

Certain pathology requests are referred to other reporting centres for either initial analysis or for confirmatory/ specialised review. Please see within the table in the column 'See Referral Centre' if this applies. For details about the referral centres we use, [click here](#).

See [Order of draw](#) for the order in which to collect blood samples

Click [here](#) for the different Microbiology swab types and specimen collection techniques

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## A

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
17-Hydroxyprogesterone (17OHP) (adult)	State clinical indication. Consultant endocrinologists, obstetricians and gynaecologists only.	Blood	Plain Clot (red top)	Referred	Synnovis	20 days		Clinical Chemistry
17-hydroxyprogesterone (17OHP) (Paediatrics)	Do not take until newborn >48hrs old.	Blood	Lithium Heparin (Green Top)	Referred	Synnovis	20 days		Clinical Chemistry
25 OH Vitamin D	See Vitamin D							
5 HIAA (5-Hydroxyindole Acetic Acid)	Investigation and monitoring of patients with carcinoid syndrome.	24hr urine	5L Plain Container	Referred	EKHUFT	21 days	5 days	Clinical Chemistry
AAFB (TB) other	Please see <a href="#">User Information: Respiratory Samples</a>	Fluid, Pus, Tissue (Not swabs)	Plain 20mL Universal (white top)	<b>Microscopy</b> 3 working days. Same day if urgent.  <b>Cultures:</b> up to 42 days but may take up to nine weeks.	National Mycobacterium Reference Service- South, National Infection Service, Colindale	Susceptibility testing on positives: 1-2 months depending on strain		Microbiology
AAFB (TB) Sputum	Please see <a href="#">User Information: Respiratory Samples</a>	Sputum	60ml (white top)	<b>Microscopy</b> 3 working days. Same day if urgent. <b>Cultures:</b> up to 42 days but may take up to nine weeks	Micropathology Ltd (Fast Track) Colindale for susceptibility	TB Fast Track up to 4 days. Susceptibility testing on positives: 1-2 months		Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
						depending on strain		
AAFB (TB) Urine	Please see <a href="#">Microbiology User Information- Urine Specimens</a>	3 x Early morning urine	EMU x3 - kits provided	<b>Cultures:</b> normally up to 42 days but may take up to nine weeks.	National Mycobacterium Reference Service- South, National Infection Service, Colindale	Susceptibility testing on positives: 1-2 months depending on strain		Microbiology
Acanthamoeba	Deliver to laboratory on day of collection Please see <a href="#">Acanthamoeba Instructions</a>	Contact Lens or Contact Lens fluid or Contact Lens Case or eye swab in normal sterile saline.	See specimen type	Referred	Micropathology Ltd	90% in 2 working days		Microbiology
ACE (Angiotensin Converting Enzyme)	Not indicated if patient on ACE inhibitors. Not recommended for screening. Consultant Chest, Neurologist or Ophthalmologist or confirmed sarcoid	Blood	Gel Clot (Gold top)	Referred	EKHUFT	14 days		Clinical Chemistry
ACRA (Acetylcholine Receptor Ab)	Paediatric samples must be red top	Blood	Gel Clot (Gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
ACTH (Adrenocorticotrophic Hormone)	Should be taken with an appropriately paired 9am cortisol sample i.e. part of a SST or repeat ONDST .  Not available to request by primary care.	Blood	EDTA (Purple top)	Referred	Synnovis	21 days		Clinical Chemistry
Acylcarnitine	Guthrie card required  Test not available to request by primary care.	Blood spot	Guthrie card	Referred	Synnovis	125 days		Clinical Chemistry
Adalimbab	Only available for Gastroenterology Consultants	Blood	Gel Clot (Gold top)	Referred	Synnovis	3 weeks		Clinical Chemistry
Adenovirus PCR	Please see <a href="#">User Information- Bacterial and Viral Serology</a> <a href="#">User Information- ENT swabs</a>	Blood/ eye swab	EDTA (Purple top) /viral transport swab	Referred	Micropathology Ltd (Synnovis for Kings Liver Transplant patients)	3 working days (4 working days)		Microbiology
Adrenal Antibodies	Paediatric samples must be red top	Blood	Gel Clot (Gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Adult Coeliac Screen		Blood	Gel Clot (Gold top)	Referred	EKHUFT	8 days		Immunology
AFP (Alpha Feto Protein)	Not recommended for screening. Only recommended for Hepatocellular, Hepatoma, Ca testes, Ca ovary	Blood	Gel Clot (Gold top)	3 days			3 days	Clinical Chemistry
Albumin (24hr Urine)		Urine	5L plain container	24 hr			3 days	Clinical Chemistry
Albumin (serum)		Blood	Gel Clot (Gold top)	4 hr			3 days	Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Albumin excretion rate	Overnight timed urine collection - usually 8 hrs. Please state times.	Urine	5L plain container	24 hr			3 days	Clinical Chemistry
Albumin/Creat ratio (Urine)		Urine	Monovette	24 hr			3 days	Clinical Chemistry
Aldosterone/ Renin	Only available for Endocrinologists. Send sample to lab within 10 mins.  Patient must stop beta blockers, spiro lactone for at least two weeks prior to sample collection. Electrolytes replaced if indicated before testing. Do not fridge or put on ice  Test not available to request by primary care.	Blood	Lithium Heparin (Green Top)	Referred	Imperial College Healthcare NHS Trust	28 days		Clinical Chemistry
Allergy Testing	See RAST testing							
ALP (Alkaline phosphatase)		Blood	Gel Clot (Gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
ALP isoenzymes (Alkaline phosphatase isoenzymes)		Blood	Gel Clot (Gold top)	Referred	EKHUFT	54 days		Clinical Chemistry
Alpha 1 Antitrypsin		Blood	Gel Clot (Gold top)	Referred	Sheffield Teaching Hospital	18 days		Clinical Chemistry
ALT (Alanine Transaminase)		Blood	Gel Clot (Gold top)	3 days			3 days	Clinical Chemistry
AMH (Anti-mullerian hormone)	Available to MTW fertility consultants only.	Blood	Gel Clot (Gold top)	Referred	Medway Foundation Trust	8 days		Clinical Chemistry
Amikacin – once daily dosage	Take Pre-dose before giving the next dose. Post dose levels are not required.	Blood	9 ml Plain Clot (Red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	1 working day		Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Amikacin – 2- or 3- times daily dosage	Take samples Pre dose & 1hr post dose	Blood	2x 9ml Plain Clot (Red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	1 working day		Microbiology
Amino Acids (Blood)	Paediatric consultants only	Blood	Lithium Heparin (Green Top)	Referred	Synnovis	28 days	3 days	Clinical Chemistry
Amino acids (Urine)	Random sample. Test available for paediatric consultants only	Urine	Plain 30mL Universal (white top)	Referred	Synnovis	28 days		Clinical Chemistry
Amiodarone	Please state dosage and time of last dose.	Blood	EDTA (Purple top)	Referred	Cardiff and Vale University Health Board (Toxicology)	11 days		Clinical Chemistry
Ammonia (Plasma)	Only available after requesting clinician has pre-arranged with Biochemistry. Must be hand delivered to lab on ice within 15 mins of collection and handed directly to staff. Contact lab if out of hours.  Test not available to request by primary care.	Blood	EDTA (Purple top)	4 hr				Clinical Chemistry
Amoeba (Hot stool)	Requires approval from Consultant Microbiologist.  Test not available to request by primary care. Please see <a href="#">User Information- Stool Specimens</a>	Faeces	Plain 30ml blue top universal	30 Mins post voiding	N/A	N/A		Microbiology
Amoebic serology	Please see- <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	9 ml plain Clot (red top)	Referred	Hospital for tropical diseases	12 working days		Microbiology
Amylase (Serum) (Adults)	Adults	Blood	Gel Clot (Gold top)	4 hr			3 days	Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Amylase (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (Green Top)	4 hr			3 days	Clinical Chemistry
ANCA (Anti neutrophil cytoplasmic antibody)	Can be done urgently by arrangement with lab. Initially please contact Maidstone Biochemistry. Paediatric samples must be red top	Blood	Gel Clot (Gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Androstenedione	Consultant Endocrinologist or Gynaecologist only	Blood	Plain Clot (Red top)	Referred	Synnovis	4 weeks		Clinical Chemistry
Antenatal serology	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	6 working days	positives: see referral centres for tests: Hep B, HIV, Syphilis		1 year	Microbiology
Anti C1q		Blood	Gel Clot (gold top)	Referred	EKHUFT	21 days		Immunology
Anti CCP		Blood	Gel Clot (gold top)	Referred	EKHUFT	14 days		Immunology
Anti-Cardiolipins		Blood	Plain Clot (red top)	4 weeks			48 hrs	Haematology
Antinuclear Antibodies (ANA/ANF)	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Antiphospholipid antibodies	see Anti-Cardiolipins and Immunology							

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Antithrombin III	Only stable for 4 hours. Send to lab immediately following after venepuncture on MTW site. Part of Thrombophilia Screen	Blood	Citrate (blue top)	4 weeks			Within 4 hrs of venepuncture	Haematology
APC resistance	Refer to Thrombophilia Screen							
APTT (Activated Partial Thromboplastin Time)	Only stable for 4 hours. Request this test on its own for heparin monitoring only.	Blood	Citrate (blue top)	4 hours for MTW 24 hours of all other users			Within 4 hrs of venepuncture	Haematology
Ascitic Fluid – cytology	See Fluids for cytology							
Ascitic Fluid – microbiology	See Fluids (MCS)							
ASO (Anti-streptolysin O)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	5 working days				Microbiology
ASOT	see ASO							
ASPERGILLUS (IgE)	see RAST							
Aspergillus PCR	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood  BAL (Bronchial wash)	Plain Clot (red top)  60ml (white top)	2 working days			Blood- 2 weeks BAL- 3 days	Microbiology
Aspergillus Precipitins (antibodies)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	EKHUFT	2 weeks		Microbiology
Aspergillus antigen (Galactomannan)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	UKHSA Mycology Reference Laboratory, Southmead Hospital, Bristol	4 working days		Microbiology
AST (Aspartate transaminase)		Blood	Gel Clot (gold top)	4 hours for MTW 24 hours of all other users			3 days	Clinical Chemistry



TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Avian precipitins	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Mycology Reference Centre, Leeds General Infirmary, Leeds	16 working days		Microbiology

**B**

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
B12	See Folate (serum) & Vitamin B12							
B2MIC (Beta 2 Microglobulin)	Not recommended for screening. Recommended to monitor diagnosed myeloma, leukaemia and lymphoma.	Blood	Gel Clot (gold top)	5 days			3 days	Clinical Chemistry
Basal Ganglia Ab's	Paediatric samples must be red top		Gel Clot (gold top)		EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Clinical Chemistry
beta-D Glucan	Needs to be tested within 48hrs of collection. Do not take the sample on a Friday or Saturday Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	UKHSA Mycology Reference Laboratory, Southmead Hospital, Bristol	90% in 4 working days		Microbiology
Beta Hydroxybutyrate	Adult.  Paired glucose sample needed for interpretation. Send sample immediately to Biochemistry for processing.	Blood	Gel Clot (gold top)	Referred	Guildford (BSPS)	20 days		Clinical Chemistry
Beta Hydroxybutyrate	Paed.	Blood	Lithium Heparin (Green Top) preferred	Referred	GOSH	20 days		Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
			OR Plain serum (red-top)					
Bile Acids	Cholestasis of pregnancy. Only indicated weekly as agreed with MTW Obstetrics & Gynaecology department	Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
Bilharzia (Schistosomiasis)	Please see <a href="#">User Information- Urine Specimens</a>	Terminal Urine	Plain 20mL Universal (white top)	Microscopy Same day				Microbiology
Bilirubin- conjugated (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green Top)	24 hr for MTW 3 days for all other users			3 days	Clinical Chemistry
Bilirubin- Conjugated		Blood	Gel Clot (gold top)	24 Hr for MTW 3 days for all other users			3 days	Clinical Chemistry
Bilirubin (Total) (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green Top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Bilirubin (Total Serum)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Biotinidase	Paediatric only. Please state clinical indication	Blood	Lithium Heparin (green Top)	Referred	Synnovis	34 days	3 days	Clinical Chemistry
BJP (Bence Jones Protein)	Early morning urine. Reporting may be delayed if further investigation is needed e.g. immunofixation	Urine	Plain 20mL Universal (white top) or monovette	5 days			3 days	Clinical Chemistry
BK/JC virus DNA		Blood, urine or CSF	EDTA (purple top) /plain 20mL Universal (white top)	Referred	Micropathology Ltd	3 working days		Microbiology
Blood Cultures MC&S	Please see <a href="#">Blood Culture User Guide</a>	Blood	Blood culture kit- See instruction sheet	Cultures are incubated for at least five days. Significant results				Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
	Send directly to lab during normal hours. Out of hours leave a room temperature – transport to lab as soon as possible for 9am.  For external users: Please contact laboratory for advice before taking samples			are telephoned as soon as possible.				
Blood Grouping & Antibody screen	Any grouping or antibody anomalies may need to be referred to the NHSBT for further investigation and additional samples may be requested.  Antenatal antibody titrations are undertaken by the NHSBT.	Blood	7 ml EDTA (pink Top)	Next working day	NHSBT	14 days		Transfusion
BNP (Brain Natriuretic Peptide)	See Pro BNP							
Bordetella	See Pertussis							
Bronchial brush samples for cytology	Do not allow to air dry. Include site of brush sample on request form and slide (e.g. left lower lobe). Do not send dry brushes, the lab can provide CCF vials, to process brush tips if necessary.	Bronchial brush samples	Alcohol-fixed slides + slide transport container	within 1 week (unless marked urgent)				Cellular Pathology
Bronchial wash/BAL for cytology	Do not attach pre-printed label over the clear section of the container	Bronchial wash BAL	Plain 20mL Universal (white top)	within 1 week				Cellular Pathology
Bronchial Washing – Microbiology  Test not available to external users	Transport to laboratory on same day Please see <a href="#">User Information: Respiratory Samples</a>	Bronchial washing	60ml (white top)	3 days			2 days	Microbiology
Brucella serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Brucella Reference Unit, Liverpool Clinical Laboratories,	12 days		Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
					Royal Liverpool and Broadgreen Hospital			

**C**

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
C1-esterase inhibitor (Total)	Pembury site please take separate form and sample for forwarding to Maidstone biochemistry	Blood	Plain Clot (red top)	Referred	St Georges University Hospital Foundation Trust, Tooting.	14 days		Clinical Chemistry
C1Q antibodies	Paediatric samples must be red top	Blood	Gel Clot (Gold top)		EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Ca125	Not recommended for screening. May be grossly raised in ascites of any cause. Only recommended for the serial monitoring of diagnosed tumours (ovary) or pre-op.	Blood	Gel Clot (Gold top)	3 days			3 days	Clinical Chemistry
Ca15-3	Not recommended for screening. Only recommended to monitor known cases of Ca breast. Note also increased in benign breast disease.	Blood	Gel Clot (Gold top)	3 days			3 days	Clinical Chemistry
Ca19-9	Not recommended for screening. To monitor known cases of Ca pancreas / colon (rarely ovary), colorectal cancer. Note also increased in cholestasis.	Blood	Gel Clot (Gold top)	3 days			3 days	Clinical Chemistry
Caeruloplasmin		Blood	Gel Clot (gold top)	Referred	EKHUFT	21 days		Clinical Chemistry
Calcitonin	Fasting sample recommended. Send sample immediately to	Blood	Gel Clot (gold top)	Referred	Imperial College Healthcare NHS Trust	27 days		Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
	Biochemistry for processing within 10 mins of collection.  Test not available to external users.							
Calcium (24hr Urine)		24 hr urine	5L plain container	24 hr				Clinical Chemistry
Calcium + Albumin (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Calcium + Albumin (Serum Adults)	Avoid using a tourniquet when taking the sample.	Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Calprotectin	See Faecal Calprotectin							
Candida serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	UKHSA Mycology Reference Laboratory, Southmead Hospital, Bristol	5 working days		Microbiology
Carbamazepine	(CBZ: Tegretol, Novartis) Please state dosage and time of last dose. Trough (pre-dose) sample recommended.	Blood	Plain Clot (red top)	3 days			3 days	Clinical Chemistry
Carboxyhaemoglobin	Samples for carboxyhaemoglobin are no longer being received in the laboratory and patients must go to A&E							
Cardiac	see Creatine Kinase							
Cardiolipin Antibodies	see Anti-Cardiolipins							
Cat Scratch PCR (Bartonella genus)	Must Contact Consultant Microbiologist for advice Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood or Tissue	EDTA (Purple top) /plain 20mL Universal (white top)	Referred	Micropathology Ltd	4 working days		Microbiology
Catecholamines (Urine Adrenaline, Noradrenaline and Dopamine)	For paediatrics only. Investigation of neuroblastoma.	24 hr urine/ timed urine	5L Acid Container		St Heliers (Epsom and St Heliers trust)	14 days	5 days	Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
CCP Antibodies (Cyclic Citrullinated Peptide antibody)	Paediatric samples must be red top		Gel Clot (gold top)		EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
CD3/ CD4/CD8 Count (Immune monitoring)	Available Mon-Thur only	Blood	EDTA (Purple top)	7 days			24 hrs	Haematology
C.difficile toxin	see FAECES - Clostridium difficile toxin A+B							
CEA (Carcinoembryonic Antigen)	Not recommended for screening. Only recommended for serial monitoring of diagnosed tumour, or pre-op Ca GI tract incl. Pancreas (rarely ovarian) Colorectal.	Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
Cell Markers	See Immunophenotyping							
Childhood vaccine antibody levels (Hib/pneumococcal)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Immunology Laboratory, Churchill Hospital, Oxford University Hospitals NHS Trust	9 working days		Microbiology
Chlamydia – genital	Please see <a href="#">User Information - Genital Tract Specimens</a>	Swab	Kit provided (Yellow cap)	7 working days				Microbiology
Chlamydia – eye	Please see <a href="#">User Information- ENT swabs</a>	Swab	Kit provided (Yellow cap)	7 working days				Microbiology
Chlamydia Urine	Please see <a href="#">Microbiology User Information- Urine Specimens</a>	Urine	plain 20mL Universal (white top)	7 working days				Microbiology
Chlamydia serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Synnovis	16 working days	1 year	Microbiology
Chlamydia psittaci PCR	Must contact Consultant Microbiologist for advice before taking specimen	BAL (Bronchial wash)	plain 20mL Universal (white top)	Referred	Micropathology Ltd	4 working days		Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
	Please see <a href="#">User Information: Respiratory Samples</a>	/Nasopharyngeal swab	/ Viral transport medium					
Chloramphenicol Levels	Pre & post levels Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	3 working days		Microbiology
Chloride (Serum)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Cholesterol (Total)	Also see Lipids	Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Cholinesterase	Suxamethonium apnoea. Please provide relevant full clinical details.	Blood	Gel Clot (gold top) Green Lithium Heparin (plasma) acceptable		Synnovis	3 weeks		Clinical Chemistry
Chromogranin A+B	Not required to fast (unless part of full gut hormone profile)  Send sample immediately to Biochemistry for processing within 10 mins.	Blood	EDTA (purple top)	Referred	Charing cross Hospital (Imperial College Healthcare NHS Trust)	21 days		Clinical Chemistry
Chromosomes	See Genetic Testing							
Citrate (24h urine)	Please state clinical indication	24 hr urine	5L Acid Container	Referred	Royal Sussex County Hospital, Brighton	21d	not available	Clinical Chemistry
CK (Creatine Kinase) Paediatrics	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	4 hr for MTW 24 hr for all other users			3d	Clinical Chemistry
CK (Creatine Kinase) Adults		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3d	Clinical Chemistry
Clostridium difficile toxin	See C.difficile toxin							

