Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

UKAS MEDICAL **9785** **Accredited to ISO 15189:2022**	**Liverpool University Hospitals NHS Foundation Trust** **Issue No:** 014 **Issue date:** 06 November 2026	
	Blood Sciences **Clinical support services building** **Liverpool University Hospitals NHS Foundation Trust** **Mount Vernon Street** **Liverpool** **L7 8YE**	**Contact: Ines Santos** **Tel: +44 (0)151 706 4374** **E-Mail: Ines.Santos@liverpoolft.nhs.uk** **Website: www.liverpoolcl.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 Liverpool University Hospitals NHS Foundation Trust Mount Vernon Street Liverpool L7 8YE	**Local contact** Ines Santos As above	Haematology Transfusion Clinical Biochemistry Antenatal & Newborn Screening	A
Address Broadgreen Hospital / Liverpool Heart and Chest Hospital Thomas Drive Liverpool L7 3PE	**Local contacts** Ines Santos As above	Haematology Transfusion Clinical Biochemistry	B
Address Liverpool Women's Hospital. Crown Street Liverpool L8 7SS	**Local contacts** Ines Santos As above	Haematology Transfusion	C
Address Aintree University Hospital Longmoor Lane Liverpool L9 7AI	**Local contacts** Dr Lisa Bailey Tel: +44(0)151 706 4374 E-Mail: lisa.bailey@liverpoolcl.nhs.uk	Haematology Transfusion Clinical Biochemistry	D

9785 Accredited to ISO 15189:2022	**Schedule of Accreditation** **issued by** **United Kingdom Accreditation Service** 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK **Liverpool University Hospitals NHS Foundation Trust** **Issue No:** 014 **Issue date:** 06 November 2026

Testing performed by the Organisation at the locations specified

Site activities performed away from the locations listed above:

Location details	Activity
Accident and Emergency Liverpool University Hospitals NHS Foundation Trust Mount Vernon Street Liverpool L7 8YE	Blood storage & issue Fridge managed by Haematology
Main Theatres Liverpool University Hospitals NHS Foundation Trust Mount Vernon Street Liverpool L7 8YE	Blood storage & issue Fridge managed by Haematology
Surgical ITU/wards Broadgreen Hospital /Liverpool Heart and Chest Hospital Thomas Drive Liverpool L7 3PE	Blood storage & issue Fridge managed by Haematology
Delivery Suite Liverpool Women's Hospital Crown Street Liverpool L8 7SS	Blood storage & issue Fridge managed by Haematology
Theatres Liverpool Women's Hospital Crown Street Liverpool L8 7SS	Blood storage & issue Fridge managed by Haematology
Main theatre A Aintree University Hospital	Storage of blood only. Under management responsibility of laboratory but no testing occurs at this site.
The Walton Centre Lower Lane Liverpool L9 7LJ	Storage of blood only. Under management responsibility of laboratory but no testing occurs at this site.
AED Theatre recovery	Storage of blood only. Under management responsibility of laboratory but no testing occurs at this site.

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Testing performed by the Organisation at the locations specified

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	In-house documented procedures based on equipment manuals as relevant	
	Quantitative determination of:	**Roche Cobas 8000** (colorimetric) using	
Serum	Urea	BS-CORE-SOP-10	A, B
	Bicarbonate	BS-CORE-SOP-123	A, B
	Glucose	BS-CORE-SOP-65	A, B
	Calcium	BS-CORE-SOP-110	A, B
	Creatinine (enzymatic)	BS-CORE-SOP-40	A, B
Serum	Phosphate	BS-CORE-SOP-122	A, B
Serum	Albumin	BS-CORE-SOP-25	A, B
Serum	Total protein	BS-CORE-SOP-102 & BS-CORE-SOP-124	A, B
Serum	Magnesium	BS-CORE-SOP-29	A, B
	AST	BS-CORE-SOP-51	A
	ALT	BS-CORE-SOP-112	A, B
	GGT	BS-CORE-SOP-61	A, B
Serum	Amylase	BS-CORE-SOP-100	A, B
Serum	CK	BS-CORE-SOP-64	A
	ALP	BS-CORE-SOP-16	A, B
	LDH	BS-CORE-SOP-109	A
	Total Bilirubin	BS-CORE-SOP-119	A, B
Serum	Lithium	BS-CORE-SOP-38	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of: (cont'd)	**Roche Cobas 8000** (colorimetric) using	
Serum	Urate	BS-CORE-SOP-18	A
Serum	Iron	BS-CORE-SOP-57	A, B
	Salicylate	BS-CORE-SOP-19	A
	Paracetamol	BS-CORE-SOP-22	A
	Total cholesterol	BS-CORE-SOP-9	A, B
	Triglycerides	BS-CORE-SOP-4	A, B
	HDL cholesterol	BS-CORE-SOP-3	A, B
Urine	Urea	BS-CORE-SOP-10	A
	Creatinine (Jaffe)	BS-CORE-SOP-41	A
	Albumin	BS-CORE-SOP-125	A
	Protein	BS-CORE-SOP-124	A
	Magnesium	BS-CORE-SOP-29	A
	Amylase	BS-CORE-SOP-100	A
	Urate	BS-CORE-SOP-18	A
	Calcium	BS-CORE-SOP-110	A
	Phosphate	BS-CORE-SOP-122	A
	Glucose	BS-CORE-SOP-65	A, B
Cerebrospinal fluid	Protein	BS-CORE-SOP-124	A, B
	Glucose	BS-CORE-SOP-65	A, B

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 procedures based on equipment manuals as relevant	
	Quantitative determination of: (cont'd)	**Roche Cobas 8000** (colorimetric) using	
Serum	Direct bilirubin	BS-CORE-SOP-107	A
	Ammonia	BS-CORE-SOP-53	A
	Lactate	BS-CORE-SOP-108	A
	LDH	BS-CORE-SOP-109	A
	Quantitative determination of:	**Roche Cobas 8000** (Immunoturbidimetry) using:	
	CRP	BS-CORE-SOP-39	A, B
