Schedule of Accreditation

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9063 **Accredited to ISO 15189:2012**	**Manchester University NHS Foundation Trust** **Issue No:** 012 **Issue date:** 07 August 2023	
	Clinical Biochemistry **Clinical Sciences Building** **Manchester Royal Infirmary** **Oxford Road** **Manchester** **M13 9WL**	**Contact: Ms Michelle Miller** **Tel: +44 (0) 161 701 1201** **E-Mail: michelle.miller@mft.nhs.uk** **Website: www.mft.nhs.uk**
Testing performed by the Organisation at the locations specified below		

Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details		**Activity**	**Location code**
Address Clinical Biochemistry Clinical Sciences Building Oxford Road Campus Manchester Royal Infirmary Oxford Road Manchester M13 9WL	**Local contact** Michelle Miller	Diagnostic testing	A
Address Clinical Biochemistry Trafford Hospital Division Moorside Road Manchester M41 5SL	**Local contact** Michelle Miller	Diagnostic testing	B
Address Essential Services Laboratory, North Manchester General Hospital, Delaunays Road, Manchester M8 5RB United Kingdom	**Local contact** Michelle Miller	Diagnostic testing	C
Biochemistry Department. Manchester University NHS Foundation Trust – Wythenshawe Site Wythenshawe Manchester M23 9LT	**Local contact** Michelle Miller Biochemistry Laboratory Manager and POCT Manager E-mail: michelle.miller@mft.nhs.uk Tel: 0161 291 4783	Biochemistry Management of Point of Care Testing Provision – Clinical Chemistry and Haematology	D

Site activities performed away from the locations listed above:

Location details		Activity	Location code
Hospital Wards, Clinics and Outpatients Wythenshawe site - as above	**Local contact** Michelle Miller	Point of Care Testing – Clinical Chemistry and Haematology.	E
North West Lung Centre Wythenshawe site – as above Wythenshawe Manchester M23 9LT	**Local contact** Michelle Miller	Point of Care Testing – Clinical Chemistry and Haematology	F
North West Heart Centre Wythenshawe site – as above Wythenshawe Manchester M23 9LT	**Local contact** Michelle Miller	Point of Care Testing – Clinical Chemistry and Haematology	G
Withington Community Hospital Nell Lane Manchester M20 2LR	**Local contact** Michelle Miller	Point of Care Testing – Clinical Chemistry and Haematology	H
Opal House Wythenshawe site – as above Wythenshawe Manchester M23 9LT	**Local contact** Michelle Miller	Point of Care Testing – Clinical Chemistry and Haematology	I
Ability House Altrincham Road Sharston Manchester M22 4NY	**Local contact** Michelle Miller	Point of Care Testing – Clinical Chemistry and Haematology	J