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Clotting Factor Assays	Only stable for 4 hours	Blood	Citrate (blue top)		EKHUFT	1 month	Within 4 hrs of venepunctur e	Haematology
Clotting Screen	Only stable for 4 hours Includes APTT and PT (do not request for patients on anticoagulants)	Blood	Citrate (blue top)	4 hr for MTW 24 hr for all other users			Within 4 hrs of venepunctur e	Haematology
CJD	Only on advice of National CJD Research & Surveillance Unit Please see <a href="#">User Information- CSF Specimens</a>	CSF	plain 20mL Universal (white top)	Referred	National CJD Research & Surveillance Unit, Edinburgh	Not published		Microbiology
CMV	See Cytomegalovirus							
Cobalt and Chromium	MTW Orthopaedics requests only	Blood	Trace element bottle (Royal blue top)	Referred	Sandwell and West Birmingham NHS Trust	21 days		Clinical Chemistry
Coccidioides / Histoplasma serology	Contact Consultant Microbiologist for advice	Blood	Plain clot (red top)	Referred	Synnovis	Not published		Microbiology
Coeliac Screen (Child)	Paediatric samples must be gold top	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Coeliac Screen (Adult)		Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Complement (C3+ C4)	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology	Immunology



TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
							already requested, 6 weeks if additional immunology test	
Copper	and caeruloplasmin. Please state clinical indication	Blood	Gel Clot (gold top)	Referred	EKHUFT	17 days		Clinical Chemistry
Copper (24h Urine)	Special acid washed container from biochemistry by prior arrangement. Usually part of penicillamine challenge - please contact biochemistry for advice	24 hr urine	5L Acid Wash Container	Referred	Synnovis	21 days		Clinical Chemistry
Corneal scrape (MC&S)	Inform lab. Transport directly to lab  Test not available to external users Please see <a href="#">Corneal Scrape Specimen Instructions</a>	Corneal scrape	Direct plates (supplied by Lab.) Slide	Microscopy results available same day. Culture results can take up to 10 days				Microbiology
Cortisol (serum)	9am sample recommended. Random samples are difficult to interpret.	Blood	Plain Clot (red top)	3 days				Clinical Chemistry
Cortisol (24h Urine)	Only available after requesting clinician has pre-arranged with Biochemistry	24 hr urine	5L plain container	Referred	EKHUFT	16 days		Clinical Chemistry
Covid 19	See SARS-Cov2							
Coxiella serology (Q-Fever) Serology	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood or BAL	Plain clot (red top)	Referred	Porton Down	12 working days		Microbiology
Coxiella serology (Q-Fever) PCR	Contact Consultant Microbiologist for advice Please see <a href="#">User Information: Respiratory Samples</a>	BAL or Sputum or Nasopharyngeal swab	Plain 20mL Universal /60ml sputum / Viral transport	Referred	Micropathology Ltd	3 working days		Microbiology
CPE Carb.prod. Enterobac. Screen	Please see <a href="#">User Information-Infection Control Swabs</a>	Faeces or Rectal swab (must have	Faeces (blue top universal) or Black	2 working days				Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
		visible faeces)	transport swab					
C-peptide	Plus Insulin if indicated. Paired glucose sample needed for interpretation. Send sample immediately to Biochemistry for processing.	Blood	Gel Clot (gold top) + Fluoride oxalate (grey top)	Referred	Berkshire and Surrey Pathology Service	21 days		Clinical Chemistry
C-peptide	Only available to Diabetes Consultant	Urine	Boric Acid Monovettes	Referred	Royal Devon & Exeter NHS Foundation Trust	3 weeks		Clinical Chemistry
Creatinine (24hr Urine)	Please also send Gel Clot (Gold top) if Creatinine Clearance Calculation required	24 hr urine	5L plain container	24 hr			3 days	Clinical Chemistry
Creatinine (Serum)	& estimated Glomerular Filtration Rate (eGFR)	Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
CRP (C-Reactive Protein) (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	4 hr for MTW 24 hr for all other users				Clinical Chemistry
CRP (C-Reactive Protein) (Adults)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Crystals- Joint Fluids	Please see <a href="#">User information: Fluids, Pus and Tissue Samples</a>	Joint fluid	Plain 20mL Universal (white top)	24 hr				Microbiology
Cryptococcal antigen	Please see <a href="#">User Information- CSF Specimens</a> Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood/CSF	Plain clot (red top)/ Plain 20mL Universal (white top)	Referred	EKHUFT	6 days		Microbiology
CSF – Microbiology C&S	Telephone laboratory once taken. Transport to the lab immediately by hand. Do NOT send via vacuum tube  Test not available to external users	CSF tubes 1&3	Plain 20mL Universal (white top)	Microscopy: same day. Culture results: 3 days				Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
	Please see <a href="#">User Information- CSF Specimens</a>							
CSF – Microbiology PCR (viral)	Telephone laboratory once taken. Transport to the lab ASAP. Do NOT send via vacuum tube Test not available to external users  Please see <a href="#">User Information- CSF Specimens</a>	CSF tubes 2&3	Plain 20mL Universal (white top)	< 24 hours (if WBC count >10)	Micropathology Ltd	4 Working days		Microbiology
CSF for cytology	Send immediately to Cytology Laboratory		Plain 20mL Universal (white top)	Within 2 days				Cellular Pathology
Cyclosporin A	Please state dosage and time of last dose. Referral hospital dependent on Rx/Txp	Blood	EDTA (purple top)	Referred	EKHUFT or Synnovis as directed by Duty Biochemist	19 days		Clinical Chemistry
Cyst Fluid	See Fluids for cytology							
Cytomegalovirus (CMV) antibody IgG	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	5 working days				Microbiology
Cytomegalovirus (CMV) antibody IgM	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	3 working days				Microbiology
Cytomegalovirus (CMV) PCR	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	EDTA (purple top)	Referred	Micropathology Ltd (Synnovis for Kings Liver Transplant patients)	3 working days (4 working days)		Microbiology
Cytomegalovirus (CMV) PCR	Please see <a href="#">User Information- Urine Specimens</a>	Urine	Plain universal	Referred	Micropathology Ltd	3 working days		Microbiology
Cytology – diagnostic fluids	See Fluids for cytology							

**D**

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
D-Dimers	Only stable for 4 hours.	Blood	Citrate (blue top)	4 hr for MTW 24 hours for all other users			Within 4 hrs of venepuncture	Haematology
Dengue/ Rickettsia	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Porton Down	6 working days		Microbiology
DHEA-sulphate	Please state clinical indication	Blood	Plain Clot (red top)	Referred	Synnovis	21 d	not available	Clinical Chemistry
Digoxin	Must be taken 6-8 hours after the dose. Please state dosage and time of last dose.	Blood	Gel Clot (gold top)	4 hr for MTW 24 hours for all other users			2 days	Clinical Chemistry
Diphtheria antibodies	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	UKHSA Colindale	24 working days		Microbiology
Diphtheria culture	MUST state relevant clinical details & foreign travel on request form	Throat swab	Black transport swab	3 days				
Direct Antiglobulin test (DAT)		Blood	7 ml EDTA (pink top) or EDTA (purple top)	24 hrs				Transfusion
Double Stranded DNA Antibodies	Reflex test following ENA. Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	3 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
DPD	Consultant oncologist request only	Blood	EDTA (purple top)	Referred	Synnovis	2 weeks		Clinical Chemistry
Drug Screen (Drugs of abuse)	See urine Toxicology.							


## E

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
eGFR (Estimated Glomerular Filtration Rate)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hrs for other users			3 days	Clinical Chemistry
ENA (Extractable Nuclear Antigen)	Reflex test following ANA, includes Ro SSA, La SSB, Sm, JO-1, Scl-70. Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
ENA ID SCREEN	Reflex test following ENA. Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Endomysial Ab	Reflex test following Coeliac Screen. Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
EBV PCR (Epstein Barr Virus)	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	EDTA (purple top)	Referred	Micropathology Ltd (Synnovis for Kings Liver Transplant patients)	3 working days (4 working days)		Microbiology
EBV EBNA IgG (Epstein Barr Virus)	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (Red top)	2 working days				Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
EBV VCA IgG and EBV VCA IgM reflex testing performed as indicated								
Enterobius vermicularis	Please see <a href="#">User Information-Stool Specimens</a>	Sellotape slide	Plain white topped universal	1 working day				Microbiology
Enterovirus RNA PCR	CSF- see CSF virology	Faeces or throat viral swab	Plain white topped universal or green top viral swab	Referred	Micropathology Ltd	3 working days		Microbiology
ESR		Blood	EDTA (purple top)	4 hr			8 hrs from venepuncture	Haematology
Ethanol	Only available in exceptional circumstances. Patients presenting in A&E departments with head injuries or after discussion with laboratory.  Test not available to external users	Blood	Fluoride oxalate (grey top)	4 hr			24 hr	Clinical Chemistry

## F

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Faecal Elastase	Random Sample, minimum pea sized sample	Faeces	Faeces 30 mL universal (blue top)	Referred	Sandwell and West Birmingham NHS Trust	2 weeks		Clinical Chemistry
Faecal Calprotectin	Recommended first stool of the day. Please ask patient to write the collection date on the specimen bottle and send to the laboratory on the day of collection.	Faeces	Faeces 30 mL universal (blue top) at least half filled	2 weeks				Clinical Chemistry

TEST	Specimen Instructions/ Comments		Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
FAECES - Clostridium difficile test	Collect specimen into disposable clean dry container without urine (if possible). Use blue scoop in lid of container to transfer at least a walnut sized piece into specimen pot		Faeces	Faeces 30mL universal (blue top)	24 hours	Ribotyping: CDRN Reference Laboratory, UKHSA Leeds General Infirmary	16 working days	1 year for positives (typing only)	Microbiology
Faecal Pathogens PCR	Collect specimen into disposable clean dry container without urine (if possible). Use blue scoop in lid of container to transfer at least a walnut sized piece into specimen pot Please see <a href="#">User Information- Stool Specimens</a>		Faeces	Faeces 30mL universal (blue top)	24 hours	UKHSA Colindale for typing	19 working days		Microbiology
FAECES OTHER parasites, virology (rotavirus, adenovirus, norovirus)	Collect specimen into disposable clean dry container without urine (if possible). Use blue scoop in lid of container to transfer at least a walnut sized piece into specimen pot Please see <a href="#">User Information- Stool Specimens</a>		Faeces	Faeces 30mL universal (blue top)	2 working days. Virology 1 day				Microbiology
Farmers Lung			Blood	Plain clot (red top)	Referred	UKHSA Mycology Reference Laboratory, Southmead Hospital, Bristol	7 working days		Microbiology
Ferritin	As part of test rationalisation iron studies should be monitored via ferritin alone.		Blood	Gel Clot (gold top)	24 hr			3 days	Clinical Chemistry
Filarial antibodies			Blood	Plain clot (red top)	Referred	Hospital for Tropical Diseases	12 working days		Microbiology
Fine needle aspirate (FNA) for cytology	Alcohol-fixed slides: Fix immediately by fixation spray.	 Cytology User guide for the preparation of the preparation	Breast, lymph node, thyroid, parotid, biliary etc.	Alcohol-fixed slides + slide transport container	1 week				Cellular Pathology
Fine needle aspirate (FNA) for cytology	Air dried slides.		Breast, lymph node, thyroid,	Air Dried slides + slide	1 week				Cellular Pathology