	Transferrin	BS-CORE-SOP-37	B
	IgA	BS-CORE-SOP-44	A
	IgG	BS-CORE-SOP-45	A
	IgM	BS-CORE-SOP-46	A
	C3	BS-CORE-SOP-62	A
	C4	BS-CORE-SOP-54	A
	B2 Microglobulin	BS-CORE-SOP-87	A
	α1-antitrypsin	BS-CORE-SOP-52	A
Urine/Serum	Caeruloplasmin	BS-CORE-SOP-55	A
	Haptoglobin	BS-CORE-SOP-113	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of:	**Roche Cobas 8000** (Ion selective electrode ISE) using:	
Urine/serum	Sodium	BS-CORE-SOP-12	A, B, D
	Potassium	BS-CORE-SOP-30	A, B, D
	Chloride	BS-CORE-SOP-121	A, B, D
	Quantitative determination of:	**Roche Cobas 8000** c701 module (Agglutination immunoassay) using:	
Serum	Phenytoin	BS-CORE-SOP-8	A
	Theophylline	BS-CORE-SOP-11	A
	Carbamazepine	BS-CORE-SOP-13	A
	Qualitative determination of:		
	Rheumatoid Factor (RF)	BS-CRLUH-SOP-5	A
	Quantitative determination of:	**Roche Cobas 8000** c701 module (enzymatic) using:	
	Ethanol	BS-CORE-SOP-5	A
	Angiotensin Converting Enzyme (ACE)	Buhlmann Labs AG kit (Enzymatic) BS-CORE-SOP-31	A
	Total Bile Acids	Dialab kit (Photometric) BS-CORE-SOP-50	A
	Quantitative determination of:	**Roche Cobas 8000** c701 module (enzyme immunoassay) using:	
	Gentamicin	BS-CORE-SOP-93	A
	Tobramicin	BS-CORE-SOP-101	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of:	**Roche Cobas 8000** c701 module (enzyme immunoassay) using:	
	Vancomycin	BS-CORE-SOP-120	A
	Teicoplanin	BS-CORE-SOP-36	A
	Amikacin	BS-CORE-SOP-103	A
	Valproate	BS-CORE-SOP-20	A
	Quantitative determination of:	**Roche Cobas 8000/c701 Module (photometric)**	
Serum/Plasma	Albumin	BS-CORE-SOP-25	D
	Alkaline Phosphatase	BS-CORE-SOP-16	D
	ALT	BS-CORE-SOP-112	D
	AST	BS-CORE-SOP-51	D
	Bicarbonate	BS-CORE-SOP-123	D
	Carbamazepine	BS-CORE-SOP-13	D
	Cholesterol	BS-CORE-SOP-9	D
	Creatine Kinase (CK)	BS-CORE-SOP-64	D
	C Reactive Protein	BS-CORE-SOP-39	D
	Creatinine	BS-CORE-SOP-40	D
	Direct bilirubin	BS-CORE-SOP-107	D
	Gentamycin	BS-CAUH-SOP-18	D
	Gamma GT	BS-CORE-SOP-61	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 procedures based on equipment manuals as relevant	
	Quantitative determination of: (cont'd)	**Roche Cobas 8000/C702 Module (photometric)**	
	HDL Cholesterol	BS-CORE-SOP-3	D
	Iron	BS-CORE-SOP-57	D
	LDH	BS-CORE-SOP-109	D
	Lithium	BS-CORE-SOP-38	D
	Paracetamol	BS-CORE-SOP-22	D
	Phenytoin	BS-CORE-SOP-8	D
	Salicylate	BS-CORE-SOP-19	D
Serum/Plasma	Theophylline	BS-CORE-SOP-11	D
	Total bilirubin	BS-CORE-SOP-119	D
	Triglyceride	BS-CORE-SOP-4	D
	Valproate	BS-CORE-SOP-20	D
	Vancomycin	BS-CORE-SOP-120	D
	Ammonia	BS-CORE-SOP-53	D
	Ethanol	BS-CORE-SOP-5	D
	Lactate	BS-CORE-SOP-108	D
	Amylase	BS-CORE-SOP-100	D
	Calcium	BS-CORE-SOP-110	D
	Magnesium	BS-CORE-SOP-29	D
	Phosphate	BS-CORE-SOP-122	D
	Urate	BS-CORE-SOP-18	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 procedures based on equipment manuals as relevant	
	Quantitative determination of: (cont'd)	**Roche Cobas 8000/C702 Module (photometric)**	
	Urea	BS-CORE-SOP-10	D
Serum/Plasma/CSF	Glucose	BS-CORE-SOP-65	D
Serum/Plasma/urine/CSF	Total Protein	BS-CORE-SOP-102	D
Urine	Creatinine	BS-CORE-SOP-41	D
	Microalbumin	BS-CORE-SOP-18	D
	Quantitative determination of:	**Roche Cobas 8000** e801 module (electrochemiluminescence) using:	
Serum	Troponin T (HS)	BS-CORE-SOP-118	A, B
	NTproBNP	BS-CORE-SOP-17	A
	CK-MB	BS-CORE-SOP-56	A, B
	Vitamin B12	BS-CORE-SOP-66	A, B
	Folate	BS-CORE-SOP-114	A, B
	Ferritin	BS-CORE-SOP-117	A, B
	Cortisol	BS-CORE-SOP-89	A
	Progesterone	BS-CORE-SOP-1	A
	Estradiol	BS-CORE-SOP-14	A
	Testosterone (male)	BS-CORE-SOP-24	A
	DHEAS	BS-CORE-SOP-81	A
	SHBG	BS-CORE-SOP-23	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of: (cont'd)	**Roche Cobas 8000** e801 module (electrochemiluminescence) using:	
	LH	BS-CORE-SOP-2	A
	FSH	BS-CORE-SOP-106	A
	TSH	BS-CORE-SOP-95	A, B
	FT4	BS-CORE-SOP-96	A, B
	FT3	BS-CORE-SOP-97	A
	Prolactin	BS-CORE-SOP-15	A
	ACTH	BS-CORE-SOP-80	A
	PTH	BS-CORE-SOP-88	A
	Insulin	BS-CORE-SOP-90	A
	c-peptide	BS-CORE-SOP-115	A
	PSA	BS-CORE-SOP-72	A
	CA-125	BS-CORE-SOP-67	A
	CA-15-3	BS-CORE-SOP-69	A
	CA-19-9	BS-CORE-SOP-70	A
	AFP	BS-CORE-SOP-26	A
	HCG	BS-CORE-SOP-63	A
	CEA	BS-CORE-SOP-71	A
	Thyroglobulin	BS-CORE-SOP-76	A
	P1NP	BS-CORE-SOP-82	A
	CTx	BS-CORE-SOP-116	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of: (cont'd)	**Roche Cobas 8000** e801 module (electrochemiluminescence) using:	
	Anti TSH receptor Abs	BS-CORE-SOP-79	A
	Anti TPO Abs	BS-CORE-SOP-78	A
Serum	Detection of SARS-CoV-2 IgG and IgM antibody against nucleocapsid (N) antigen	Elecsys anti-SARS-CoV-2 assay on Roche Cobas e602, SOP BS-CORE-SOP-144	A
Serum	25 OH Vitamin D	BS-NONA-SOP-43	A
	Anti-thyroglobulin Abs	BS-CORE-SOP-77	A
	Digoxin	BS-CORE-SOP-7	A
Serum	SFLT	BS-CORE-SOP-141	A
	PLGF	BS-CORE-SOP-140	A
		Roche Cobas 8000/e801 (chemiluminescent immunoassay with photometric detection)	
Serum	AFP	BS-CORE-SOP-26	D
	CA125	BS-CORE-SOP-67	D
	CA19-9	BS-CORE-SOP-70	D
	CEA	BS-CORE-SOP-71	D
	Cortisol	BS-CORE-SOP-89	D
	Digoxin	BS-CORE-SOP-7	D