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis Quantification of:	Roche Cobas c702 (location A) and Roche Cobas 503 (location B) Roche Cobas c503 (location C) Roche Cobas c702/801 (location D)	
Serum	A1 Antitrypsin	Turbidimetric assay BC-AUTO-S-37	D
Serum/Plasma	Alpha-1-Antitrypsin	Turbidometric BC-AUTO-S-37	A
Serum	ACE	Enzymatic assay BI-S-AUTO-11	D
Serum/Plasma	Alanine Transaminase (ALT)	Colorimetric BC-AUTO-S-37	A, B,C, D
Serum/Plasma	Albumin	Colorimetric BCP BC-AUTO-S-37	A, B, C,D
Urine	MicroAlbumin	Immunoturbidimetric CB-AUTO-PRO-048	A, B,D
Serum	Alkaline Phosphatase	Enzymatic BI-S-AUTO-11	D
Serum/Plasma	Alkaline Phosphatase	Colorimetric BC-AUTO-S-37	A, B,C
Serum/Plasma	Bilirubin	Colorimetric diazomethod BC-AUTO-S-37	A, B,C
Serum/Plasma	Bilirubin	Colorimetric diazomethod BC-AUTO-S-37	A, B,C
Serum	Direct Bilirubin	Vanadate oxidation	D
Serum/Plasma, Urine	Calcium	Colorimetric (NM-BAPTA)BC-AUTO-S-37	A, B,C, D
Serum/Plasma,	Chloride	ISE CB-AUTO-PRO-055	A, B,C, D
Serum/Urine			D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas c702 (location A) and Roche Cobas 503 (location B) Roche Cobas c503 (location C) Roche Cobas c702/801 (location D)	
Serum/Plasma	Cholesterol	Enymaticcolorimetric BC-AUTO-S-37	A, B,C
Serum/Plasma	C Reactive Protein	Particle enhanced Immunoturbidimetric BC-AUTO-S-37	A, B,C,D
Serum /Plasma	Creatinine Kinase	Enzymatic Assay BC-AUTO-S-37	A, B,C,D
Serum/plasma	Creatinine	Enzymaticcolorimetric BC-AUTO-S-37	A, B, C,D
Urine	Creatinine	Jaffe Kinetic BC-AUTO-S-37	A, B,D
Urine	24hr Creatinine Clearance	Enzymatic BI-S-AUTO-11	D
CSF	CSF Protein	Immunoturbidmetric BI-S-AUTO-11	D
Serum/Plasma	Gamma-Glutamyl transpeptidase	Enzymatic colorimetric BC-AUTO-S-37	A, B,C,D
Fluoride/oxalate plasma , CSF	Glucose	Enzymatic Assay BC-AUTO-S-37	A, B,D
Serum/Plasma	High Density Cholesterol	Homogeneous enzymatic colorimetricBC-AUTO-S-37	A, B,C,D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas c702 (location A) and Roche Cobas 503 (location B) Roche Cobas c503 (location C) Roche Cobas c702/801 (location D)	
Serum/Plasma	Iron	colorimetric BC-AUTO-S-37	A, B,C,D
Serum,	Lactate	colorimetric BC-AUTO-S-37	A, B,C
Serum/Plasma	Lactate dehydrogenase	EnzymaticCB-Auto_PRO-140	A, B,C,D
Serum/Plasma	Lipase	Enzymaticcolorimetric CB-Auto_PRO-140	A, B,C,D
Serum	Lithium	Colorimetric	A,B,C, D
Serum/Plasma, urine	Phosphate	Colorimetric BC-AUTO-S-37	A, B,C
Serum/Urine		BI-S-AUTO-11	D
Serum/Plasma, urine	Potassium	ISE BC-AUTO-S-37	A, B,C,D
Serum/Plasma,, urine	Sodium	ISE BC-AUTO-S-37	A, B,C,D
Serum/Plasma	Total Protein	colorimetric CB-AUTO-PRO 140	A, B,C
Serum/Urine		BI-S-AUTO-11	D
Serum/CSF	Protein	Colorimetric biuret BI-S-AUTO-11	D
Urine, CSF	Total Protein	Colorimetric CB-AUTO-PRO 140	A, B
Urine	24hr Protein	BI-S-AUTO-11	D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas c702 (location A) and Roche Cobas 503 (location B) Roche Cobas c503 (location C) Roche Cobas c702/801 (location D)	
Serum/Plasma	Transferrin	Immunoturbidometric BC-AUTO-S-37	A, B,C
Serum		BI-S-AUTO-11	D
Serum/Plasma	Triglycerides	Enzymatic colorimetric BC-AUTO-S-37	A, B,C
Serum		BI-S-AUTO-11	D
Serum/Plasma, Urine	Urate (Uric Acid)	End point colorimetric BC-AUTO-S-37	A, B,C,D
Serum/Plasma, Urine	Urea	Enzymatic BC-AUTO-S-37	A, B,C,D
Serum/Plasma	Conjugated Bilirubin	End point colorimetric CB-AUTO-PRO-025 (WAKO)	A,B,C
Serum/Plasma, Urine	Magnesium	End point colorimetric BC-AUTO-S-37	A, B,C,D
Serum	Ammonia	Enzymatic method, with glutamate dehydrogenase CB-AUTO-PRO-026	A,C,D
