


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <p>UKAS MEDICAL 10139</p> <p>Accredited to ISO 15189:2022</p>	<p>Sheffield Teaching Hospitals NHS Foundation Trust</p> <p>Issue No: 011 Issue date: 23 March 2026</p>	
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<p>Testing performed at the above address only</p>		

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
HUMAN BODY FLUIDS	<u>Biochemistry examination activities for the purpose of clinical diagnosis:</u> <u>Metabolic biochemistry</u>	In house documented methods incorporating manufacturers' instructions where relevant
Blood, Urine, CSF, Dried Blood Spot	Quantitative Amino Acids	Biochrom 30 analysers using ion exchange chromatography SOP 123022 Waters TQD Tandem Mass Spectrometer:
Blood, Bile, Dried Blood Spot	Acylcarnitines	SOP 127003
Blood, Urine	Carnitine	SOP 127003
Blood, Urine	Bile salts: Glycodihydroxycholanoate Glycotrihydroxycholanoate Taurodihydroxycholanoate Taurotrihydroxycholanoate	SOP 127301
Blood	Biotinidase	Horiba Pentra using enzymatic assay with coloured product SOP 130005
Urine	Qualitative Amino Acids	Manual Thin Layer Chromatography SOP 122001 Sciex 4500MD LC-MS/MS Liquid Chromatography Tandem Mass Spectrometry
Urine	Sulphocysteine	SOP 167001
Urine	IVG	SOP 163001
Urine	Hexanoyl-glycine	SOP 164001
Plasma	Acylcarnitine	SOP 166001



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis:</u> <u>Metabolic biochemistry (cont'd)</u>	In house documented methods incorporating manufacturers' instructions where relevant
Urine	Homovanillic Acid (HVA) / Vanillylmandelic Acid (VMA)	Shimadzu GCMS (QP2010): SOP 124003 (HVA/VMA)
Urine	Methylmalonic Acid (MMA)	SOP 124004
Urine	Ethylmalonic Acid (EMA)	SOP 124007
Urine	Orotic Acid	SOP 124002
Urine	Organic Acids (Qualitative)	SOP 124001
Blood	Very Long Chain Fatty Acids- Phytanate, Pristinate; Docosahexanoic acid Tetracosanoic acid Hexacosanoic acid	Shimadzu GCMS (QP2020): SOP 124315
Blood	Sterols-Cholestanol, 7- Dehydrocholesterol, 8- Dehydrocholesterol, Cholesterol	SOP 124313
Blood	Phytosterols- Sitosterol, Campesterol, Stigmasterol	SOP 124313
Blood	Plasmalogens	SOP 124312
Urine	Dimethylglycine	SOP 124304
Urine	Galactitol	SOP 124317



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis:</u> <u>Metabolic biochemistry (cont'd)</u>	In house documented methods incorporating manufacturers' instructions where relevant
Blood	Homocysteine (Total)	Shimadzu HPLC: SOP 125003
Urine	Collagen Cross-Links-Pyridinoline, Deoxypyridinoline	SOP 125004
Urine	Trimethylamine and Trimethyl -N- Oxide	Shimadzu Headspace GCMS SOP 124314
Blood	Galactosaemia Screen (G1PUT activity)	Manual assay using Beutler principle SOP 122005
Urine	Glycosaminoglycan Quantitation	Ortho Clinical Diagnostics Vitros 5600 using Dimethyl Methylene Blue assay SOP 122014
Blood	Intermediary Metabolites - Free Fatty Acids, 3-Hydroxy Butyrate	Ortho Clinical Diagnostics Vitros 5600 using Wako FFA reagent/ Randox 3OHB reagent SOP 113140
Plasma, Serum	Lipase	Ortho Clinical Diagnostics Vitros 5600 using Abx Pentra Lipase CP reagent – enzymatic colorimetric assay SOP 116007
Urine	Glycosaminoglycan	Electrophoresis using Cleaver Scientific electrophoresis tanks (CSL/CELLAS) Consort E143 power pack Consort EV22 power pack SOP 122009
Blood	25-Hydroxy Vitamin D2 & D3	AB Sciex Triple Quad 5500 Tandem Mass Spectrometer. Exion LC HPLC system SOP 161001 Sciex 5500MD LC-MS/MS – Tandem Mass Spectrometry
Plasma, Urine, CSF	Pipecolic Acid	SOP 162001