	Ferritin	BS-CORE-SOP-117	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 procedures based on equipment manuals as relevant	
	Quantitative determination of: (cont'd)	**Roche Cobas 8000/e801 (chemiluminescent immunoassay with photometric detection)**	
	FSH	BS-CORE-SOP-106	D
	fT3	BS-CORE-SOP-97	D
	fT4	BS-CORE-SOP-96	D
	Folate	BS-CORE-SOP-114	D
	GH	BS-CORE-SOP-111	D
	hCG	BS-CORE-SOP-63	D
	hs-TnT	BS-CORE-SOP-118	D
	LH	BS-CORE-SOP-2	D
	NT-proBNP	BS-CORE-SOP-17	D
	Oestradiol	BS-CORE-SOP-14	D
	Progesterone	BS-CORE-SOP-1	D
	Prolactin	BS-CORE-SOP-15	D
	PTH	BS-CORE-SOP-88	D
	PSA	BS-CORE-SOP-72	D
	SHBG	BS-CORE-SOP-23	D
	Testerone	BS-CORE-SOP-24	D
	TSH	BS-CORE-SOP-95	D
	Vitamin B12	BS-CORE-SOP-66	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 procedures based on equipment manuals as relevant	
Cerebrospinal fluid	Detection of xanthochromia	NorthStar Camspec 550 spectrophotometer using BS-CORE-SOP-68	A
Serum and urine	Osmolality	OsmoPro model using: BS-CORE-SOP-138	A
		Advanced micro Osmometer (freezing point depression) BS-CAUH-SOP-51	D
Serum	Blood gas analysis	Siemens Rapidpoint 500e POCT-SOP-43	A
Whole blood	Detection of Ketones	Nova statstrip ketone meter using: POCT-SOP-11	A
Urine	Detection of HCG	Biosign Urine pregnancy test using: POCT-SOP-3	A
		Biosign hCG pregnancy testing using DXpress reader, solid phase chromatographic immunoassay	D
Urine	pH measurement	Hannah ph meter using: BS-NONA-SOP-21	A
		Roche Cobas 8000 e801 (Immunoassay) using:	
Serum	AMH	BS-CORE-SOP-2	A
	NSE	BS-CORE-SOP-157	A
	Quantitative determination of:	IDS isys chemiluminescence using:	
Plasma	Aldosterone	BS-NONA-SOP-27	A
Plasma	Renin	BS-NONA-SOP-1	A

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 procedures based on equipment manuals as relevant	
Faeces	Faecal Immunochemical Testing (FIT) for symptomatic testing	Pledia OC Sensor by latex agglutination using: BS-NON-SOP-69	A
Faeces	Faecal Immunochemical Testing (FIT) for screening purposes	Pledia OC Sensor by latex agglutination using: BS-NON-SOP-69	A
Whole blood	Measurement of β-hydroxybutyrate	Nova StarStrip ketone meter POCT-SOP-11	D
	Quantitative determination of:	**IDS isys chemiluminescence using:**	
Serum	GH	BS-NONA-SOP-27	A
Serum	IGF-1	BS-NONA-SOP-29	A
Serum	1-25 OH Vitamin D	IDS-iSYS BD-NONA-SOP-76	A
	Quantitative determination of:	DS2 automated ELISA using:	
Faeces	Faecal calprotectin	Biohit extraction ELISA BS-NONA-SOP-40	A
	Faecal Elastase	IDK Pancreatic Elastase ELISA BS-NONA-SOP-83	A
	Quantitative determination of:	Agilent 6490 LC-MS/MS using:	
Urine and serum	Tyrosine	BS-NONA-SOP-30	A
Urine and serum	Homogentisic Acid	BS-NONA-SOP-30	A
Urine and serum	Phenylalanine	BS-NONA-SOP-30	A
Urine and serum	Hydroxyphenylacetate	BS-NONA-SOP-30	A
Urine and serum	Hydroxyphenylpyruvate	BS-NONA-SOP-30	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of:	Thermo Vanquish Core HPLC System using) using:	
Whole blood	Thiamine (Vitamin B1)	BS-NONA-SOP-54	A
Serum	Vitamin A	BS-NONA-SOP-23	A
	Vitamin E	BS-NONA-SOP-23	A
Plasma (Fluoride/EDTA)	Homocysteine	Isocratic system on Vanquish HPLC with Fluorescence detection using Chromsystems Homocysteine Kit BS-NONA-SOP-87	A
	Quantitative determination of:	TOSOH HLC-723 G8 using:	
Whole Blood	Glycated haemoglobin (HbA1c)	BS-NONA-SOP-44	A, D
	Quantitative determination of:	Waters Xevo TQD LC-MS/MS using:	
Whole blood	Cyclosporin	BS-NONA-SOP-63	A
Whole blood	Sirolimus	BS-NONA-SOP-64	A
Whole blood	Tacrolimus	BS-NONA-SOP-63	A
Urine	5HIAA	BS-NONA-SOP-24	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of:	Waters Acquity UPLC-TQS LC-MS/MS using:	
Urine	Urine Metadrenalines (metadrenaline, normetadrenaline, and 3-methoxytyramine)	BS-NONA-SOP-9	A
Urine	Urine free cortisol	BS-NONA-SOP-56	A
Serum	17-OHP	BS-NONA-SOP-8	A
Serum	Female Testosterone	BS-NONA-SOP-42	A
Serum	Androstenedione	BS-NONA-SOP-42	A
	Quantitative determination of:	**Thermo ICAP ICPMS using:**	
Serum	Copper	BS-NONA-SOP-47	A
Whole blood	Lead	BS-NONA-SOP-13	A
Whole blood	Manganese	BS-NONA-SOP-14	A
Serum	Selenium	BS-NONA-SOP-47	A
Serum	Zinc	BS-NONA-SOP-47	A
Whole blood	Cobalt	BS-NONA-SOP-55	A
Whole blood	Chromium	BS-NONA-SOP-55	A
Urine	Copper	BS-NONA-SOP-47	A

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 procedures based on equipment manuals as relevant	
	Quantitative determination of:	**Thermo ICP-MS Inductively Coupled Mass Spectrometry (ICPMS)**	
Serum	Peg prolactin (precipitation of macroprolactin)	BS-NONA-SOP-53	A
EDTA Plasma	Plasma Free Metadrenalines	Waters Acquity TQ Absolute tandem mass spectrometer. Sample Preparation: Solid Phase Extraction (SPE) and analysis is via LC-MS/MS. BS-NONA-SOP-68	A

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 procedures based on equipment manuals as relevant	
Arterial Blood	Blood Gas: pCO2 pO2 Na+ K+ Ca2+ Cl- Glu Lactate tHb FO2Hb COHb FMetHb Calculated tests	Siemens Rapidpoint 500e SOP: POCT-SOP-59	D
Serum	Anion Gap	BS-CORE-SOP-80, BS-CAUH-SOP-36	A, B, D