Plasma		BI-S-AUTO-11	D
Serum/Plasma	Asparatate Transaminase (AST)	Kinetic colorimetric BC-AUTO-S-37	A, D
Serum	Beta Hydroxybutyrate	Enzymatic colorimetric CB-AUTO-PRO-0108 (Randox)	A
Serum/Plasma	Bicarbonate	phosphoenolpyruvate (PEP) BC-AUTO-S-37	A,B,C
Serum		BC-AUTO-S-37	D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas c702 (location A) and Roche Cobas 503 (location B) Roche Cobas c503 (location C) Roche Cobas c702/801 (location D)	
Serum	Bile Acids	End point colorimetric CB-AUTO-PRO-027 (Diazyme)	A,D
		BC-AUTO-S-37	D
Serum	Caeruloplasmin	Immunoturbidometric BC-AUTO-S-37	A
Serum/Plasma	Cystatin C	Immunoturbidometric CB-AUTO-PRO-01	A
Serum	Ethanol	Enzymatic method with alcohol dehydrogenase	A
Plasma		BC-AUTO-S-37	D
Serum/Plasma	Paracetamol	EnzymaticBC-AUTO-S-37	A, B,C,D
Serum/Plasma	Salicylate	Enzymatic BC-AUTO-S-37	A, B,C
Serum / Urine			D
Serum	Caeruloplasmin	Immunoturbidometric BC-AUTO-S-37	A
Serum/Plasma	Cystatin C	Immunoturbidometric CB-AUTO-PRO-01	A
Serum	Ethanol	Enzymatic method with alcohol dehydrogenase. CB-AUTO-PRO-028	A
Plasma		BI-S-AUTO-11	D
Serum/Plasma	Paracetamol	EnzymaticBC-AUTO-S-37	A, B,C
Serum		BI-S-AUTO-11	D
Serum/Plasma	Salicylate	Enzymatic BC-AUTO-S-37	A, B,C
Serum	Free Fatty Acids	End point colorimetric CB-AUTO-PRO-109 (Randox)	A
Serum	Orosomucoid	Immunoturbidometric BC-AUTO-S-37	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas c702 (location A) and Roche Cobas 503 (location B) Roche Cobas c503 (location C) Roche Cobas c702/801 (location D)	
Serum	Macroprolactin	PEP extraction and electrochemiluminescence immunoassay ECLI CB-AUTO-PRO-130 , BC-AUTO-S-37	A, B,D
Serum	Free Fatty Acids	End point colorimetric CB-AUTO-PRO-109 (Randox)	A
Serum	Orosomucoid	Immunoturbidometric BC-AUTO-S-37	A
		Roche Cobas e801 (Location A) Roche 602 (Location B) Roche Cobas e801 (Location D) electrochemiluminescence immunoassay ECLIA Roche Cobas e801	
Serum/Plasma	Alpha-feto Protein	BC-AUTO-S-37	A, B,D
Serum/Plasma	AMH	BC-AUTO-S-37	A
Serum	Anti TPO	BI-S-AUTO-11	D
Serum	B12	BI-S-AUTO-11	D
Serum/Plasma	CA-125	BC-AUTO-S-37	A, B,D
Serum	CA19-9	BI-S-AUTO-11	D
Serum	CEA	BI-S-AUTO-11	D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas e801 (Location A) Roche 602 (Location B) Roche Cobas e801 (Location D) electrochemiluminescence immunoassay ECLIA Roche Cobas e801	
Serum/Plasma	Cortisol	CB-AUTO-PRO- 140	A, B, C, D
Serum	Ferritin	BI-S-AUTO-11	D
Serum	Folate	BI-S-AUTO-11	D
Serum/Plasma	Folicle Stimulating Hormone	BC-AUTO-S-37	A, B,D
Serum	Free T4	BC-AUTO-S-37	A, B, C,D
Serum/Plasma	Alpha-feto Protein	BC-AUTO-S-37	A, B,D
Serum/Plasma	AMH	BC-AUTO-S-37	A
Serum	Anti TPO	BI-S-AUTO-11	D
Serum	B12	BI-S-AUTO-11	D
Serum/Plasma	CA-125	BC-AUTO-S-37	A, B
Serum		BI-S-AUTO-11	D
Serum	CA19-9	BI-S-AUTO-11	D
Serum	CEA	BI-S-AUTO-11	D
Serum/Plasma	Cortisol	CB-AUTO-PRO- 140	A, B, C
Serum	Ferritin	BI-S-AUTO-11	D
Serum	Folate	BI-S-AUTO-11	D
Serum/Plasma	Folicle Stimulating Hormone	BC-AUTO-S-37	A, B
Serum		BI-S-AUTO-11	D
Serum	Free T4	BC-AUTO-S-37 BI-S-AUTO-11	A, B, C D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas e801 (Location A) Roche 602 (Location B) Roche Cobas e801 (Location D) electrochemiluminescence immunoassay ECLIA Roche Cobas e801	
Serum	High Sensitive Troponin T	BI-S-AUTO-11	D
Serum	Human Chorionic Gonadotrophin	BC-AUTO-S-37	A, B, C
		BI-S-AUTO-11	D
Serum	Beta hCG	BI-S-AUTO-11	D
Serum	Luteinising hormone	BC-AUTO-S-37 BI-S-AUTO-11	A, B D
Serum/plasma	NT-ProBNP	BC-AUTO-S-37	A