TEST	Specimen Instructions/ Comments		Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
	Slides must be spread thinly and quickly and completely dried before placing in slide transport container.		parotid, TBFNA etc	transport container					
Fine needle aspirate (FNA) for cytology - Needle rinse	Wash needle in cytospin collection fluid		Thyroid, etc	Cytospin collection fluid	1 week				Cellular Pathology
Fine needle aspirate (FNA) for cytology – endoscopic brushings	Place unsheathed brush tip in cytospin collection fluid. Dry brushes CANNOT be accepted.			Cytospin collection fluid	1 week				Cellular Pathology
Flu (A+B)	Nose/ throat swab Please see <a href="#">User Information: Respiratory Samples</a>		Viral swab (green top or red in-house top)		2 days				
Fluids for cytology	Do not attach pre-printed label over the clear section of the container		Ascitic, pleural, cyst aspirates, pericardial, peritoneal etc.	2 x Plain 20mL Universal (white top)	1 week				Cellular Pathology
Fluids (MC&S) excluding CSF	If required urgently, please contact the laboratory. Transport to the laboratory within one day Please see <a href="#">User information: Fluids, Pus and Tissue Samples</a>		Ascitic, joint, pleural, cyst aspirates etc.	Plain 20mL Universal (white top)	Microscopy: 1 working day. Culture results: 10 days				Microbiology
FOB	see Faecal Occult Blood								
Folate (red cell)	See Red Cell Folate								
Folate (serum) & Vitamin B12			Blood	Plain Clot (red top)	7 days				Haematology
Fructosamine	Only available for patients with Hb variants.		Blood	Gel Clot (gold top)	Referred	Sandwell and West Birmingham NHS Trust	25 days		Clinical Chemistry



TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
FSH (Follicular Stimulating Hormone)	Female patients – day 1 -5 if regular cycles. Please state LMP.	Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
FT3 (Free tri iodothyronine)	FT3 tested if indicated by clinical details and/or depending on TSH level.	Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
FT4 (Free Thyroxine)	FT4 tested if indicated by clinical details and/or depending on TSH level.	Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
Full Blood Count (FBC)		Blood	EDTA (purple top)	1 hr agreed urgent pathways 4 hr inpatients 24 hr all other users			8 hrs	Haematology
Fungi (Mycology) (Dermatophytes)	click heading above for instructions on sample collection Please see <a href="#">User Information- Mycology</a>	Skin, Hair or Nail clippings	Dermapak or Plain 20mL Universal (white top)	Microscopy results within 4 days. Culture results may take up to four weeks.	UKHSA Mycology Reference Laboratory, Southmead Hospital, Bristol – for difficult isolates	7-14 working days		Microbiology

## G

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Gabapentin	Please state dosage and time of last dose.	Blood	Plain Clot (red top)	Referred	Synnovis	21 days		Clinical Chemistry
GAD 2 (Glutamic acid decarboxylase) Antibodies	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Galactamannan	See Aspergillus antigen							

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Galactose-1- Phosphate uridylyltransferase	Paediatric consultants only.  Must collect sample Mon-Wed (to arrive at Synnovis lab Mon- Thurs)	Blood	2 x Lithium Heparin (green Top)	Referred	Synnovis	27 days		Clinical Chemistry
Ganciclovir level		Blood	Plain Clot (red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	3 working days		Microbiology
Ganglioside Antibodies Screen	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Ganglioside Antibodies profile	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Gastric Parietal Cell Antibody		Blood	Gel Clot (gold top)	Referred	EKHUFT	3 days	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Gastrin	See Gut Hormones							
GBM (Glomerular Basement)	Can be done urgently by arrangement with lab. Initially please contact Maidstone	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Membrane) Antibodies	Biochemistry. Paediatric samples must be red top						requested, 6 weeks if additional immunology test	
Genetic Testing	Genetic Studies/ Karyotyping. Pathology reception will send on requestor's behalf, must reach lab by 11am with the appropriate South East Genomics paperwork  Use link to access request form: <a href="https://southeastgenomics.nhs.uk/glh/forms/">https://southeastgenomics.nhs.uk/glh/forms/</a>	Blood	See Genetics form		South East Genomics			Clinical Chemistry
Genital Ulcer Screen PCR (HSV, H.ducreyi & Syphilis)	Refer patient to GUM clinic Please see <a href="#">User Information - Genital Tract Specimens</a>	Viral swab or fluid	Viral transport medium. Kit provided	Referred	Micropathology Ltd	4 working days		Microbiology
Gentamicin (paediatric)	When being collected into a paediatric bottle Not available to external users	Blood	Lithium Heparin (green top)	4 hr			3 days	Clinical Chemistry
Gentamicin (adult & older children)	Once daily is preferred regime. Take 18-24 hours post dose (state time collected). Pre dose Gentamicin - Take just before the dose Post dose Gentamicin - Take 1 hour after the IV dose. Please refer to Trust Policy	Blood	Gel Clot (gold top)	4 hr			3 days	Clinical Chemistry
GGT (Gamma-glutamyl transferase)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
GH (Growth Hormone)	Patient must fast for 14 hours.	Blood	Gel Clot (gold top)	Referred	EKHUFT	17 days		Clinical Chemistry
Glandular Fever Screening Test	Also known as Paul Bunnell or Monospot	Blood	EDTA (purple top)	4 hr for urgent, 48 hr for all other requests				Haematology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Glucose (CSF)	Do NOT use Vacuum tube (pod) to transport CSF samples Request not available to external users	CSF	Fluoride oxalate (grey top)	4 hr				Clinical Chemistry
Glucose (Fluid)	Do NOT use Vacuum tube (pod) to transport fluid samples Request not available to external users	Fluid	Fluoride oxalate (grey top)	4 hr				Clinical Chemistry
Glucose (Plasma)	Random or Fasting (minimum 12 hrs water only)	Blood	Fluoride oxalate (grey top)	4 hr for MTW 24 hr for all other users				Clinical Chemistry
Glucose-6-Phosphate Dehydrogenase (G6PD)	If request if urgent, please liaise directly with laboratory	Blood	EDTA (purple top)	Referred	Synnovis	1 day for urgent requests other wise 7 days		Haematology
Glucose Tolerance test	<u>Special protocol</u>							
Glucagon	See Gut Hormones							
GM1 Antibodies	Paediatric samples must be red top	Blood	Gel Clot (gold top)			7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
GRE Screen	Please see <a href="#">User Information- Infection Control Swabs</a>	Rectal swab	Black transport swab	4 days				Microbiology
GQ1b Antibodies	Paediatric samples must be red top	Blood	Gel Clot (gold top)			7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Gut Hormone Screen: Chromogranin A&B, Glucagon, Gastrin, Vasoactive intestinal Polypeptide	Patient needs to fast. Send sample immediately to Biochemistry for processing within 10 mins.	Blood	2x EDTA (purple top)	Referred	Imperial College Healthcare NHS Trust	21 days		Clinical Chemistry

## H

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Haematology (Adenovirus, CMV, EBV PCR)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	EDTA (purple top)	Referred	Micropathology Ltd	3 working days		Microbiology
Haemochromatosis (gene marker)		Blood	EDTA (purple top)		NHSBT	7 d		Haematology
Haemoglobin capillary electrophoresis (for thalassaemia and Haemoglobinopathy screening)	Please ensure to complete Family Origin Questionnaire for antenatal requests.	Blood	EDTA (purple top)	3 days	Synnovis	2 weeks	24 hr	Haematology
Haemophilus (Hib) Antibody level	see Childhood vaccine antibody levels (Hib/pneumococcal)							
Haptoglobin	Send sample to laboratory ASAP after venepuncture		4 mL Plain Clot (red top)	10 days	Synnovis	2 weeks		Haematology
HbA1c	HbA1c for monitoring diabetic control or for the diagnosis of diabetes mellitus.	Blood	EDTA (purple top)	7 Days				Clinical Chemistry
HCG (Molar Preg)	Molar pregnancy monitoring	Blood	Gel Clot (gold top)	Referred	Imperial College Healthcare NHS Trust	8 days		Clinical Chemistry
HCG (Serum) (Human Chorionic	Not appropriate as a first-line pregnancy test. Only recommended	Blood	Gel Clot (gold top)	24 hr			3 days	Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Gonadotropin/ beta HCG)	for query ectopic pregnancy two request 48 hrs apart Not available to external users							
HCG (Tumour Marker)	Not recommended for screening . Only recommended for Ca testes/ovary	Blood	Gel Clot (gold top)	24 hr			3 days	Clinical Chemistry
Helicobacter pylori (Antibody)	No longer available - see H pylori antigen							
Helicobacter pylori (Antigen)	Do not perform this test in patients that had a PPI in the last two weeks or antibiotics in the last four weeks as it may lead to false negative results. Please see <a href="#">User Information- Stool Specimens</a>	Faeces	Stool pot (blue top)	4 working days				Microbiology
Helicobacter pylori Culture & Sensitivity	MUST Contact Consultant Microbiologist Specimens must be sent to the laboratory ASAP as they need to be referred within 24 hours of collection.	Biopsy	plain 20mL Universal (white top)	Referred	UKHSA Colindale	17 working days		Microbiology
Hepatitis A IgG antibodies (immunity)	Not a funded test. Contact Microbiology if required. Please see <a href="#">User Information- Bacterial and Viral Serology</a>						1 year	Microbiology
Hepatitis A IgM (for acute infection)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	3 working days	UKHSA Colindale for Confirmation of positives	10 working days		Microbiology
Hepatitis B core antibody (HBcAb)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	2 working days				Microbiology
Hepatitis B immunity check (anti-HBs)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	5 working days				Microbiology
Hepatitis B PCR viral load	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	EDTA (purple top)	Referred	EKHUFT	9 working days		Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Hepatitis B surface antigen (HBsAg)	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	2 working days				Microbiology
Hep B markers	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	EKHUFT	8 working days		Microbiology
Hepatitis C antibodies	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	2 working days	Micropathology Ltd for confirmation of positives	7 working days		Microbiology
Hepatitis C PCR & genotype	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	EDTA (purple top)	Referred	Micropathology Ltd	7 working days		Microbiology
Hepatitis D serology	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	UKHSA Colindale	17 working days		Microbiology
Hepatitis E serology	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred		6 working days		Microbiology
Herpes simplex virus (HSV) PCR	Transport to the lab within one day Please see <a href="#">User Information - Genital Tract Specimens</a> .	Viral swab	Viral transport medium. Kit provided.	Referred	EKHUFT	12 working days		Microbiology
HSV serology	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	EKHUFT	4 working days		Microbiology
Histoplasma	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	Not published		Microbiology
HIV 1+2	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	2 working days	Positives: PHE Colindale for confirmation	10 working days		Microbiology
HIV viral load	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	EDTA (purple top)	7 working days				Microbiology
HLA - B27	Test once only in lifetime. Samples can only be accepted Monday-Thursdays.	Blood	EDTA (purple top)	1 week			12 hours	Haematology
HLA - others	Contact Haematology consultants before sending. Samples referred to NBS laboratories.	Blood	7 ml EDTA (pink Top) or EDTA		NHSBT	2 - 3 weeks		Transfusion