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis:</u> <u>Tissue Culture</u>	In house documented methods incorporating manufacturers' instructions where relevant
Fibroblasts	Pyruvate carboxylase assay	Radioimmunoassay: 14C uptake assay with measurement using Packard 1900CA Scintillation Counter SOP 142027
Fibroblasts	Glutaryl-CoA dehydrogenase activity	Measurement of release of 14CO ₂ by Packard 1900CA Scintillation Counter SOP 142010
Fibroblasts	Palmitoyl carnitine transferase Type II assay	14C uptake assay with measurement using Packard 1900CA Scintillation Counter SOP 142006
Fibroblasts	Propionyl-CoA carboxylase and Holocarboxylase Synthetase	14C uptake assay with measurement using Packard 1900CA Scintillation Counter SOP 142023
Fibroblasts	Myristate/ Oleate/ Palmitate Flux assays	3H labelled release assay measured on Packard 1900CA Scintillation Counter SOP 142029
Fibroblasts	L-Valine breakdown	Measurement of the release of 14CO ₂ by Packard 1900CA Scintillation Counter SOP 142012
Fibroblasts	Octanoate breakdown	3H labelled release assay measured on Packard 1900CA Scintillation Counter SOP 142018
Fibroblasts	Leucine breakdown	Measurement of the release of 14CO ₂ by Packard 1900CA Scintillation Counter SOP 142019
Fibroblasts	BCA Protein Assay	Horiba Pentra – Colourmetric assay SOP 142015



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis:</u> <u>Acute Chemistry</u>	In house documented methods incorporating manufacturers' instructions where relevant
Blood	HbA1c	Siemens DCA Advantage. Immunoagglutination. SOP 115042 Ortho-Clinical Diagnostics, Vitros 5600 using SOP 113143
Blood	Albumin	Colourmetric assay
Blood	Alkaline Phosphatase (ALP)	Enzymatic assay
Blood	Alanine Aminotransferase (ALT)	Enzymatic assay
Blood	Ammonia	Colourmetric assay
Blood, Urine	Amylase (& Amylase/ Creatinine ratio)	Enzymatic assay
Blood	Aspartate Amino Transferase (AST)	Enzymatic assay
Blood	C-Reactive Protein (CRP)	Immunoassay
Blood, Urine	Calcium (& Calcium/ Creatinine Ratio)	Colourmetric assay
Blood	Chloride	Potentiometric assay
Blood	Cholesterol	Colourmetric assay
Blood, Urine	Creatinine	Enzymatic assay
Blood	Creatine Kinase (CK)	Enzymatic assay
CSF	CSF Glucose (CSF/Plasma Ratio)	Colourmetric assay
CSF	CSF Protein	Colourmetric, assay
Blood	Gamma Glutamyl Transferase (GGT)	Enzymatic assay
Blood	Gentamicin	Immunoassay
Blood, Urine, CSF	Glucose	Colourmetric assay