Serum	Oestradiol	BC-AUTO-S-37 BI-S-AUTO-11	A, B D
Serum/plasma	Placental growth Factor (PlGF)	BC-AUTO-S-37	A,B
Serum/plasma	Progesterone	BC-AUTO-S-37	A, B
Serum		BI-S-AUTO-11	D
Serum/plasma	sFlt-1 (Solublefms-like tyrosine kinase-1)	BC-AUTO-S-37	A, B
Serum/plasma	sFlt-1/PlHi ratio		B
Serum	Prolactin	BC-AUTO-S-37 BI-S-AUTO-11	A, B D
	Parathyroid Hormone	BC-AUTO-S-37 BI-S-AUTO-11	A, B D
	Prostate Specific Antigen	BC-AUTO-S-37 BI-S-AUTO-11	A, B,C D
Serum & plasma Serum	Sex Hormone Binding Globulin	BC-AUTO-S-37 BI-S-AUTO-11	A, B D
Serum & plasma	Testosterone	BC-AUTO-S-37	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	Roche Cobas e801 (Location A) Roche 602 (Location B) Roche Cobas e801 (Location D) electrochemiluminescence immunoassay ECLIA Roche Cobas e801	
Serum & plasma Serum	Thyroid Stimulating Hormone	BC-AUTO-S-37 BI-S-AUTO-11	A, B,C D
Serum	Thyroid Peroxidase Autoantibodies	BI-S-AUTO-11	D
Serum & plasma	Procalcitonin		D
Serum & plasma	Carcinoembryonic Antigen	Sandwich Immunoassay BC-AUTO-S-37	 B
Serum & plasma	Anti-Mullerian Hormone	BC-AUTO-S-37	A
Serum & plasma	Troponin-T	Sandwich Immunoassay	
Serum & plasma	Free T3	BC-AUTO-S-37	A,D
Serum & plasma	N-Terminal of the Prohormone Brain Natriuretic Peptide	BC-AUTO-S-37	A
Serum & plasma	Procalcitonin	CB-AUTO-PRO- 140	A
Serum & plasma	Digoxin	BC-AUTO-S-37	A, B,C,D
	Therapeutic Drug Monitoring/Antibiotic	Roche e801 (Location A&C) Roche c702/801 (Location D)	
Serum	Amikacin	Kinetic interaction of microparticles in solution (KIMS) KIMS) BC-AUTO-S-37	A,D
	Gentamicin	Enzyme Immunoassay CEDIA BC-AUTO-S-37	A,C,D
	Methotrexate	Immunoassay CB-AUTO-PRO-101 ARK/Alpha labs kit	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
	Tobramycin	homogeneous enzyme Immunoassay CB-AUTO-PRO-095 BC-AUTO-S-37	A D
	Vancomycin	Kinetic interaction of microparticles in solution (KIMS) BC-AUTO-S-37	A,C,D
	Carbamezapine	Kinetic interaction of microparticles in solution (KIMS) BC-AUTO-S-37	A,D
	Phenobarbitone	Kinetic interaction of microparticles in solution (KIMS) BC-AUTO-S-37	A
	Phenytoin	Kinetic interaction of microparticles in solution (KIMS) BC-AUTO-S-37	A,D
	Valproate	homogeneous enzyme Immunoassay BC-AUTO-S-37 PO-S-2 in conjunction with manufacturers instruction for analysis using Werfren Gem 5000	A
	Quantification of:	Agilent HPLC system	
Serum	Thiopental	HPLC fractionation BC-SP-S-66	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required Finnegan Surveyor HPLC with PDA plus detector	
Whole blood (EDTA)	Thiopurine metabolites:		
	Thioguanine nucleotides (6GTN)	BC-SP-S-106	A
	Methylmercaptopurine nucleotides (6MMPN)		A
		Thermo Endura LC-MS	
Serum	Cyclosporin Sirolimus Tacrolimus	BC-SP-S-61	A
	25 hydroxy vitamin D2/D3	BC-SP-S-95	
Serum/plasma	Vitamin A	BC-SP-S-109	A
	Vitamin E		A
Serum	1,25-Dihydroxy Vitamin D	Absciex 6500+ LC-MS/MS System BC-SP-S-98 Thermo TQS Endura UPLC-MS	A
Serum	Busulphan	BC-SP-S-78	
	Calculated parameter Busulphan pharmacokinetics	By calculation BC-SP-S-79 Manufacturers instruction for analysis using LCMS/MS - Waters Acquity with XEVO family in conjunction with :	A
Plasma	Aldosterone	BC-SP-S-5 measurement by : LCMS	D
Serum and plasma	Cortisol	BC-SP-S-6 measurement by : LCMS	D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
EDTA whole blood	Cyclosporin	BC-SP-S-27measurement by : LCMS	D
Serum	Dexamethasone	BC-SP-S-129 measurement by : LCMS	D
Serum	Androgen profile: Testosterone Androstenedione 17-hydroxyprogesterone	BC-SP-S-7 measurement by : LCMS	D