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
			(purple top)					
HLA antibody screens	Contact Haematology consultants before sending. Samples referred to NBS laboratories.	Blood	Plain Clot (red top)		NHSBT	7-10 days		Transfusion
Homocysteine	Patient must be fasting. Send sample immediately to Biochemistry for processing within 10 mins. Test not available to external users	Blood	Lithium Heparin (green Top)	Referred	University Hospitals Pathology East	21 days		Clinical Chemistry
HTLV 1 antibody	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red clot)	Referred	EKHUFT	5 working days		Microbiology
HVS MC&S	See swabs MC&S							Microbiology
Hydatid serology		Blood	Plain clot (red top)	Referred	Hospital for Tropical Diseases	12 working days		Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
IgA Endomysial Ab	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
IgG Endomysial Ab	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology



TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
IgG Insulin Ab	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
IgE only		Blood	Gel Clot (gold top)	Referred	EKHUFT	16 days		Immunology
IGF-1 (Insulin-like Growth Factor-1)		Blood	Gel Clot (gold top)	Referred	EKHUFT	18 days		Clinical Chemistry
Indirect immunofluorescence (immunology)	see Pemphigus/goid Ab							
Influenza (A+B)	See Flu A & B							
Immunoglobulins G, A & M (adults)		Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
Immunoglobulins G, A & M (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	3 days			3 days	Clinical Chemistry
Immunoglobulins Subclasses		Blood	Gel Clot (gold top)	Referred	South West London Pathology	33 days		Clinical Chemistry
Immunophenotyping	Available Mon-Thur only	Blood or bone marrow (specify if it blood or bone marrow on request)	EDTA (purple top)	4 weeks	Synnovis.	4 weeks	8 hours from sample collection	Haematology
Infliximab	Consultant gastroenterologist only	Blood	Gel Clot (gold top)	Referred	Synnovis	3 weeks		Clinical Chemistry
Inhibin B		Blood	Gel Clot (gold top)	Referred	Imperial College Healthcare NHS Trust	4 weeks		Clinical Chemistry
INR (International Normalised Ratio) [Prothrombin time]	Only stable for 4 hours.	Blood	Citrate (blue top)	1 hr for agreed urgent pathways			Within 4 hrs of venepuncture	Haematology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
	Request this test only when patients are on oral anticoagulants- see guidelines on pathology website			4 hrs for all other inpatient requests 1 day for all other requests				
Insect for identification			Plain universal	48 hr	LSHTM	Not published		Microbiology
Insulin	Paired Glucose sample needed for interpretation. Send sample immediately to Biochemistry for processing.	Blood	Gel Clot (Gold top) + Fluoride oxalate (Grey top)	Referred	Berkshire and Surrey Pathology Service	20 days		Clinical Chemistry
Intraconazole levels	Take a pre-dose sample after 7 days of treatment Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Mycology Reference Centre, Leeds General Infirmary, Leeds	10 days		Microbiology
Intrinsic Factor Ab	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Iron (Fe)	If suspected of overdose, please contact lab.	Blood	Gel Clot (gold top)	48 hr			3 days	Clinical Chemistry
Iron, Transferrin + Saturation	As part of test rationalisation iron studies should be monitored via ferritin alone. Iron/transferrin saturation remain available in exceptional circumstances depending on clinical details, inflammatory markers and FBC results.	Blood	Gel Clot (gold top)	48 hr for MTW requests 72 hr for all other requests			3 days	Clinical Chemistry
Islet Cell Antibody	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	4 weeks	7 days if no immunology already requested, 6	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
							weeks if additional immunology test	

## J

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
JC/BK virus		Blood, urine or CSF	EDTA (purple top)/ plain 20mL Universal (white top)	Referred	Micropathology Ltd	3 working days		Microbiology
Joint Fluid	For Culture see <b>Fluids</b> (MC&S) For Crystals see <b>Crystals</b> –joint fluids							

## K

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Karyotype	See Chromosomes							
Kleihauer tests (foetal maternal haemorrhage estimation)	Sample must not be taken within 30 minutes of the sensitising event. Same sample cannot be used for blood group and antibody screen.	Blood	7 ml EDTA (pink Top)	1 working day	NHSBT for positive confirmations	72 hours		Transfusion

L

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Lactate Dehydrogenase (Fluid LDH)	Measurement of fluid LDH values and the calculation of fluid to serum total protein ratios will aid in differentiating exudates from transudates. Not available for CSF. Do NOT use Vacuum tube (pod) to transport fluid samples	Fluid	20 mL white top Universal	4 hr for MTW 24 hr for all other users				Clinical Chemistry
Lactate dehydrogenase (Serum LDH)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users				Clinical Chemistry
Lamotrigine	Please state dosage and time of last dose.	Blood	Plain Clot (red top)	Referred	Synnovis	10 days		Clinical Chemistry
Lead (Blood)	Please state source of exposure	Blood	EDTA (purple top)	Referred	Synnovis	7 days		Clinical Chemistry
Legionella Antigen Screen	Please see <a href="#">Microbiology User Information- Urine Specimens</a>	Urine - 10 ml	20mL Plain Universal (white top) or Boric Acid Monovettes	1 day				Microbiology
Leishmania serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Hospital for Tropical Diseases	12 working days		Microbiology
Leptospira serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Porton Down	6 working days		Microbiology
Levetiracetam	Please state dosage and time of last dose.	Blood	EDTA (purple top)	Referred	Cardiff and Vale University Health Board	16 days	3 days	Clinical Chemistry
LFT (Liver Function Tests) (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
LFT (Liver function tests) (Adult)	Profile = Bilirubin, ALP, ALT and Albumin	Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
LGV (lymphogranuloma venereum)		Rectal swab	Chlamydia container	Referred	Micropathology Ltd	6 working days		Microbiology
LH (Luteinising hormone)	Female patients – day 1 -5 if regular cycles. Please state LMP.	Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
Lipase	Gastroenterology and Paediatrician Consultants only	Blood	Gel Clot (gold top)	Referred	Synnovis	2 weeks		Clinical Chemistry
Lipids	Profile = Cholesterol, Triglycerides, HDL, non-LDL, LDL and Chol/HDL. Fasting 12 hr minimum, ideally 14 hr water only.	Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Lipoprotein (A)		Blood	Gel Clot (gold top)	Referred	Synnovis	21 days		Clinical Chemistry
Lithium	12 hours post dose.	Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
Liver Antibodies	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Lupus anticoagulant Screen	Only stable for 4 hours. Discuss with Consultant Haematologist before ordering request.	Blood	2 x Citrate (blue top)	4 weeks			Within 4 hrs of venepuncture	Haematology
Lyme serology (Borrelia burgdorferi)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	5 working days	Positives: Porton Down	10 working days		Microbiology
Lymphocyte subsets	Discuss with haematology consultant before taking samples	Blood	EDTA (purple top)	Referred	Synnovis	4 weeks		Haematology