Serum	eGFR	BS-CORE-SOP-86, BS-CAUH-SOP-36	A, B, D
Serum	AKI alerts	BS-CORE-SOP-91, BS-CAUH-SOP-36	A, B, D
Serum	Adjusted Calcium	BS-CORE-SOP-85, BS-CAUH-SOP-36	A, B, D
Serum	Globulins	BS-CORE-SOP-84, BS-CAUH-SOP-36	A, B, D
Serum	Non-HDL cholesterol	BS-CORE-SOP-92, BS-CAUH-SOP-36	A, B, D
Serum	LDL cholesterol	BS-CORE-SOP-92, BS-CAUH-SOP-36	A, B, D
Serum	Cholesterol/HDL ratio	BS-CORE-SOP-92, BS-CAUH-SOP-36	A, B, D
Plasma	Total Iron Binding Capacity (TIBC)	BS-CORE-SOP-94, BS-CAUH-SOP-36	A, B, 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) Calculated tests (cont'd)	In-house documented procedures based on equipment manuals as relevant	
Serum	Fe % saturation	BS-CORE-SOP-92, BS-CAUH-SOP-36	A, B, D
Urine	urine calcium/creatinine ratio	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine protein/creatinine ratio	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	urine albumin/creatinine ratio	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
24 hour Urine and Serum	Creatinine clearance	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine Sodium/24hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A. D
Urine	Urine Potassium/24 hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine Chloride/24 hrs	BS-CORE-SOP-99	A
Urine	Urine Urea/24 hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine Creatinine/24 hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine Albumin/24 hrs	BS-CORE-SOP-99	A
Urine	Urine Protein/24hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine Magnesium/24hrs	BS-CORE-SOP-99	A
Urine	Urine Amylase/24hrs	BS-CORE-SOP-99	A
Urine	Urine Urate/24hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A. 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) Calculated tests (cont'd)	In-house documented procedures based on equipment manuals as relevant	
Urine	Urine Calcium/24hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine Phosphate/24hrs	BS-CORE-SOP-99, BS-CAUH-SOP-36	A, D
Urine	Urine Sodium/24hrs	BS-CORE-SOP-99	A
Urine	Urine Potassium/24 hrs	BS-CORE-SOP-99	A
Urine	Urine Chloride/24 hrs	BS-CORE-SOP-99	A
Urine	Urine Creatinine/24 hrs	BS-CORE-SOP-99	A
Urine	Urine Albumin/24 hrs	BS-CORE-SOP-99	A
Urine	Urine Protein/24hrs	BS-CORE-SOP-99	A
Urine	Urine Magnesium/24hrs	BS-CORE-SOP-99	A
Urine	Urine Amylase/24hrs	BS-CORE-SOP-99	A
Urine	Urine Urate/24hrs	BS-CORE-SOP-99	A
Urine	Urine Calcium/24hrs	BS-CORE-SOP-99	A
24 hour Urine and Serum	AST/Platelet Ratio	BS-CAUH-SOP-36	D
24 hour Urine and Serum	Calcium Clearance	BS-CAUH-SOP-36	D
24 hour Urine and Serum	Calcium Excretion Index	BS-CAUH-SOP-36	D
24 hour Urine and Serum	Calcium: Creatinine ratio	BS-CAUH-SOP-36	D
Serum	Calculated Osmolarity (part of OGAP)	BS-CAUH-SOP-36	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 procedures based on equipment manuals as relevant	
	Calculated tests (cont'd)		
Serum	Estimated Monomeric Prolactin	BS-CAUH-SOP-36	D
Serum	Fractional Excretion Magnesium	BS-CAUH-SOP-36	D
Serum	Free Androgen Index	BS-CAUH-SOP-36	D
Serum	Macroprolactin	BS-CAUH-SOP-36	D
Serum	Osmolar Gap	BS-CAUH-SOP-36	D
Serum	Serum Ascites Albumin Gradient	BS-CAUH-SOP-36	D
Serum	Free Testosterone	BS-CAUH-SOP-36	D
Serum	Ethanol	BS-CAUH-SOP-36	D
Whole blood only	Standard bicarbonate	BS-CAUH-SOP-30	D
Urine	Urine Phosphate/24hrs	BS-CORE-SOP-99	A
Urine	Urine chromium/creatinine ratio	BS-CORE-SOP-99	A
Urine	Urine copper/24 hrs	BS-CORE-SOP-99	A
Urine	Urine cobalt/creatinine ratio	BS-CORE-SOP-99	A
Urine	Urine nickel/24 hrs	BS-CORE-SOP-99	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	<u>Blood Transfusion examinations to assist in clinical investigations</u>	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Blood Plasma	Blood Group/Phenotype by detection and identification of antigens: A B O Rh	Automated using Ortho Vision and Ortho BioVue column agglutination using: BS-TRAN-SOP-23 And RhK cards;- BS-TRAN-SOP 117 BS-TAUH-SOP-1	A
	• D • C • c • E • e • Kell	Automated using Ortho Swift and Ortho BioVue column agglutination using: BS-TRAN-SOP-23 And RhK cards;- BS-TRAN-SOP 117 BS-TAUH-SOP-1	B, D
		Automated using Ortho AutoVue and Ortho BioVue column technology BS-TRAN-SOP-34	A, B, D
		Manual using BioRad Diamed Gel cards BS-TRAN-SOP-44	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Blood Transfusion examinations to assist in clinical investigations (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Blood Plasma	Antibody Screen Rh: anti-C^w, anti-C, anti-c, anti-D, anti-E, anti-e Kell: anti-K, anti-k, anti-Kp^a Kidd: anti-Jk^a, anti-Jk^b Duffy: anti-Fy^a, anti-Fy^b Lutheran: anti-Lu^a, anti-Lu^b MNS: anti-M, anti-N, anti-S, anti-s Lewis: anti-Le^a, anti-Le^b P: anti-P_1	Automated using Ortho vision and Ortho BioVue column agglutination and Ortho 3 and 11 cell panels BS-TRAN-SOP-23 BS-TRAN-SOP-42 (11 cell) BS-TAUH-SOP-1	A,
		Automated using Ortho Swift and Ortho BioVue column agglutination and Ortho 3 and 11 cell panels BS-TRAN-SOP-23 BS-TRAN-SOP-42 (11 cell) BS-TAUH-SOP-1	B, D
