


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

 8115 Accredited to ISO 15189:2012	Northampton General Hospital NHS Trust	
	Issue No: 011 Issue date: 05 September 2024	
	Pathology Department Northampton General Hospital Cliftonville Northampton Northamptonshire NN1 5BD	Contact: Josephine Evans Tel: +44 (0)1604 523809 E-Mail: ben.briggs1@nhs.net Josephine.evans7@nhs.net Website: http://www.northamptongeneral.nhs.uk/OurServices/Clinical/Pathology/Pathology.aspx
Testing performed by the Organisation at the locations specified below		

Additional site activity performed away from the laboratory

Location details	Activity
Main Theatre Northampton General Hospital	Storage and issue of blood and blood products
Manfield Theatre Northampton General Hospital	Storage and issue of blood and blood products
Strutridge Theatre Northampton General Hospital	Storage and issue of blood and blood products
Cynthia Spencer Hospice Northampton	Issue of blood and blood products
Three Shires Hospital Northampton	Storage and issue of blood and blood products
Danetre Hospital Daventry	Storage and issue of blood and blood products



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DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN BODY FLUIDS</p> <p>Serum / Plasma</p>	<p><u>Biochemistry examination activities for the purposes of clinical diagnosis</u></p> <p>Quantitation of:</p> <p>ALT AST Ammonia Amylase ALP Alpha-1-antitrypsin (AAT) ACE Bicarbonate Bile Acids C3 / C4 complement Caeruloplasmin Calcium Cholesterol CK Creatinine CRP Direct Bilirubin Ethanol Gamma GT Glucose Immunoglobulin G Immunoglobulin A Immunoglobulin M Iron Lactate LDH Magnesium Phosphate Rheumatoid Factor (RF) Total Bilirubin Total Protein Transferrin Triglyceride Urate Urea</p>	<p>Documented in house methods and manufacturer's instructions for</p> <p>Roche Cobas c702 using photometric analysis BIO-49,50,54,64</p>



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<p>HUMAN BODY FLUIDS (cont'd)</p> <p>Urine</p> <p>CSF</p> <p>Serum / Plasma</p> <p>Urine</p>	<p><u>Biochemistry examination activities for the purposes of clinical diagnosis (cont'd)</u></p> <p>Quantitation of:</p> <p>Amylase Calcium Creatinine Microalbumin Phosphate Protein Urate Urea</p> <p>Glucose Lactate Protein</p> <p>Quantitation of:</p> <p>Chloride</p> <p>Potassium Sodium</p> <p>Chloride Potassium Sodium</p>	<p>Documented in house methods and manufacturer's instructions for</p> <p>Roche Cobas c702 using photometric analysis BIO-49,50,54</p> <p>Roche Cobas ISE module using potentiometric analysis</p> <p>BIO-49,50,54,64</p>



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purposes of clinical diagnosis (cont'd)</u>	Documented in house methods and manufacturer's instructions for
Serum / Plasma	Therapeutic Drug Monitoring Carbamazepine Gentamicin Lithium Paracetamol Phenytoin Salicylate Theophylline Valproate Vancomycin (Roche Cobas c702 using photometric analysis BIO-49,50,54,64
Serum / Plasma	Immunoassay Investigations Quantitation of: AFP Anti-Throglobulin antibody Anti-TSH Receptor antibody NTPro-BNP CA125 CA153 CA199 CEA Cortisol Digoxin Ferritin FSH Free T3 Free T4 Folate GH HCG IGF-1 LH Macroprolactin Oestradiol	Roche Cobas e801 using Electrochemical luminescence (ECL) BIO-49,50,54,64



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purposes of clinical diagnosis (cont'd)</u>	Documented in house methods and manufacturer's instructions for
Serum / Plasma	Immunoassay Investigations (cont'd) Quantitation of: P1NP Progesterone Prolactin PSA PTH SHBG Testosterone Thyroglobulin Thyroid antibodies (ATPO) Troponin T TSH Vitamin B12 Vitamin D	Roche Cobas e801 using Electrochemical luminescence (ECL) BIO-49,50,54,64
Whole Blood	Diabetic Monitoring Tests: HbA1C	Roche Cobas c513 using photometric analysis BIO-50,65
Serum, Plasma, Urine	Osmolality	Osmo1 single-sample micro-osmometer SOP BIO-52