## M

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Magnesium (24h urine)		24 hr urine	5L plain container	Referred	EKHUFT	2 weeks	3 days	Clinical Chemistry
Magnesium (Serum) (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Magnesium (Serum) (Adults)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other users			3 days	Clinical Chemistry
Malarial Parasites		Blood	EDTA (purple top)	4 hr if urgent 6 hr for all other requests	Hospital for Tropical Diseases	3 days	6 hr	Haematology
Measles IgM antibodies	Acute infection Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (Red top)	Referred	UKHSA Colindale	6 working days		Microbiology
Measles IgG antibodies (immunity check)	Please see <a href="#">User Information-Bacterial and Viral Serology</a>	Blood	Plain Clot (Red top)	7 working days				Microbiology
MRES-CoV	MUST contact Consultant Microbiologist							
Metabolic stone screen (Urine)	Profile = 24 hr Urine Calcium, Creatinine, Phosphate, Urate, Oxalate and Osmolality	24hr urine	5 L plain container	24 h + Oxalate - Referred	University Hospitals Sussex NHS foundation Trust/EKHUFT	27 days		Clinical Chemistry
Meningococcal PCR	Please see <a href="#">User Information-Bacterial and Viral Serology</a> Please see <a href="#">User Information-CSF Specimens</a>	Blood CSF	EDTA (purple top) Plain 20mL Universal (white top)	Referred	UKHSA Meningococcal Reference Unit, Manchester Royal Infirmary	14 days		Microbiology
Metanephrines	For investigation of Pheochromocytoma	24hr urine	5 L plain container	Referred	EKHUFT	14 days		Clinical Chemistry
Mitochondrial Cell Antibody		blood	Gel Clot (gold top)	Referred	EKHUFT	7 days		Immunology
MPO Antibodies	Reflex test following ANCA. Paediatric samples must be red top	blood	Gel Clot (gold top)	Referred	EKHUFT	3 weeks	7 days if no immunology already	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
							requested, 6 weeks if additional immunology test	
MRSA screen	Transport to the laboratory within one day Please see <a href="#">User Information- Infection Control Swabs</a>	Swab	Blue top plastic shaft	2 days				Microbiology
MSSA screen	Transport to the laboratory within one day	Nose Swab	Blue top plastic shaft	2 days				Microbiology
Mucopolysaccharide s	Please state clinical indication. External users, please contact laboratory before requesting test.	Urine	Plain 20mL Universal (white top)	Referred	Synnovis	43 days		Clinical Chemistry
Mumps IgG antibodies	Immunity Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	EKHUFT	6 working days		Microbiology
Mumps IgM antibodies	Acute infection Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	UKHSA Colindale	12 working days		Microbiology
Mycobacteria	See AAFB							
Mycophenolate	Please state dosage and time of last dose. Referral hospital dependent on Rx/Txp	Blood	EDTA (purple top)	Referred	Kings College Institute of Liver Studies	12 days		Clinical Chemistry
Mycoplasma genitalium PCR	Refer patient to GUM Clinic Please see <a href="#">User Information - Genital Tract Specimens</a>	Swab or urine	Use Chlamydia collection - Kit provided (Yellow cap)  Urine- plain 20mL Universal (white top)			7 working days		Microbiology
Mycoplasma pneumoniae IgM	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	EKHUFT	7-10 days	1 year	Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Mycoplasma pneumoniae PCR	Please see <a href="#">User Information: Respiratory Samples</a>	BAL, Sputa or NPA  Nose/ Throat Swab	Plain 20mL Universal (white top)  Viral transport medium	Referred	Micropathology Ltd	3 working days		Microbiology

## N

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
N.gonorrhoea PCR	Please see <a href="#">Microbiology User Information- Urine Specimens</a> or Please see <a href="#">User Information - Genital Tract Specimens</a>	Swab or Urine	Swab and urine samples in Chlamydia container (yellow top)	7 working days	For confirmation: Micropathology Ltd	11 working days		Microbiology
Needlestick injury - RECIPIENT	Serum saved Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)					
Needlestick injury - DONOR	Hepatitis Bs Ag, Hepatitis C Ab and HIV - Patient must give consent. Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	1 day			1 year	Microbiology
Neuronal Antibody (Hu/R)	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Neutrophil Antibodies	Consultant Haematologist approval required.	Blood	Plain Clot (red top)	Referred	NHSBT	14 days		Transfusion
NSE (Neurone Specific Enolase)	Please state clinical indication	Blood	Gel Clot (gold top)	Referred	Sheffield NHS Teaching Hospitals NHS Foundation Trust	9 days		Clinical Chemistry



TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Neurotensin	See Gut Hormones							
Norovirus	see FAECES- C&S, parasites, virology (rotavirus, adenovirus, norovirus)							

## O

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
25 OH Vitamin D	See Vitamin D							
Oestradiol	State LMP or HRT preparation.	Blood	Plain Clot (red top)	3 days			2 days	Clinical Chemistry
Oligoclonal Bands	Paired serum and CSF sample should be sent. Do NOT use Vacuum tube (pod) to transport CSF samples	Blood + CSF	Gel Clot (gold top) + Plain 20mL Universal (white top)	Referred	St George's University Hospitals NHS Foundation Trust	51 days		Clinical Chemistry
Organic acids (Urine)	Please state clinical indication	Urine	Plain 20mL Universal (white top) or monovette	Referred	Synnovis	60 days		Clinical Chemistry
Osmolality (Serum)		Blood	Gel Clot (gold top)	24 h r			3 days	Clinical Chemistry
Osmolality (Urine)	Random sample	Urine	Plain 20mL Universal (white top) or monovette	24 hr			3 days	Clinical Chemistry
Oxalate (24h Urine)		24hr urine	5 L plain container	Referred	EKHUFT	27 days	not applicable	Clinical Chemistry
Ovarian Antibodies	Paediatric samples must be red top	Blood	Gel Clot (gold top)		EKHUFT	7 weeks	7 days if no immunology already	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
							requested, 6 weeks if additional immunology test	

## PQ

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Paracetamol	Sample must be taken at least 4 hrs post dose. Test not available to external users	Blood	Gel Clot (gold top)	4 hr			2 Days	Clinical Chemistry
Parasite Micro	See Faeces							Microbiology
Parathyroid hormone (PTH)	Please also request paired calcium and phosphate (gold top). Sample must reach biochemistry on the day of collection.	Blood	EDTA (purple top) + Gel Clot (gold top)	7 days				Clinical Chemistry
Parvovirus IgG/IgM	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	EKHUFT	9 working days	1 year	Microbiology
Pemphigus/goid Ab (aka Indirect immunofluorescence (serum))	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Peritoneal fluid	See Fluids for cytology or Fluids for Microbiology as appropriate							
PERTUSSIS (Bordetella) children <12 months old	refer patient to the hospital paediatric team	NPA (Nasopharyngeal aspirate)	Plain 20mL Universal	Referred	UKHSA, Southampton Laboratory, Southampton General Hospital	6 working days		Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
	Please see <a href="#">User Information: Respiratory Samples</a>		(white top) or collection tube					
PERTUSSIS (Bordetella) children >12 months old and adults	Collect >2 weeks after onset of symptoms. Not suitable if primary or booster pertussis vaccination given within the last 12 months Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	UKHSA Colindale	12 working days	6 months (if other microbiology tests requested)	Microbiology
pH Urine & Fluids	Send sample immediately to Biochemistry for processing Test not available to external users	Urine or fluid	20 mL white top Universal	4 hr				Clinical Chemistry
Phenobarbitone	Please provide dosage and time of last dose in clinical details	Blood	Plain Clot (red top)	Referred	Synnovis	13 days		Clinical Chemistry
Phenytoin	Please provide dosage and time of last dose in clinical details	Blood	Plain Clot (red top)	3 days			3 days	Clinical Chemistry
Phosphate (24hr Urine)		24hr urine	5L plain container	24 hr			3 days	Clinical Chemistry
Phosphate (Serum) (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	4 hr for MTW 24 hr for all other requests			3 days	Clinical Chemistry
Phosphate (Serum) (Adults)		Blood	Gel Clot (gold top)	4 hr for MTW 24 hr for all other requests			3 days	Clinical Chemistry
Platelet antibodies	Consultant Haematologist approval required.	Blood	Plain Clot (red top)	Referred	NHSBT	14 days		Transfusion
Platelet function test (platelet aggregation studies)	Consultant Haematologist approval required. This is a specialised test performed on fresh blood by the Haemophilia Centre at EKHUFT (Kent and Canterbury Hospital). The patient is referred by appointment. Tel: 01227 783157	Blood			EKHUFT			Haematology
Pleural fluid	See - Fluids for cytology or Fluids for Microbiology as appropriate							

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Pneumococcal antibody level	See - Childhood vaccine antibody levels (Hib/pneumococcal)							
Pneumococcal Antigen Screen	Please see <a href="#">Microbiology User Information- Urine Specimens</a> Performing <i>Streptococcus pneumoniae</i> urinary antigen test within 5 days of vaccination is not recommended.	Urine – 10 ml	Plain Universal (white top)	1 day			24 hrs after sample collected	Microbiology
Pneumocystis Pneumonia (PCP)	Please see <a href="#">User Information: Respiratory Samples</a>	BAL, sputum, NPA	Plain 20mL Universal (white top)	Referred	Micropathology Ltd	3 working days		Microbiology
PNH Screen (Paroxysmal Nocturnal Haemoglobin Uria)	Send sample to laboratory straight after venepuncture	Blood	EDTA (purple top)	Referred	St Georges University Hospital Foundation Trust, Tooting.			Haematology
Porphyrins (Blood)	Sample must be protected from light Please state full clinical details to aid helpful interpretation. Sample required within 8 hours of collection.	Blood	EDTA (purple top)	Referred	Synnovis	21 days		Clinical Chemistry
Porphyrins (Faeces)	Sample must be protected from light Please state full clinical details to aid helpful interpretation. Sample required within 8 hours of collection.	Faeces	Faeces 30 mL universal (blue top)	Referred	Synnovis	21 days		Clinical Chemistry
Porphyrins (Urine)	Sample must be protected from light Please state full clinical details to aid helpful interpretation. Sample required within 8 hours of collection.	Urine	Plain 20mL Universal (white top) or monovette	Referred	Synnovis	21 days		Clinical Chemistry
Posaconazole Level	Take a pre-dose sample after 7 days of treatment Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Mycology Reference Centre, Leeds General Infirmary	10 days		Microbiology
Potassium (24hr Urine)		24hr urine	5L plain container	24 hr			3 days	Clinical Chemistry
Potassium (Random Urine)		Urine	Plain 20mL Universal (white top)	24hr			3 days	Clinical Chemistry
Potassium (serum)		Blood	Gel Clot (gold top)	4 hr for MTW requests			3 days	Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
				24 hr for all other requests				
PR3 Antibodies	Reflex test following ANCA. Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	3 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Primidone	Metabolises to phenobarbitone. Request phenobarbitone							
Procollagen-3-NP		Blood	Gel Clot (gold top)	Referred	Sheffield NHS Teaching Hospitals NHS Foundation Trust	15 days		Clinical Chemistry
Progesterone	Useful only day 21 of Cycle or mid luteal phase. In certain PUL (not routine EPC) patients Consultant request only	blood	Plain Clot (red top)	24 hr			3 days	Clinical Chemistry
Prolactin	Please state all medication.	blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
Prosthetic Joint	Do NOT add formalin to sample Please see <a href="#">User information: Fluids, Pus and Tissue Samples</a>	Tissue	Sterile theatre pack Yellow top (do not add formalin)	Interim report in 2 days. Final report in 12 days				Microbiology
Protein & albumin (Fluid)	Do NOT use Vacuum tube (pod) to transport fluid samples Test not available to external users.	Fluid	Plain 20mL Universal (white top)	4 hr			3 days	Clinical Chemistry
Protein C	Only stable for 4 hours. Requires approval from Consultant Haematologist if ordering separately from Thrombophilia screen.  If clinical indications do not meet those set out in BSH guidelines, this test will be rejected.	Blood	1 x Citrate (blue top) (if requested as individual test)	4 weeks		4 weeks	not available	Haematology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Protein/Creatinine ratio (random urine)	Available acute obstetrics at weekend if received before 12:00 at TWH	Urine	Plain 20mL Universal (white top) or monovette	24 hr for MTW requests 3 days for all other requests			3 days	Clinical Chemistry
Protein Electrophoresis (Serum)	Not applicable <18 years old. Reporting may be delayed if further investigation is needed e.g. immunofixation	Blood	Gel Clot (gold top)	5 days			3 days	Clinical Chemistry
Protein S	Only stable for 4 hours. Requires approval from Consultant Haematologist if ordering separately from Thrombophilia screen.  If clinical indications do not meet those set out in BSH guidelines, this test will be rejected.	Blood	1 x Citrate (Blue top) (if requested as individual test)	4 weeks		4 weeks		Haematology
Prothrombin Time	Tested as part of Clotting Screen. Request INR if this test is required for INR ratio only. Refer to INR test in this instance.							
Pro BNP (NT Pro BNP)	Only available to PCT. Must reach biochemistry within 8 hours. Not recommend to repeat within 1 year. Test not available to MTW users	Blood	EDTA (purple top)	3 days				Clinical Chemistry
PSA (Prostate Specific Antigen Total)		Blood	Gel Clot (gold top)	3 days			3 days	Clinical Chemistry
PTH (Parathyroid hormone)	Please also request paired calcium and phosphate (gold top). Sample must reach biochemistry on the day of collection.	Blood	EDTA (purple top) + Gel Clot (gold top)	7 days				Clinical Chemistry
Purkinje Ab (Yo)	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
							immunology test	
Purkinje Cell Antibody		Blood	Gel Clot (gold top)	Referred	EKHUFT	21 days	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
qFIT (quantitative faecal immunochemical test)	Random Sample. Please ask patient to write the collection date on the specimen bottle and send to the laboratory on the day of collection.	Faeces	Green top qFIT collection device	1 week				Biochemistry
Q-Fever	See - Coxiella serology							