		Automated using Ortho Vision and Ortho BioVue column technology and Ortho 3 and 11 cell panels BS-TRAN-SOP-34 (3 cell) BS-TRAN-SOP-42 (11 cell)	C
		Manual using BioRad Diamed Gel cards and either/or Ortho 3 and 11 cell panels or NHSBT 2 and 10 cell panels BS-TRAN-SOP-41	A, B, C
		Column agglutination technology using the Diamed system using:	
EDTA Whole Blood	Direct Antiglobulin Test (Manual)	BioRad BS-TRAN-SOP-43, BS-TAUH-SOP-1	A, B, C, D
	Direct Antiglobulin Test (Automated) (Phenotype)	Automated using Ortho Vision (Column Agglutination Technology) using: BS-TRAN-SOP-43	A, B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Blood Transfusion examinations to assist in clinical investigations (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
EDTA Whole Blood	Electronic Issue	BS-TRAN-SOP-6	A, B, C
EDTA plasma	Serological Crossmatch (Manual)	BioRad BS-TRAN-SOP-45, BS-TAUH-SOP-14	A, B, C, D
EDTA Whole Blood	Electronic cross match	BS-TAUH-SOP-30	D
EDTA plasma	Manual Antibody panels – Antigens of the following systems: Rh – C,D,E,c,e,C^w Kell – K,k,Kp^a Duffy – Fy^a, Fy^b MNSs – M,N,S,s Kidd – Jk^a, Jk^b Lutheran – Lu^a, Lu^b Lewis – Le^a, Le^b P –P_1	Column agglutination technology on BIO-RAD LISS/Coombs cards using: BS-TRAN-SOP-41 Column agglutination technology using the Diamed system using:	A, B, C
EDTA plasma	Automated Antibody panels – Antigens of the following systems: Rh – C,D,E,c,e,C^w Kell – K,k,Kp^a Duffy – Fy^a, Fy^b MNSs – M,N,S,s Kidd – Jk^a, Jk^b Lutheran – Lu^a, Lu^b Lewis – Le^a, Le^b P –P_1	Biovue IAT (Column agglutination technology) using: BS-TRAN-SOP-42 BS-TUAH-SOP-12	A, B, D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Blood Transfusion examinations to assist in clinical investigations (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods: Column agglutination technology using the Diamed system using:	
EDTA whole blood	Blood grouping A B O Rhesus D status	Manual methods using BIOVUE cassette (column agglutination technology) BS-TAUH-SOP-33	D
EDTA plasma	Antibody screen manual Rhesus: anti-C^w, anti-C, anti-c, anti-D, anti-E, anti-e Kell: anti-K, anti-k, anti-Kp^a Kidd: anti-Jk^a, anti-Jk^b Duffy: anti-Fy^a, anti-Fy^b Lutheran: anti-Lu^a, anti-Lu^b MNS: anti-M, anti-N, anti-S, anti-s Lewis: anti-Le^a, anti-Le^b P: anti-P_1	BIOVUE IgG/Poly cards (column agglutination technology) BS-TAUH-SOP-32	D
EDTA plasma	Antenatal 3 cell antibody screen – Antigens of the following system: Rh – C,E,c,e, Kell – K,k,Kp^a Duffy – Fy^a, Fy^b MNSs – M,N,S,s Kidd – Jk^a, Jk^b Lutheran – Lu^a, Lu^b Lewis – Le^a, Le^b P –P_1	Ortho Vision utilising Column agglutination technology using: BS-TRAN-SOP-23	A
EDTA Whole Blood	Automated Rh/K typing	Ortho Vision utilising Column agglutination technology using: BS-TRAN-SOP-117	A, B
EDTA plasma	IgG Anti A & B titres for ABO incompatible renal transplants	ABO titres using BioRad system using: BS-TRAN-SOP-10	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Provision of stem cell preparations and related products for the purpose of stem cell transplantation	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
EDTA whole blood	CD 34 stem cell enumeration	FACS Lyric using ISHAGE strategy: RBS-BMT-SOP-70	A
Peripheral blood aspirates	CD3 cell enumeration	FACS Lyric flow cytometer: RBS-BMT-SOP-71	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Molecular genetic analysis for genetic mutations and variants	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
A. Fixed bone marrow cells	DNA extraction from Fixed cells	Genomic DNA extraction from fixed cell using QIAamp® DNA Mini Kit BS-MOLB-SOP-34	A
B. FFPE tissue sample	DNA extraction from FFPE tissue sample	Extraction of gDNA from FFPE tissue samples using QIAamp DNA FFPE Tissue Kit HD-MBO-SOP-3	
C. EDTA whole blood	DNA extraction from EDTA whole blood	HODS DNA/RNA extraction by AllPrep DNA/RNA Mini Kit HD-MBO-SOP-25	
D. EDTA whole blood	RNA extraction from EDTA whole blood	Haematology Molecular Biology Myeloid Manual RNA extraction by RNeasy Mini Kit BS-MOLB-SOP-35 Haematology Molecular Biology Use of QIAcube BS-MOLB-SOP-10	
E. EDTA bone marrow	DNA extraction from EDTA bone marrow	HODS DNA/RNA extraction by AllPrep DNA/RNA Mini Kit HD-MBO-SOP-25	
F. EDTA bone marrow	RNA extraction from EDTA bone marrow	Haematology Molecular Biology Myeloid Manual RNA extraction by RNeasy Mini Kit BS-MOLB-SOP-35 Haematology Molecular Biology Use of QIAcube BS-MOLB-SOP-10	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Molecular genetic analysis for genetic mutations and variants (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
RNA extracted from sample types D and F above	Screening for BCR-ABL (p190 gene)	Manual RT-PCR on thermocycler real-time PCR using the Light Cycler 480 PCR Gel electrophoresis Haematology Molecular Biology BCR-ABL gene identification using multiplex PCR (BS-MOLB-SOP-14)	A