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis: Acute Chemistry (cont'd)</u>	In house documented methods incorporating manufacturers' instructions where relevant Ortho-Clinical Diagnostics, Vitros 5600 using SOP 113143:
Blood	High Density Lipoprotein (HDL)	Colourmetric assay
Blood	Iron	Colourmetric assay
Blood	Lactate	Colourmetric assay
CSF	Lactate (CSF)	Colourmetric assay
Blood	Lactate Dehydrogenase (LDH)	Enzymatic assay
Blood, Urine	Magnesium	Colourmetric assay
Blood	Paracetamol	Colourmetric assay
Blood, Urine	Phosphate	Colourmetric assay
Blood, Urine	Potassium	Potentiometric assay
Blood	Protein (Total)	Colourmetric assay
Urine	Protein (& Protein/Creatinine Ratio)	Randox Colourmetric assay
Blood	Ethanol	Colourmetric assay
Blood	Corrected Calcium	Calculated parameter
Blood	Salicylate	Colourmetric assay
Blood, Urine	Sodium	Potentiometric assay
Blood	Tobramicin	Immunoassay
Blood	Triglycerides	Colourmetric assay
Blood, Urine	Urea	Colourmetric assay
Blood, Urine	Uric Acid	Colourmetric assay



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis: Acute Chemistry (cont'd)</u>	In house documented methods incorporating manufacturers' instructions where relevant
Blood	Caffeine	Ortho-Clinical Diagnostics, Vitros 5600 using SOP 113143: EMIT
Blood	Unconjugated and Conjugated Bilirubin	Colourmetric assay
Blood	Total Bilirubin	Colourmetric assay
Blood	Bicarbonate	Colourmetric assay
Blood	Low Density Lipoprotein (LDL)	Calculated parameter
Urine	Creatinine (Modified Jaffe)	Colourmetric assay
Blood	Vitamin B12	Immunoassay
Blood	Cortisol	Immunoassay
Blood	Ferritin	Immunoassay
Blood	Folate	Immunoassay
Blood	Free Thyroxine (FT4)	Immunoassay
Blood	Parathyroid Hormone (PTH)	Immunoassay
Blood	Thyroid Stimulating Hormone (TSH)	Immunoassay
Blood	eGFR – estimated glomerular filtration rate	Calculated parameter
Blood	Anion Gap	Calculated parameter



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis: Acute Chemistry (cont'd)</u>	In house documented methods incorporating manufacturers' instructions where relevant
Blood	Cyclosporine	Ortho-Clinical Diagnostics, Vitros 5600 using SOP 113150a: Immunoassay
Blood	FK506 (Tacrolimus)	Ortho-Clinical Diagnostics, Vitros 5600 using SOP 113150b: Turbidimetric immunoassay
Blood	Methotrexate	Ortho-Clinical Diagnostics, Vitros 5600 using SOP 113150c: ARK Competitive Immunoassay
Blood, Urine	Osmolality	Advanced Instruments – Depression of freezing point SOP112001
Sweat	Sweat Chloride	Corning MKII 9265 Chloride Meter – Coulometry SOP 111004
Dried Blood Spot	Phenylalanine and Tyrosine for Dietary monitoring of PKU	Waters TQD Tandem Mass Spectrometry: SOP 153142



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HUMAN BODY FLUIDS (cont'd)	<u>Newborn Screening</u>	Documented in-house methods to meet the requirements of the NBS screening programme as defined in the July 2018 version of 'Newborn Blood Spot Screening: laboratory QA evidence requirements'
Dried Blood Spot	Thyroid Stimulating Hormone (TSH)	Perkin Elmer GSP Fluoroimmuno-metric assay SOP 151442
Dried Blood Spot	Immunoreactive Trypsin (IRT)	Perkin Elmer GSP Fluoroimmuno-metric assay SOP 151443
Dried Blood Spot	Haemoglobin profile (HbA, HbC, HbD, HbE, HbF, HbO ^{Arab} , HbS)	SCIEX QQQ4500MD Tandem Mass Spectrometer SOP 159141
Dried Blood Spot	T-Cell Receptor Excision Circles (TRECs)	Revvity Eonis-Q96 real-time PCR cyclor (using the Eonis SCID-SMA kit). Multiplex real time PCR based assay – quantitative assay utilising fluorescence detection. SOP 158202
END		