## R

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
RA (Rheumatoid Arthritis) Screen Also known as RF		Blood	Gel Clot (gold top)	72 hrs				Haematology
Rabies Serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Animal & Plant Health Agency	Not published		Microbiology
RAST (Allergy Screen). <a href="#">Reference Guide available</a>	Please complete <a href="#">allergy form</a> stating specific allergen required and send with sample	Blood	Gel Clot (gold top)	Referred	EKHUFT	18 days		Immunology
Red Cell Cholinesterase	For organophosphate use	<a href="#">Requesting clinician to contact H&amp;S Laboratory Buxton directly</a>						

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Renal (Paediatrics)	When being collected into a paediatric bottle	blood	Lithium Heparin (green top)	4 hr for MTW requests 24 hr for all other requests			3 days	Clinical Chemistry
Renal (Adults)	Profile = Sodium Potassium Creatinine	blood	Gel Clot (gold top)	4 hr for MTW requests 24 hr for all other requests			3 days	Clinical Chemistry
Renin	See Aldosterone							
Respiratory viruses (except Flu A/B, RSV, Covid) PCR	Please see <a href="#">User Information: Respiratory Samples</a>	Nose/ throat swab	Viral swab (green top)	Referred	Micropathology Ltd	3 working days		Microbiology
Reticulocyte Count	Request with FBC if this test is required.	Blood	EDTA (purple top)	4 hr for MTW requests 24 hr for all other requests			8 hrs	Haematology
RF (Rheumatoid Factor)	see Rheumatoid Arthritis							
Rifampicin levels	Take a pre-dose sample and three post dose samples at 1h, 2h and 4h after oral dose Please see <a href="#">User Information: Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	5 working days		Microbiology
RSV screen	Please see <a href="#">User Information: Respiratory Samples</a>	NPA	Plain universal	1 day	EKHUFT	4 working days		Microbiology
Rubella IgM	Acute infection Please see <a href="#">User Information: Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	EKHUFT	16 working days		Microbiology
Rubella IgG antibodies	Immunity Please see <a href="#">User Information: Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	7 working days				Microbiology



## S

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Salicylate	Test not available to external users	Blood	Gel Clot (gold top)	4 h			3 days	Clinical Chemistry
Salivary Gland Antibody		Blood	Gel Clot (gold top)	Referred	EKHUFT	21 days		Immunology
SARS-Cov2 RNA PCR	Please see <a href="#">User Information: Respiratory Samples</a>	Nose/ throat swab, NPA, Sputum	Viral swab (green top or red in-house top) NPA- Plain universal Sputum- 60ml (white top)	Screening: 48hrs				Microbiology
SARS-Cov2 RNA Rapid Testing		Nose/ throat swab	specific bottle type issued from ED mini lab	3 hrs				Rapid Testing
Schistosoma serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Hospital for Tropical Diseases	12 working days		Microbiology
Selenium	Please state clinical indication Please contact laboratory if Royal Blue Bottle required	blood	Trace element bottle (royal blue top) Paediatric: Plain Clot (red top)	Referred	Royal Wolverhampton NHS Trust operating as Black Country Pathology Services	8 days		Clinical Chemistry
Serous fluids	See Fluids for cytology							
Serum Free Light Chains (FLC, Serum free Kappa, and Lambda light chains)	Only available to Consultant Haematologists	Blood	Gel Clot (gold top)	Referred	Synnovis	3 weeks		

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Schistosoma serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Hospital for Tropical Diseases	12 working days		Microbiology
Sickle cell screen	Contact lab for urgent requests if patient going into imminent surgery	Blood	EDTA (purple top)	24 hr			24 hrs	Haematology
Skeletal Muscle Antibody		Blood	Gel Clot (gold top)	Referred	EKHUFT	21 days		Immunology
Skin Antibody		Blood	Gel Clot (gold top)	Referred	EKHUFT	21 days		Immunology
Smooth Muscle Antibody		Blood	Gel Clot (gold top)	Referred	EKHUFT	3 days		Immunology
Sodium (24hr Urine)	24 hr collection.	24hr urine	5L plain container	24 hr			3 days	Clinical Chemistry
Sodium (Random Urine)		Random urine	Plain Universal (white top)	24 hr				Clinical Chemistry
Sodium/Potassium (Serum)		Blood	Gel Clot (gold top)	4 hr for MTW requests 24 hr for all other requests			3 days	Clinical Chemistry
Somatostatin	See Gut Hormones							
Sputum C&S	Do not send saliva. Avoid mouth wash. Transport to the laboratory the same day. Please see <a href="#">User Information: Respiratory Samples</a>	2-5 ml Sputum	60ml (white top)	90% in 3 days				Microbiology
Sputum for cytology	Detection rates of malignancy from sputum are very low	Early morning deep cough specimen	60ml (white top)	within 1 week (unless marked urgent)				Cellular Pathology
Steroid Profile (24 hr Urine)	Please state clinical indication	24 hr urine	5L plain container	Referred	Synnovis	36 days		Clinical Chemistry
Steroid profile (Random Urine)	Please state clinical indication	Urine	Plain Universal (white top)	Referred	Synnovis	36 days		Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Stone	Please state site of stone	Stone	Plain Universal (white top)	Referred	HSL (Analytics) LLP	16 days		Clinical Chemistry
Streptococcus pneumoniae Antigen Screen	See - Pneumococcal Antigen Screen							
Streptomycin Level	Pre-& Post dose to be collected after 2 <sup>nd</sup> – 4 <sup>th</sup> dose Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	5 working days		Microbiology
Strongyloides serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Hospital for Tropical Diseases	12 working days		Microbiology
SWABS- BACTERIAL (all sites) (C&S) (Pus is always preferred)	Transport swabs are stable at room temperature for 24 hours but refrigerate samples where possible. Please see <a href="#">User Information- ENT swabs</a> Please see <a href="#">User Information- Wound, Skin and Ulcer Swabs</a> Please see <a href="#">User Information - Genital Tract Specimens</a>	Charcoal swab. ENT and Urethral/ CX wire swabs available.	Black top, plastic shaft.	3 working days				Microbiology
SWABS - CHLAMYDIA	Transport to the lab within one day. Please see <a href="#">User Information - Genital Tract Specimens</a>		Kit supplied	7 working days				Microbiology
SWABS – HSV (Herpes simplex virus) PCR	Transport to the lab within one day. Please see <a href="#">User Information - Genital Tract Specimens</a>		Viral transport medium. Kit provided.	Referred	EKHUFT	6 working days		Microbiology
SWABS - VIRAL investigation	Provide full clinical details and specify which viral PCR requested Transport to the lab within one day. Please see <a href="#">User Information- ENT swabs</a> Please see <a href="#">User Information: Respiratory Samples</a>		Viral transport medium. Kit provided.	Referred	Micropathology Ltd	14 working days		Microbiology
Sweat test	Please contact the Paediatricians.	Sweat		Referred	EKHUFT			Clinical Chemistry
Syphilis (IgG/IgM)	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	5 working days	Positives sent to UKHSA Bristol	8 working days		Microbiology