Plasma	Metanephrines: metanephrine, normetanephrine 3-methoxytyramine)	BC-SP-S-128 measurement by : LCMS Manufacturers instruction for analysis using LCMS/MS - Waters Acquity with XEVO family in conjunction with :	D
Plasma	Renin	BC-SP-S-10 measurement by : LCMS	D
Serum and urine	5-HIAA	BC-AUTO-S12 (serum) BC-SP-S-4 (urine)	D
Serum	Vitamin A	Waters acquity UPLC BI-S-LC-VITSCHRO measurement by Chromsystems kit for HPLC	D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (Cont'd)	Biochemistry examination activities for the purpose of clinical diagnosis (Cont'd)	In house documented methods incorporating manufacturers' instructions as required (Cont'd)	
Serum and heparin plasma	Vitamin D metabolites	Manufacturers instruction for analysis using LCMS/MS - Waters Acquity with XEVO family in conjunction with :BC-SP-S-18 measurement by : LCMS	D
Saliva	Salivary Cortisol and cortisone	BC-SP-S-11 measurement by : LCMS	D
	Testosterone	BC-SP--S-12 measurement by : LCMS	D
Urine	Cystine	BC-SP-S-16 measurement by : LCMS Manufacturers instruction for analysis using LCMS/MS - Waters Acquity with XEVO TQD 2 TQD 3 measurement by : LCMS	D
Serum	25-hydroxyvitamin D2 and D3	BI-S-LC_VITD3 R14	D
Whole blood mitra collection device	Tacrolimus	BI-S-MS-22	D
	Creatinine		D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
	Cotinine	BC-SP-S-15 measurement by : LCMS Analysis using LCMS/MS - Waters Acquity XEVO TQ-XS-LC-MS/MS	D
Serum	High sensitivity oestradiol	BC-SP-S-22 Waters AcquityLC-MS/MS using Waters Xevo TQD2 and ABSciex Citrine with Shimadzu Nexera UPLC	D
Serum	Voriconazole Itraconazole Posaconazole	BC-SP-S-29 Manufacturers instruction for analysis using Waters TQS Micro LC-MS-MS and TQS-LC-MS-MS	D
Serum	Cortisol	BC-SP-S-6	D
Serum and plasma	Dehydroepiandrosterone (DHEAS)	Waters TQS-Micro mass spectrometer and Acquity I-Class UPLC.	D
Serum and Plasma	Oestradiol		D
Serum and heparinsed plasma	Teicoplanin	Teicoplanin by LC-MS/MS Manufacturers instruction for analysis using ABSciex Citrine MS/MS	D
Urine	Free cortisol	BC-SP-S-17	D
	Oxalate	BC-SP-S-26	D
	Citrate		D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (Cont'd)	Biochemistry examination activities for the purpose of clinical diagnosis (Cont'd)	In house documented methods incorporating manufacturers' instructions as required (Cont'd)	
Plasma	Mycophenolic Acid	BI-S-LC-MPA	D
Serum& Plasma	Prednisolone	BI-S-LC_PRED R15	D
	Calculated Parameters:	By calculation	D
Serum/Plasma	AKI		A, B
Serum/Plasma	Adjusted calcium		A,B,D
	Globulin		D
	Free androgen index	Calculated using BC-SP-S-7	D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
Serum	AKI	Calculated using BC-IT-INS-1	D
Serum/plasma	Estimated GFR		A,B,D
Serum/Plasma	Estimated GFR (children)		A, B
Urine	Creatinine clearance		A,B,D
Urine	24hr urine excretion calculation		D
Urine	Microalbumin/creatinine ratio		D
Serum/Plasma	Transferrin saturation		A, B
Serum/Plasma	Total cholesterol/HDL ratio		A, B
Serum/Plasma	TmP/GFR		A
Serum/Plasma	Trans-tubular potassium gradient		A
Serum/Plasma	CKD-EPI Cystatin C		A
Serum/Plasma	Free Androgen Index		A, B, D
Urine	Urine albumin creatinine ratio		A, B
	Urine calcium/creatinine clearance ratio		A, B
	Urine fractional excretion of sodium		A A
	Urine protein/creatinine ratio		A, B
	Urine urate/creatinine ratio		A, B
Urine	Urine HMMA/creatinine ratio		A
	Urine HVA/creatinine ratio		A
	Urine noradrenaline/creatinine ratio		A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
	Urine calcium/creatinine ratio		A,B