RNA extracted from sample types D above	BCR::ABL1 Quantification	BCR::ABL Ultra p190 kit BCR::ABL Ultra kit p210 kit. RT-PCR using Cepheid GeneXpert system HD-MBO-SOP-46	A
DNA extracted from sample types A, B, C and E above	Detection of NPMI mutation	Real-time PCR using the Light Cycler 480 NPM1 mutation by QIAGEN Ipsogen NPM1 MutScreen kit (BS-MOLB-SOP-21)	A
DNA extracted from sample types A, B, C and E above	Detection of c-KIT Mutation	Real-time PCR using the Light Cycler 480 Haematology Molecular Biology c-KIT mutation by real-time quantitative PCR (BS-MOLB-SOP-24)	A
RNA extracted from sample types D and F above	Immunoglobulin heavy chain variable gene	PCR machine – Eppendorf mastercycler HD-MBO-SOP-29 PCR Gel electrophoresis – Geneflow MultiSUB Choice Horizontal Gel Unit 15 x 15cm	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Molecular genetic analysis for genetic mutations and variants (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
DNA extracted from sample types A, B, C and E above	FLT3-ITD	Manual PCR on thermocycler TECHNE/ThermoHybaid PxE 0.5 machine PCR Gel electrophoresis and Sanger sequencing FLT-3 ITD identification using genomic DNA (BS-MOLB-SOP-22)	A
DNA and RNA extracted from samples types A, B, C, D, E and F above	Targeted detection of mutations and gene fusions associated with myeloid disorders	Oncomine Myeloid NGS Panel sequencing on Ion Torrent using: Haematology molecular Biology genomic DNA and Vilo cDNA preparation (BS-MOLB-SOP-66) Quantification by Qubit 2.0 fluorometer (HD-MBO-SOP-26) Library preparation and Sequencing using Ion Torrent Genexus, Next Generation Sequencinf Platform. (HD-MBO-SOP-9) Oncomine Myeloid NGS data analysis and reporting using Ion Reporter and Oncomine Variant Annotator (HD-MBO-SOP-19)	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Molecular genetic analysis for genetic mutations and variants (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
DNA extracted from samples types A, B, C, E above	Targeted detection of SNVs and small indels	Oncomine Lymphoma Core Panel NGS sequencing using Ion Torrent S5 Prime. Library preparation and analysis using Ion Chef HD-MBO-SOP-1 Sequencing using Ion Torrent S5 Prime HD-MBO-SOP-2 Analysis using Thermofisher Ion Reporter HD-MBO-SOP-4	A
DNA extracted from samples types C and E above	Targeted detection of SNVs and small indels	TP53 Panel - Genexus Oncomine Myeloid NGS Genexus Integrated Sequencer Myeloid Panel HD-MBO-SOP-9 TP53 mutation data analysis and reporting HD-MBO-SOP-28 Genexus Integrated Sequencer Myeloid data analysis and reporting HD-MBO-SOP-19	A
DNA extracted from samples types C and E above	Targeted detection of SNVs and small indels	Myeloproliferative Panel (MPN) Genexus NGS Genexus Integrated Sequencer MPN Panel HD-MBO-SOP-10 Genexus Integrated Sequencer MPN data analysis and reporting HD-MBO-SOP-17	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Molecular genetic analysis for genetic mutations and variants (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
DNA from bone marrow or peripheral blood	Detection of hotspot mutation in MYD88 (L265P)	Allele Specific PCR and agarose gel electrophoresis using: Qiagen Allprep DNA Mini Kit or QIAamp Mini kit for DNA extraction: HD-MBO-SOP-25 BS-MOLB-SOP-34 NanoDrop 8000 using spectrophotometry technology HD-MBO-SOP-20 Agarose Gel electrophoresis and Geneflow MultiSUB Choice Horizontal Gel Unit 15 x 15cm HD-MBO-SOP-27 BS-MOLB-FOR-20 HD-MBO-SOP-27	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Haematological examinations for the purpose of clinical diagnosis	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Whole blood EDTA Body fluids	Full Blood Count (FBC) analysis of the following parameters: WBC RBC HGB HCT MCV MCH MCHC RDW PLT NEUT LYMPH MONO EOS BASO Nucleated red blood cell (NRBC) count	Sysmex XN automated analysers; hydrodynamic focusing, fluorescent staining, differential laser light scatter BS-HAEM-SOP-75 AH-GHAE-SOP-8	A, B, C, D
Whole blood EDTA	Reticulocyte count	BS-HAEM-SOP-75	A
Whole blood EDTA	Erythrocyte Sedimentation Rate (ESR)	Sysmex Interliner and Sysmex RS, Westergren method BS-HAEM-SOP-25 Automated Starrsed analyser, modified Westergren method BS-HAUH-SOP-2	A, B D
Whole blood EDTA	Glandular Fever Screen	Clearview IM II test (lateral flow immunoassay) BS-HAEM-SOP-27	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Haematological examinations for the purpose of clinical diagnosis (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Whole blood EDTA	Sickle cell solubility	Sickledex Screening Test, HbS solubility test kit (quantitative tube test) using: BS-HGP-SOP-56	A
Whole blood EDTA Serum or EDTA plasma	Detection of infectious mononucleosis heterophile antibodies	Clearview® IM II test. Rapid chromatographic immunoassay kit AH-GHAE-SOP-1	D