## T

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
T- spot TB test	The sample must arrive at Microbiology within 24 hours of collection. <b>DO NOT COLLECT SAMPLE AT WEEKENDS.</b> The sample needs arrive at the reference laboratory within 36 hours of collection Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	2 x Lithium Heparin (green top)		Oxford Diagnostics Laboratories	1-2 Days		Microbiology
Tacrolimus	Please state dosage and time of last dose.	Blood	EDTA (purple top)	Referred	ESTH/ Kings College Institute of Liver Studies	7 days		Clinical Chemistry
TB (tuberculosis) culture	See AAFB							
Teicoplanin	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	3 working days		Microbiology
Tips MC&S	Disinfect the skin around the cannula entry site, remove cannula using aseptic technique, and cut off 4cm into appropriate sterile Please see <a href="#">User Information- Cannulae/ Central line tips</a>	Tip	Plain universal	3 working days				Microbiology
Testosterone/SHBG	Male patients collect sample 8-11 am. SHBG routinely reported for female patient	Blood	Plain Clot (red top)	3 days			3 days	Clinical Chemistry
Theophylline	Please state dosage and time of last dose.	Blood	Plain Clot (red top)	3 days			3 days	Clinical Chemistry
Thioguanine nucleotides (TGN) Methylmercaptopyrine (MeMP)	Only available to consultant Gastroenterologists	Blood	EDTA (purple top) Whole blood		Synnovis	2 weeks	3 days	
THREAD-WORM	See instruction sheet	cellotape onto slide.	Plain 20mL Universal (white top)	Microscopy results available same day.				Microbiology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
THREAD-WORM	See instruction sheet	Saline wash and swab.	Plain 20mL Universal (white top)	Microscopy results available same day.				Microbiology
Thrombin Time	Only stable for 4 hours.	Blood	Citrate (blue top)	1 hr for agreed urgent requests 4 hr for all other requests			Within 4 hrs of venepuncture	Haematology
Thrombophilia screen	Only stable for 4 hours.  If clinical indications do not meet those set out in BSH guidelines, this test will be rejected.	Blood	4 x Citrate (blue top) and 1 x Plain Clot (red top)	4 weeks		4 weeks		Haematology
Thyroglobulin	Recommended for monitoring patients with papillary and follicular thyroid carcinoma	Blood	Gel Clot (gold top)	Referred	EKHUFT	20 days		Clinical Chemistry
Thyroid Autoantibody		Blood	Gel Clot (gold top)	Referred	EKHUFT	14 days		Immunology
Thyroid Peroxidase	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	2 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Tissue - culture	see also Prosthetic joint. Do NOT add formalin Please see <a href="#">User information: Fluids, Pus and Tissue Samples</a>	Tissue	Plain 20mL Universal (white top)	Microscopy – same day Interim Culture –3 working days				Microbiology
Tissue - histology biopsies	Add sufficient formalin to cover tissue Test not indicated for external users	Tissue	60ml formalin container (purple top)	7 days	Tissue and Test type dependent			Histology
Tissue - histology large specimens	Add sufficient formalin to cover tissue Test not indicated for external users	Tissue	.05l - 2l bucket	10 days`	Tissue and Test type dependent			Histology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Rapid Frozen section – fresh tissue	DO NOT add formalin or any fixative to tissue	Tissue	60ml pot - 2l bucket			Same Day – intraoperative assessment		Histology
Tissue - Skin IMF	Must be in Michel's medium – sufficient medium to cover tissue	Tissue	Cryotube		Not applicable	Not applicable		Cellular Pathology
TOBRAMYCIN	Take Pre-dose before giving the next dose. Post dose levels are not required Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Antimicrobial reference laboratory, Southmead Hosp, Bristol	24 hr (Mon-Thurs) 72 hrs (Fri) from receipt phoned result		Microbiology
TORCH screen	Sent with stored antenatal sample Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (Red top)	7 working days	EKHUFT	15 working days from time stored samples sent	1 year	Microbiology
Total Protein (CSF)	Do NOT use Vacuum tube to transport CSF samples Test not available for external users	CSF	Plain 20mL Universal (white top)	4 hr			3 days	Clinical Chemistry
Total Protein (Fluid)	Do NOT use Vacuum tube (pod) to transport fluid samples Test not available for external users	Fluid	Plain 20mL Universal (white top)	4 hr				Clinical Chemistry
Total Protein (Serum)		Blood	Gel Clot (gold top)	4 hr for MTW requests 24 hr for all other requests			3 days	Clinical Chemistry
Toxicology Screen (Urine)	Please state which drug or substance in particular suspected in the clinical details.  Not available for medico-legal work or employment screening.	Urine	Plain 20mL Universal (white top)	Referred	Synnovis	25 days	3 days	Clinical Chemistry
Toxoplasma screen	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	7 working days	Positives: Toxoplasma reference unit, Public Health Wales Swansea, Singleton Hospital	9 to 12 working days	1 year	Microbiology
TPHA (Treponema haemagglutination)	See Syphilis							
TPMT (Thio Purine Methyl Transferase)	Only indicated once (unless previously post transfusion)	Blood	EDTA (purple top)	Referred	Synnovis	23 days		Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Trichomonas vaginalis (TV) PCT	Please see <a href="#">User Information - Genital Tract Specimens</a>	Swab or urine	Use Chlamydia collection - Kit provided (Yellow cap) Urine- plain 20mL Universal (white top)			7 working days		Microbiology
Troponin T	Only available to MTW in-patients. Troponin T should not be requested at triage but only after medical review (unless obvious suspected acute coronary event) in which case contact laboratory or indicate on request form	Blood	Gel Clot (gold top)	4 hr			24 hrs	Clinical Chemistry
Tryptase	Anaphylactic reactions = sample asap after emergency treatment started. It is important to state approx time reaction started/exposure to allergen. Second sample ideally within 1–2 hours (but no later than 4 hours) from the onset of symptoms. NICE CG134.	Blood	EDTA (purple top) or Lithium Heparin (green top) preferred– but Gel Clot (gold top) acceptable	Referred	Sheffield NHS Teaching Hospitals NHS Foundation Trust	21 days		Clinical Chemistry
TSH (Thyroid Stimulating hormone)	Please state all medication. FT4 and FT3 will be reflexed by the laboratory if indicated by clinical details and/or depending on TSH level. TSH should not be re-requested within a month.	Blood	Gel Clot (gold top)	24 hr for MTW requests 3 days for all other requests			3 days	Clinical Chemistry
Toxocara serology	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Hospital for Tropical Diseases	12 working days		Microbiology

# U

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Urate (24hr Urine)		24hr urine	5L plain container	1 working day			3 days	Clinical Chemistry
Urate (Serum)	Uric Acid	Blood	Gel Clot (gold top)	4 hr for MTW requests 24 hr for all other requests			3 days	Clinical Chemistry
Urea (24 hr Urine)		Urine	5L plain container	24 hr			3 days	Clinical Chemistry
Urea (Serum) (Paediatrics)	When being collected into a paediatric bottle	Blood	Lithium Heparin (green top)	4 hr for MTW requests 24 hr for all other requests			3 days	Clinical Chemistry
Urea (Serum) (Adults)		Blood	Gel Clot (gold top)	4 hr for MTW requests 24 hr for all other requests			3 days	Clinical Chemistry
Urine for cytology	Detection rates of malignancy from urine are very low.  Urine samples are not suitable for haematuria pathway investigation.	First part of second voided sample.	Plain 20mL Universal (white top)	1 week				Cellular Pathology
URINE MC&S	Please see <a href="#">Microbiology User Information- Urine Specimens</a>	Urine	Boric Acid Monovette- fill to line	Microscopy available same day. Culture results within 2 days				Microbiology
URINE MC&S Paediatric	Where <10ml can be collected Please see <a href="#">Microbiology User Information- Urine Specimens</a>	Urine	Plain 20mL Universal (white top)	Microscopy available same day. Culture results within 2 days				Microbiology



## V

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Valproate (Sodium Valproate)	(Epilim) Please state dosage and time of last dose.	Blood	Plain Clot (red top)	Referred	Synnovis	11 days		Clinical Chemistry
Vancomycin	Pre-dose: take just before dose. Post dose levels are not required Test not available to external users	Blood	Gel Clot (gold top)	4 hr			2 days	Clinical Chemistry
Very Long Chain Fatty Acids	Paediatrics only. Please state clinical indication	Blood	EDTA (purple top)	Referred	Synnovis	2 weeks		Clinical Chemistry
VDRL	See Syphilis							
Viral cultures	see Swabs - viral							
Viral loads	See specific virus Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	EDTA (purple top)	See specific virus	See specific virus			Microbiology
Viral titres	Specify virus Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	Referred	Depends on virus		1 year	Microbiology
25 OH Vitamin D	See Vitamin D							
Vitamin B12	see Folate (serum) & Vitamin B12							
Vitamin D (VitD3, 25 hydroxy vitamin D, 25 OH Vitamin D.)	Do not retest within 80 days of previous result. <u>See guidelines for the replacement of low Vitamin D</u>	Blood	Plain Clot (red top)	5 days				Clinical Chemistry
VIP (vasoactive intestinal peptide)	See Gut Hormones							
VMA	See Catecholamines							
Voltage Gated Calcium channel antibody	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if	Immunology

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
							additional immunology test	
Voltage Gated Potassium channel antibody	Paediatric samples must be red top	Blood	Gel Clot (gold top)	Referred	EKHUFT	7 weeks	7 days if no immunology already requested, 6 weeks if additional immunology test	Immunology
Voriconazole levels	Pre-dose, within 5 days of starting therapy Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain clot (red top)	Referred	Mycology Reference Centre, Leeds General Infirmary, Leeds	10 working days		Microbiology
VZV (chicken pox) contact immunity check	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	24 hr			1 year	Microbiology
VZV Occ Health immunity check	Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top)	7 working days			1 year	Microbiology

## WXYZ

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
Whooping Cough	See Pertussis							Microbiology
Xanthochromia	Samples must reach lab within 1 hour. Protect from the light. <a href="#">See protocol</a> Test not available to external users	CSF	<a href="#">See protocol</a>	24 hr				Clinical Chemistry
Zinc	Please state clinical indication Please contact laboratory if Royal Blue Bottle required	blood	Trace element bottle (royal blue top)	Referred	Royal Wolverhampton NHS Trust operating as Black Country Pathology Services	8 days		Clinical Chemistry

TEST	Specimen Instructions/ Comments	Specimen Type	Specimen Container	Internal Turnaround time	Referral centre	Referral Turnaround time	Add on time limit	Pathology department
			Paediatric: Plain Clot (red top)					
Zika Virus	Discuss with Consultant Microbiologist prior to sending sample to ensure compliance with PHE guidelines Please see <a href="#">User Information- Bacterial and Viral Serology</a>	Blood	Plain Clot (red top) & EDTA (purple top)	Referred	UKHSA RIPL, Porton Down	7 working days	1 year	Microbiology