Urine	Dopamine/creatinine ratio		A
		Manufacturers instruction for analysis using the Schebo manual Eliza with Thermo Multiskan FC Plate Reader with SkanIt software in conjunction with :	
Faeces	Elastase	BC-SP-S-41	D
Sweat	Sweat Analysis	Documented in-house procedure BC-SP-S-48 and BC-SP-S-38 for analysis using Sherwood 926S chloride analyser. Measurement by Colourimetric titration	D
CSF	Xanthochromia	Spectrophotometry using Thermo Scientific Evolution 300 spectrophotometer with OptLab-SPX software and Bilirubin application routine. BC-SP-S-40	D
Renal calculi	Determination of the composition of renal calculi	Reflectance Spectroscopy using Nicolet iS5 with Omnic software BC-SP-S-42 <u>In house documented methods incorporating manufacturers' instructions as required</u>	D
Blood		IDS iSYS Automated Analyser	
Serum	Insulin Like Growth factor 1	Chemiluminescent Immunoassay CB-NBS-PRO- 44	A
	Growth Hormone	Chemiluminescent Immunoassay CB-NBS-PRO- 45	A
	Procollagen N Peptide type 1	Chemiluminescent Immunoassay CB-NBS-PRO-33	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
Serum	Renin	Chemiluminescent Immunoassay CB-NBS-PRO-36	A
Serum	IGF-BP3	Chemiluminescent Immunoassay CB-NBS-PRO-43	A
Serum	C-Peptide	ELISA assay using Mercodia kit and manual method or Tecan robot CB-NBS-PRO-27	A
	Insulin (normal)	CB-NBS-PRO-29	A
	Insulin (Ultrasensitive)	CB-NBS-PRO-30	A
	Insulin to C peptide ratio	Calculated parameter	A
Serum, urine	Osmolality	Advanced Instruments Micro Osmometer using freezing point depression CB-AUTO-PRO-061 CB-TRAF-PROC-67 BI-S-AUTO-13R1	 A,C B D
	Calculated parameter: Osmolar gap		A,C
		Gem 5000 blood gas analyser CB-BC-AUTO-S-54	B
Blood	Actual bicarbonate, calculated	Calculation	
	Base Excess	Calculation	
	O2 content	Calculation	
	HCO3-Std	Calculation	
	Carboxyhaemoglobin	Cooximetry	
	Haemoglobin (Total)	Cooximetry	
	Oxy Haemoglobin	Cooximetry	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
		Gem 5000 blood gas analyser CB-TRAF-PROC-28	B
	Oxygen saturation	Cooximetry	
	Met Haemoglobin	Cooximetry	
	pCO2	Potentiometric	
	pH	Potentiometric	
	pO2	Amperometric	
	Sodium	Potentiometric	
	Potassium	Potentiometric	
	Chloride	Potentiometric	
	Calcium	Potentiometric	
	Lactate	Amperometric	
	Glucose	Amperometric	
	New Born Screening Biochemistry exmaniation activities for the purposes of clinical diagnosis	Documented in-house methods to meet the requirements of the Newborn blood spot screening programme (NBS) as defined in the July 2018 'NHS Newborn blood spot Screening Programme: laboratory QA evidence requirements.'	
		Biorad Variant HPLC and Panthera sample puncher	A
Dried blood spot	Haemoglobinopathy	BC-NBS-S-1, BC-NBS-S-17	A
		Perkin Elmer GSP , time resolved fluorescence and Panthera sample puncher	A
	Immuno-reactive trypsin	BC-NBS-S-26	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
Dried blood spot	TSH		A
	17-Hydroxy Progesterone	Thermo Scientific Exactive High Resolution Accurate MS and Panthera sample puncher CB-NBS-PRO-49	A
	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
Serum	Alkaline phosphatase ISO enzymes	Helena SAS3 and SAS 4 electrophoresis BC-SP-S-55	A
Serum	Androstenedione DHEA-S Testosterone 17-Hydroxy Progesterone	Dionex Ultimate 3000 UHPLC with Thermo Scientific Exactive Plus MS,BC-SP-S-90 CB-NBS-PRO-46	A
Urine	Antihypertensive drug screen – metabolites of: Enalapril Enalaprilat Lisinopril Perindopril Perindoprilat Ramipril Ramiprilat Quianpril Quinaprilat Trandolapril Trandolaprilat Candesartan Irbesartan Valsartan Losartan Telmisartan Olmesartan Atenolol Metoprolol Propranolol Labetalol	BC-SP-S-103	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