Whole blood EDTA	Sickle Cell Screening Test	Lateral Flow chromatographic qualitative immunoassay test kit, Sickle SCAN (detection of HbA, HbS and HbC) using: BS-HAEM-SOP-69. Documented -in-house methods to meet the requirements of the Sickle cell and Thalassaemia (SCT) screening programme screening programme(s) laboratory QA evidence requirements'	A
Whole blood EDTA	Adult Haemoglobinopathy analysis (including Antenatal) by detection of haemoglobin variants: HbS HbC HbD HbE HbLepore HbOArab	TOSOH G11 analyser (HPLC): BS-HGP-SOP-57	A
Whole blood EDTA	HbS estimation	BS-HGP-SOP-57	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Haematological examinations for the purpose of clinical diagnosis (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods: Documented -in-house methods to meet the requirements of the Sickle cell and Thalassaemia (SCT) screening programme screening programme(s) laboratory QA evidence requirements'	
Whole blood EDTA	Hb Variant confirmation: HbA, HbF, HbS, HbC	Haemoglobinopathy Acid Haemoglobin Electrophoresis BS-HGP-SOP-5 Haemoglobinopathy Alkaline Haemoglobin Electrophoresis BS-HGP-SOP-6	A
Whole blood EDTA	Qualitative G6PD screen	Binax NOW Test (enzyme chromatographic test) BS-HGP-SOP-51	A
Whole blood EDTA	Malarial antigens of: *P. falciparum* *P. vivax* *P. ovale* *P. malariae*	Apacor Malaria Combo Pf/PAN (HRP2/pLDH) using the CareUS Ag Antigen lateral flow BS-HAEM-SOP-81	A, D

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Morphology examinations for the purpose of clinical diagnosis	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Whole blood EDTA	Identification of normal and abnormal morphologies including WBC differential count	Automated smear and staining: Sysmex SP-50 BS-HAEM-SOP-76 Thiazin and Eosin Stain and manual microscopy RAL Stainer Wrights stain and manual microscopy BS HAEM-SOP-73	A A, B, C
Whole blood	Identification of normal and abnormal morphologies including WBC differential count	Automated staining using RAL Stainer: Kit RAL Stainer MCDh Giemsa and May Grunwald stains. SOP: BS-HEAM-SOP-73	D
Bone marrow aspirate EDTA slides	Reporting of normal and abnormal morphologies	Aerospray Hematology ProSlide Stainer HD-IMP-SOP-24 Thiazin and Eosin Stain and manual microscopy Perls Stain BS-HODS-SOP-29 HD-GEN-POL-1	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Morphology examinations for the purpose of clinical diagnosis (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Whole blood EDTA	Malaria screening for: *P. falciparum* *P. vivax* *P. ovale* *P. malariae* *P.knowlesi*	Automated smear and staining using: Sysmex SP-50 BS-HAEM-SOP-76 Thiasin and Eosin stain and manual microscopy. Thin films: BS-HAEM-SOP-70 BS-HAEM-SOP-17 RAL Stainer Wrights stain and manual microscopy BS HAEM-SOP-73	A A, B, C
Whole blood EDTA	Blood film analysis	May-Grunwald and Giemsa stains and manual microscopy. Automated smear and staining using Sysmex SP-10 AH-GHAE-SOP-18 Manual light microscopy (Nikon) AH-GHAE-SOP-16	D
Whole blood EDTA Bone marrow aspirate EDTA Cerebrospinal fluid Pleural fluid Synovial fluid Ascitic fluid	Cytospin and staining preparations	Aerospray hematology Pro Slide Stainer HD-IMP-SOP-14 BS-HAEM-SOP-10	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	<u>Immunophenotyping examinations for the purpose of clinical diagnosis</u>	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Whole blood EDTA Bone marrow aspirate EDTA Cerebrospinal fluid Pleural fluid Synovial fluid Ascitic fluid FNA	Immunophenotyping of the following markers/antigens for the diagnosis and monitoring of Haematological malignancy including the following disorders: • Acute leukaemia – AML, ALL (B and T) • Chronic myeloid disorders – MDS, CML, CMML • Mature lymphoid disorders – B and T lymphoproliferative disorders, Lymphoma, Myeloma CD1a CD2 CD3 CD4 CD5 CD7 CD8 CD10 CD11b CD11c CD13 CD14 CD15 CD16 CD19 CD20 CD22 CD23 CD25 CD26	BD FACSLyric analyser, flow cytometry (laser flow cytometry) using manufacturer supplied panels or in house documented methods. BD FACSLyric. HD-IMP-SOP-26 HD-IMP-INF-8 BS-HODS-SOP-46 BS-HODS-SOP-43 BS-HODS-SOP-21 HD-IMP-SOP-27 HD-IMP-SOP-20 BS-HODS-SOP-50 HD-IMP-SOP-10	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	<u>Haematological examinations for the purpose of clinical diagnosis</u>	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Whole blood EDTA Bone marrow aspirate EDTA Cerebrospinal fluid Pleural fluid Synovial fluid Ascitic fluid FNA (cont'd)	Immunophenotyping of the following markers/antigens for the diagnosis and monitoring of Haematological malignancy (cont'd) CD27 CD30 CD33 CD34 CD38 CD43 CD45 CD56 CD64 CD79a CD79b CD81 CD103 CD117 CD123 CD138 CD200 CD235a B2 Microglobulin cLysozyme FMC-7 HLA-DR TSLPR	BD FACSLyric analyser, flow cytometry (laser flow cytometry) using manufacturer supplied panels or in house documented methods. BD FACSLyric. HD-IMP-SOP-26 HD-IMP-INF-8 BS-HODS-SOP-46 BS-HODS-SOP-43 BS-HODS-SOP-21 HD-IMP-SOP-27 HD-IMP-SOP-20 BS-HODS-SOP-50 HD-IMP-SOP-10	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	<u>Haematological examinations for the purpose of clinical diagnosis</u> (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Whole blood EDTA	Kappa Lambda TCR-GD MPO TdT	BD FACSLyric analyser, flow cytometry (laser flow cytometry) BD FACSLyric. HD-IMP-SOP-20 HD-IMP-SOP-10	A