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purposes of clinical diagnosis (cont'd)</u>	Documented in house methods and manufacturer's instructions for
CSF	Xanthochromia testing: Bilirubin Oxyhaemoglobin	Northstar Scientific UVIKON XS scanning spectrophotometer using spectrophotometric analysis assisted with data interpretation software BIO-65
Serum	Protein Electrophoresis Immunotyping	SEBIA Capillarys 3 Octa CZE system using capillary zone electrophoresis and immunotyping BIO-62
Serum	Serum Free Light Chains Beta-2-Microglobulin	BindingSite Optility Protein Analyser BIO-77
Sweat	Sweat Chloride Sweat Weight	Sherwood Scientific Chloride Meter using potentiometry BIO-3,68
Whole Blood	<u>Haematological examination activities for the purposes of clinical diagnosis</u> Full Blood Count Haemoglobin g/L White cell count 10 ⁹ /L Platelet count 10 ⁹ /L Haematocrit % Red cell count 10 ¹² /L Mean corpuscular volume fl Mean corpuscular haemoglobin pg Mean corpuscular haemoglobin concentration g/L Neutrophil count 10 ⁹ /L Lymphocyte count 10 ⁹ /L Monocyte count 10 ⁹ /L Eosinophil count 10 ⁹ /L Basophil count 10 ⁹ /L Nucleated red cells 10 ⁹ /L Reticulocyte count 10 ⁹ /L	Documented in house methods and manufacturer's instructions for Sysmex XN9001 using impedance and flow cytometry HAE-17, 39
Whole Blood	Erythrocyte Sedimentation Rate (ESR)	Sysmex Interrliner using Westergren method HAE-48



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HUMAN BODY FLUIDS (cont'd)	<u>Routine coagulation examination activities for the purposes of clinical diagnosis</u>	Documented in house methods and manufacturer's instructions for
Citrated Plasma	Routine Coagulation testing for Prothrombin Time (PT) Activated Partial Thromboplastin Time (APTT) Fibrinogen (Clauss) Thrombin Time (TT) D Dimer Factor Assay analysis: FII FV FVII FVIII FIX FX FXI FXII Anti-Xa Acquired Thrombophilia (Lupus) Screen DRVVT screen / confirm Actin FSL Inherited Thrombophilia Screen Protein C ATIII Free Protein S	Systemex CN6000 using clotting, chromogenic and immunoassay and PCR using Hain genoXtract and fluorocycler HAE- 2,10,11,22,24,25,30 SOP HAE 30, 12, SOP HAE 24, 10 SOP HAE 22, 2 SOP HAE-25, 2



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HUMAN BODY FLUIDS (cont'd)	<u>Routine Haematological examination activities for the purposes of clinical diagnosis (cont'd)</u>	Documented in house methods and manufacturer's instructions for
Whole Blood	Blood film assessment for detection of abnormal cell types, morphology and numbers including malaria	Sysmex SP 5 staining analysers and microscopes HAE-18,27
	Detection of Epstein Barr (Glandular Fever)	Clearview Infectious Mononucleosis (IM) kit, immunoassay HAE-32
		Documented in-house methods to meet the requirements of the Sickle cell and Thalassaemia screening programme as defined in the laboratory QA evidence requirements
Whole Blood	Screening for haemoglobin variants	Capillary zone electrophoresis on Sebia Capillarys HAE-34
Whole Blood	Screening for HbA2, HbA, HbF	Alkaline Electrophoresis using Sebia Hydrays HAE-36
Whole Blood	Identification of haemoglobin variants: HbF, HbS, HbC, HbD, Hb E	Acid Electrophoresis using Sebia Hydrays HAE-36
	<u>Blood Transfusion examination activities for the purpose of clinical diagnosis</u>	
Whole Blood	Blood Grouping <ul style="list-style-type: none"> • A B O • Rhesus D status 	Automated using Grifols Erytra by column agglutination BLD-3,33 Manual using Grifols column agglutination and tube techniques BLD19,22,33,53



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HUMAN BODY FLUIDS (cont'd)	<u>Blood Transfusion examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented in house methods and manufacturer's instructions for
Whole Blood	Antibody Screening <ul style="list-style-type: none"> • Rh- C,D,E,c,e, • Duffy- Fya, Fyb • Kidd- Jka, Jkb • MNS: M,N,S,s • Lewis- Le(a), Le(b) • Kell- K,k • P: P1 • D negative 4 cells screen 	Automated using Grifols Erytra by column agglutination BLD-3 Manual using Grifols column agglutination, indirect antiglobulin test BLD-19,53 BLD-46 Griofls Serascan 4 cell screen, NBS 3 cell antibody screen in Cellmedia and NBS rr 4 cells screen in Cellmedia
Whole Blood	Antibody Identification <ul style="list-style-type: none"> • Rh- C,D,E,c,e, • Duffy- Fya, Fyb • Kidd- Jka, Jkb • MNS: M,N,S,s • Lewis- Le(a), Le(b) • Kell- K,k • P: P1 	Automated using Grifols Erytra by column agglutination BLD-3 Manual using Grifols column agglutination, indirect antiglobulin test BLD19,55 Cells used are Grifols Identisera 11 cell panel and 4 cell extension panel in Cellmedia, Grifols Identisera P 11 cell panel and 4 cell extension panel in Cellmedia, and NBS 10 cell panel in Cellmedia.
EDTA	Direct antiglobulin test	Automated using Grifols Erytra by column agglutination BLD-3,43 Manual using Grifols column agglutination, indirect antiglobulin test, direct antiglobulin test BLD-43