	Antihypertensive drug screen – metabolites of Bisoprolol Nebivolol Amloodipine Delodipine Lercanidipine Lacidipine Diltiazem Verapamil Norverapamil Nifedipine Bendoflumethiazide Hydrochlorothiazide Indapamide Chlorthalidone Bumetanide Furosemide Eplerenone Canrenone Amiloride Hydralazine Doxazosin Prazosin Aliskiren Moxonidine Methyldopa	Dionex Ultimate 3000 UHPLC with Thermo Scientific Exactive Plus MS, BC-SP-S-103 BC-SP-S-103	A
Urine	Detection of Drugs of Abuse screen: Morphine Codiene 6-MAM Norcodeine Acetylcodeine Dihydrocodeine Tramadol Fentanyl Methadone EDDP	BC-SP-S-101	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
	Detection of Drugs of Abuse screen: Buprenorphine norbuprenorphine Amphetamine Benzoylecgonine Tetrahydrocannabinol carboxylic acid Ketamine Alprazolam Bromazepam Clonazepam Diazepam Flunitrazepam Flurazepam Lorazepam	Dionex Ultimate 3000 UHPLC with Thermo Scientific Exactive Plus MS, BC-SP-S-101	A
Urine	Detection of Drugs of Abuse screen: Lormetazepam Midazolam Nitrazepream Nordiazepam Oxazepam Phenazepam Temazepam Gabapentin Pregabalin	BC-SP-S-101	A
CSF	Bilirubin	Uvikon XL Spectrophotometer CB-BC-SP-S-62	A
Urine	Catecholamines as below: HMMA HVA	Agilent 1100 UPLC ECD BC-SP-S-049 CB-SPEC-PRO-027	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis	In house documented methods incorporating manufacturers' instructions as required	
Serum	Cholinesterase activity and phenotype	Manual spectrophotometric method using Uvikon XL and BC-SP-S-59	A
		Agilent 7800cx ICP-MS	A
Serum	Chromium	CB-SPEC-PRO-078	A
	Cobalt	BC-SP-S-72	A
	Copper	BC-SP-S-74	A
	Selenium	CB-SPEC-PRO-053	A
	Zinc	BC-SP-S-67	A
Urine	Copper	BC-SP-S-71	A
	Chloride	CB-SPEC-PRO-127	A
Sweat	Chloride	CB-SPEC-PRO-127	A
	Sodium	BC-SP-S-104 Agilent 1100 HPLC	A
Whole Blood (EDTA)	Glycated haemoglobin	Biorad D-100 HPLC, BC-SP-S-5 BC-SP-S-60	B A
EDTA Whole blood	HbA1c-IFCC	Manufacturers instruction for analysis using Biorad D-100 in conjunction with BC-SP-S-43	D
Blood	Pro Collagen Type 3	Packard Cobra 2 RIA, using Orion kit and BC-SP-S-54	A
Faeces	Calprotectin	DS2 Immunoassay CB-SPEC-PRO-086	A
Pleural fluid	pH	iStat G3	A
Faeces	Faecal immunochemical testing (FIT)	Intergrate sphere latex turbidimetry using the HM-Jackarc analyser and BC-SP-S-110	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	Biochemistry examination activities for the purpose of clinical diagnosis Provision of Point of Care testing in accordance with ISO 22870: 2016 related to the following:	Nova Statstrip POCT analyser	
Whole blood	Glucose	Electrochemical biosensor technology and SOP PO-S-4	E,F,G,H,I,J
Whole blood	Ketones	Electrochemical biosensor technology and SOP PO-S-4	E
		HemoCue 201DM Hb POCT analyser	E
Whole blood	Haemoglobin	Azidemethoglobin reaction and SOP PO-S-5	E
Whole blood		Werfen Gem 5000 POCT analyser	
	pH, pCO_2 and pO_2 Electrolytes: Na+,K+,Ca2+,Cl-	Potentiometric measurement and SOP PO-S-8	E,F,G
	Co-oximetry: oxyhaemoglobin,carboxyhaemoglobin Methaemoglobin	Optical measurement and SOP PO-S-8	E,F,G
Whole blood	pO_2, Glucose, lactate	Amperometric measurement and SOP PO-S-8	E,F,G
	haematocrit, total Haemoglobin, reduced haemoglobin	Conductivity measurement and SOP PO-S-8	E,F,G
		Abbot I-stat POCT analyser	
Arterial and venous whole blood	Creatinine	Electrochemical biosensor technology and SOP PO-S-6	E

