics/Molecular genetics)
- Genetic Request Form
- TDL Supplies Re-order Form
- TDL Request Form



SCAN ME

Download TDL Request Forms
from:

**[www.tdlpathology.com/
tests/request-forms/](http://www.tdlpathology.com/tests/request-forms/)**

Vacutainer	Anticoagulant	Capacity	SAMPLE TYPE
Lavender	EDTA	4ml / 10ml*	A
Gold	SST/Gel	5ml	B
Light blue	Citrate	4.5ml	C
Red	None	6ml	F
Grey	Fluoride oxalate	2ml, 4ml	G
Green	Lithium heparin	6ml	H
Dark blue	Trace metal	7ml	K
* 10ml EDTA tubes are used for specific PCR assays			
Blood culture bottle: contact laboratory			BC
Contact laboratory for advice on sample taking			J
Test by appointment			X
Random faeces			RF
Faecal collection			LF
Random urine			RU
Mid stream urine			MSU
First catch random urine (for DL12/Chlamydia, etc.)			FCRU
30ml aliquot from a 24 hour urine collection – state total volume			CU
30ml aliquot from a 24 hour urine collection with 10ml of 0.1N hydrochloric acid added – state total volume			PU
Early morning urine (1st sample of the day)			EMU
60ml container (sterile)			SC
Cytoc thin prep vial			TPV
Orange/Blue swab for culture – swab in transport medium/Blue microswab			STM
Black charcoal swab			CS
Green viral swab			VS
PCR swab for Chlamydia/PCR infection screening			PCR
Tap/bottled water mouth wash – 20mls			MW
Amniotic fluid (5mls PCR – 10mls Karyotype)			AF
Chorionic villus (medium provided by laboratory)			CVS
Urine cytology container			UCYT

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