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HUMAN BODY FLUIDS (cont'd)	<u>Blood Transfusion examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented in house methods and manufacturer's instructions for
EDTA Whole Blood	Foetal Maternal Haemorrhage	Manual method by acid elution BLD-40 Alkali Denaturation Test BLD-57
EDTA Whole Blood	Red Cell Phenotyping <ul style="list-style-type: none"> • Rh C,c,E,e,Cw • Lewis Le(a), Le(b) • Duffy Fy(a), Fy(b) • Kidd Jk(a) Jk(b) • MNS MNSs • Kell, Kpa • Anti-A1 	Manual using Grifols column agglutination, indirect antiglobulin test or immediate spin BLD-15,17
	Cross Matching	Manual using Grifols column BLD-19, 47 and Manual using immediate spin BLD-34



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Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
HUMAN BODY FLUIDS AND TISSUES	<u>Microbiology examination activities for the purpose of clinical diagnosis</u>	In house documented methods based on related UK Standards for Microbiology Investigations (UK SMIs):
Swabs Fluids Aspirates Tissues Pus/Exudates Tips/Lines Nails Hair Skin IUCD coils Respiratory samples Urine Faeces	General isolation of micro-organisms of clinical significance	Manual inoculation followed by culture MIC-51 MIC-6 MIC-175
Whole Blood	General isolation of micro-organisms of clinical significance	Automated culture using BD BacTec FX MIC-45 MIC-77
Urine	Quantification of white and red blood cells, bacteria and epithelial cells	Automated urine analysis using Roche Cobas u701 MIC-7
Urine	Isolation, identification and antibiotic susceptibility testing of microorganisms of clinical significance	Mast UriSystem MIC-7



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HUMAN BODY FLUIDS AND TISSUES	<u>Microbiology examination activities for the purpose of clinical diagnosis</u>	In house documented methods based on related UK Standards for Microbiology Investigations (UK SMIs):
Cultures isolated in house from the above	Identification of microorganisms of clinical significance	Manual and/or automated biochemical methods using: Automated Matrix-assisted laser desorption/ionisation (MALDI-TOF) MIC-53 MIC-81 MIC-99
Cultures isolated in house from the above	Antimicrobial susceptibility testing of clinically significant bacteria	Manual disc diffusion and/or automated methods using EUCAST methodology MIC-65
Cultures isolated in house from the above	Antimicrobial susceptibility testing of clinically significance	Automated BD Phoenix MIC-99, MIC-76
Urine	Detection of: Legionella Antigen Pneumoniae antigen	Fluorescent Immunoassay using SD Biosensor Standard F analyser MIC-3
Genital swabs	Detection of Bacterial vaginosis and Trichomonas vaginalis	Gram stained microscopy examination by automated slide stainer (Aerospray) MIC-34, MIC-76



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HUMAN BODY FLUIDS AND TISSUES (cont'd)	<u>Microbiology examination activities for the purpose of clinical diagnosis (cont'd)</u>	In house documented methods based on related UK Standards for Microbiology Investigations (UK SMIs):
Faeces	Detection of ova, cysts and parasites (OCP)	Direct microscopy and concentration using Parasep MIC-41
Faeces	Detection of: <i>Cryptosporidium</i> and <i>Giardia</i> antigens <i>H.pylori</i> antigen Rotavirus antigen	Automated enzyme linked immunosorbent assay (ELISA) using Triturus Instrument (Grifols) MIC-8 MIC 3
Respiratory samples Urine Blood	Isolation and presumptive identification of Acid-alcohol fast bacilli (inc. <i>Mycobacterium</i> spp.) and routine respiratory culture of clinical significance	Manual culture and microscopy (screening by fluorescent microscopy using Auramine stain, and ZN light microscopy on automated detection) using BD Bactec MGIT 320 MIC-39, MIC-97, MIC-18, MIC-116
Anal swabs	• Detection of <i>Enterobius vermicularis</i> larvae and ova	Direct microscopic examination MIC-41