(See Appendix 1 for details of accredited examinations at location types E -J)

END

Testing performed by the Organisation at the locations specified

E: Wythenshawe site – as above Wards	**Glucose** Nova Statstrip	**Ketone** Nova Statstrip	**Haemoglobin** HemoCue 201DM Hb	**Testing using** (Gem 5000) (see below – key)	**Creatinine** Abbot I-Stat
SDEC	X				
A&E	X	X		1	
ACUTE WARDS A1	X			1	
A2	X			1	
A3	X	X			
A4	X				
A5	X	X			
A6	X				
A7	X	X			
A8	X				
A9	X				
A10	X	X		1	
Coronary care	X				
Admissions unit	X				
Acute ITU	X	X		1	
Burns unit	X			1	
Cardaic rehab	X				
Maternity wards C1	X				
Maternity wards C2	X			1	
Maternity wards C3	X				
Acute theatres	X		X	1	
Cecilia unit	X				
F1 Sexton Suite	X				
Transplant unit	X				
Treatment Day case unit	X			1	
Treatment Day case Recovery	X				
Delivery suite	X	X	X	1	
Discharge lounge	X				
Endoscopy pre ass	X				
Endoscopy recovery	X				
ENT	X				
F block theatre	X		X	1	
F1 SRU	X				
NWVU	X			2	
F12	X	X			
F14	X				
F15	X				

E: Wythenshawe site – as above **Wards**	**Glucose** Nova Statstrip	**Ketone** Nova Statstrip	**Haemoglobin** HemoCue 201DM Hb	**Testing using** (Gem 5000) (see below – key)	**Creatine** Abbot I-Stat
F16	X				
Cardiology theatres	X			1	
Catheter laboratory	X				
CF OPD	X				
F2 Cardio	X				
F2 lung	X				
F3	X				
F4	X				
F5	X				
F6	X				
F7	X	X			
F8 HDU	X				
F8 STARLIGHT	X	X		1	
F9	X				
Allergy	X				
Paeds obs Assessment unit (POAU)	X				
JQ cardiac ward	X				
F11	X				
POU Oncology	X				
Acute XRAY	X				
Nightingale centre	X				
Haem day unit	X				
Long-term ventilation				2	
SCBU	X			1	
Radiology					X
Ante natal clinic	X				
Transplant OPD	X				
Paediatric OPD	X				
OPD Clinic	X				
Pain clinic	X				
MaxFax OPD	X				
Pearce CF ward	X			2	
Diabetes Centre	X				
ANC	X				
ANC DCU	X				
Doyle (Gastro)	X				
Wilson (Gastro)	X				

F: North West Lung Centre		
	Glucose	Testing using
(Gem 5000)		
(see below – key)		
Bronchoscopy	X	
Charles Blakely unit	X	
Chest Clinic	X	
Lung function ward		2

G: North West Heart Centre	**Glucose**	**Testing using (Gem 5000) (see below – key)**	**Creatinine Abbot - Istat Alinity**
Heart Failure Clinic			X
Cardio clinic	X		
Cardiac Imaging			X
CT CCU zone 1	X	1	
CT CCU zone 2	X	1	
CT CCU zone 3	X	1	
CT CCU zone 4	X	1	
CICU TXU (pocu)	X	1	

H: Withington Community Hospital	
	Glucose
Resus team	X
Treatment centre	X
Ante Natal clinic	X
Dermatology	X
H: Withington Community Hospital	
Buccleagh Lodge	X

I: Opal House	**Glucose**
Opal House – frailty care	X

J: Ability House	**Glucose**
Ability Centre	X

Testing undertaken on Gem 5000

1: Blood gases, glucose, lactose, co-oximetry
2: Blood gases, co-oximetry