	PNH Screen CD14 CD15 CD24 CD45 CD59 CD64 CD235a FLAER	 HD-IMP-SOP-16 HD-IMP-SOP-10	
Peripheral blood apheresis product	7AAD	BD FACSLyric analyser, flow cytometry (laser flow cytometry)	A
Urine	Reporting of normal and abnormal morphologies	Perl's staining for Haemosiderin. BS-HODS-SOP-29 HD-IMP-SOP-6	A
	<u>Coagulation examination activities for the purpose of clinical diagnosis</u>	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Plasma citrate		ACL 500 and ACL 750 (clot end point detection) Werfen TOPs 300 (clot end point detection)	A B

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Coagulation examination activities for the purpose of clinical diagnosis (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Plasma citrate	Activated Partial thromboplastin time (APTT)	BS-COAG-SOP-4	A, B
	Activated Partial thromboplastin time Ration (APTR)		
	Prothrombin time (PT)	BS-COAG-SOP-3	
	International normalised ratio (INR)		
	Activated partial thromboplastin time (APTT) and ratio	Clotting point detection method ACL TOP 550 Automated Coagulation Analysers': AH-COAG-SOP-22	D
Plasma citrate	Mixing Studies for investigation of prolonged PT and APTT	ACL TOP 550 Automated Clotting point detection method AH-COAG-SOP-12	D
	Prothrombin time (PT) and International normalised ratio (INR)	ACL TOP 550 Automated Clotting point detection method AH-COAG-SOP-21	D
	Anti-Xa (Heparin) Assay	BS-COAG-SOP-10	A
	Clauss Fibrinogen	BS-COAG-SOP-5	A, B
		ACL TOP 550 Automated Clotting point detection method AH-COAG-SOP-5	D
	Mixing studies for investigation of prolonged PT and APTT	BS-COAG-SOP-12	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Coagulation examination activities for the purpose of clinical diagnosis (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Plasma citrate	D-Dimer	ACL TOP 750 (latex agglutination) BS_COAG-SOP-6	A
		ACL TOP 550 Automated Immunoassay AH-COAG-SOP-7	D
Plasma citrate	Clotting factors: PT based: II V VII X APTT based: VIII IX,XI,XII	ACL TOP 750 (clot end point detection) BS-SCOAG-SOP-7	A
Plasma citrate	LUPUS screening	ACL TOP 750 (clot end point detection, turbidimetric immunoassay and chromogenic) BS-SCOAG-SOP-11 BS-SCOAG-SOP-12 BS-SCOAG-SOP-13	A
	Factor XIII antigen	ACL TOP 750 (Latex enhanced immunoassay) BS-COAG-SOP-29	A
	Clotting factor inhibitors: Factor VIII and IX inhibitors	ACL TOP 750 (clot end point detection) BS-SCOAG-SOP-8	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Coagulation examination activities for the purpose of clinical diagnosis (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Plasma citrate	Thrombophilia screen: Antithrombin activity and antigen Protein C activity Free protein S NAPCR	ACL TOP 750 (clot end point detection, turbidimetric immunoassay and chromogenic) BS-SCOAG-SOP-9 BS-SCOAG-SOP-10	A
	Von Willebrands screen: Von Willebrands antigen Von Willebrands activity	ACL TOP 750 (latex particle enhanced immunoturbidimetric assay) BS-COAG-SOP-15 BS-COAG-SOP-16	A
		IL Coagulation Acustar by chemiluminescence (2 analysers)	A
Plasma citrate	Heparin Induced thrombocytopenia (HIT) IgG	BS-SCOAG-SOP-22	
	Anticardiolipin antibodies (IgG and IgM)	BS-SCOAG-SOP-21 BS-SCOAG-SOP-23	
	B-2-Glycoprotein IgM VW: RcO	BS-SCOAG-SOP-21 BS-SCOAG-SOP-23	
	B-2-Glycoprotein IgG	BS-SCOAG-SOP-15	
	Collagen binding antigen (CBA)	BS-SCOAG-SOP-21 BS-SCOAG-SOP-15	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Coagulation examination activities for the purpose of clinical diagnosis (cont'd)	Procedures documented in manufacturer's equipment manuals in conjunction with documented in- house procedures by the following methods:	
Plasma citrate		SpectraMax plate reader (ELISA) BS-SCOAG-SOP-34	A
	ADAMTS-13 Activity	BS-SCOAG-SOP-6	
	ADAMST-13 Inhibitor	BS-SCOAG-SOP-5	
	Thrombophilia screen: Protein C antigen Total protein S	BS-SCOAG-SOP-9 BS-SCOAG-SOP-10 BS-SCOAG-SOP-26 BS-SCOAG-SOP-27	A
Plasma citrate	Prothrombin Gene Mutation (PGM) – qualitative	GeneXpert Dx HemosIL assay	A
	Factor V Leiden (FVL)	BS-SCOAG-SOP-1	
Plasma Citrate	Emicizumab	Modified FVIII performed on ACL TOP 50 series coagulation analysers BS-SCOAG-SOP-32	A
	Edoxaban	Modified Ant-Xa chromogenic assay performed on ACL TOP 50 series coagulation analysers BS-COAG-SOP-19	A
	Chromogenic VIII	Chromogenic VIII assay performed on ACL TOP 50 series coagulation ananaysers BS-SCOAG-SOP-31	A
Plasma Citrate	ADAMTS13 Activity	Automated ELISA on Acustar analyser BS-SCOAG-SOP-30	A

END