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HUMAN BODY FLUIDS AND TISSUES (cont'd)	<u>Serological activities for the purpose of clinical diagnosis</u>	Documented in-house methods to meet the requirements of the Infectious Diseases in Pregnancy Screening Programme as defined in the laboratory QA evidence requirements' (targets marked *)
Blood serum samples	Detection of: Antistreptolysin Rubella IgG HIV-1 & HIV-2 Antibodies and HIV1 p24 Antigen* Hepatitis B surface Ag* Hepatitis B core Hepatitis B e Ab Hepatitis B e Ag Hepatitis B Ab Hepatitis A IgG and IgM Hepatitis C Ab Syphilis total Antibody* Syphilis TPLA*	Cobas 8000 BIO-49,BIO-54,MIC-32, MIC-52, MIC-55, MIC-57, MIC-35, MIC-11, MIC-80, MIC-59, MIC-56
Blood serum samples	Detection of: Treponema IgM	Automated ELISA using Chorus MIC-11
Faeces	Detection of rotavirus	Imunochromatographic assay using Coris BioConcept Rota-Strip MIC-4



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HUMAN BODY FLUIDS AND TISSUES (cont'd)	<u>Molecular activities for the purpose of clinical diagnosis</u>	
Nose and Throat Swabs (NSA), nasopharyngeal aspirates (NPA) in VTM	Multiplex Respiratory Panel: Influenza A (H1, H3) Adenovirus Parainfluenza (1-4) Human Metapneumovirus Rhinovirus Bordetella pertussis	Automated, multiplexed, flexible nucleic acid test using Verigene NanoSphere MIC-17
Nose and Throat Swabs (NSA) in VTM	Influenza A & B	Automated PCR using Roche Liat technology MIC-17
Nose and Throat Swabs (NSA) in VTM Faeces Faeces	RSV A/B Norovirus C. difficile	Automated PCR using Aries Luminex technology MIC-17
Faeces	Detection of genomic DNA from bacteria causing infectious gastroenteritis: Salmonella spp., Shigella spp. Enteroinvasive E.coli (EIEC), Campylobacter spp. (jejuni and coli) Shiga toxin-producing organisms (STEC, Shigella dysenteriae)	Automated DNA extraction, amplification & detection on the BD MAX platform MIC-4



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<p>HUMAN BODY TISSUE AND FLUIDS</p> <p>Tissue samples</p>	<p><u>Histopathological examination of tissues for the purpose of diagnosis</u></p> <p>Examination of tissues in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis including identification of basophilic and eosinophilic structures</p>	<p>Macroscopic and Microscopic examination; Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p><u>Tissue dissection:</u> HIS-84, HIS-81, HIS-92, HIS-93, HIS-79, HIS-80, HIS-99</p> <p><u>Decalcification:</u> HIS-21 – Rapid Decalcification</p> <p><u>Tissue processing - Sakura Tissue Tek VIP 6:</u> HIS-53</p> <p><u>Embedding - Sakura embedding centres:</u> HIS-77</p> <p><u>Microtomy:</u> Leica Microtomes: HIS-62</p>
<p>FFPE Tissue</p>	<p>Basophilic and eosinophilic tissue structures</p>	<p><u>Automated:</u> Haematoxylin and Eosin <u>Staining:</u> Sakura Tissue-Tek Prisma staining machine: HIS-16, HIS-70, HIS-67</p>
<p>Fresh Tissue</p> <p>Frozen Tissue</p>	<p>Basophilic and eosinophilic tissue structures (to assist with Intra-operative diagnosis)</p>	<p><u>Frozen sections –</u> Cryotomy and manual rapid Haematoxylin and Eosin staining method using CPH032 – Frozen sections and Sakura cryostat.</p>



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HUMAN BODY TISSUE AND FLUIDS (cont'd)	<u>Histopathological examination of tissues for the purpose of diagnosis</u> (cont'd)	Macroscopic and Microscopic examination: Documented in house methods incorporating manufacturers' instructions where relevant:
Tissue samples (cont'd)	Special staining for identification of:	<u>Manual techniques</u> <u>HIS-63, HIS-15, HIS-42</u>
	Acid mucins	Alcian blue staining technique for acid mucins HIS-91
	Acid mucins and neutral mucins	Alcian Blue Periodic Acid Schiff (AB PAS) for Acid mucins and neutral mucins HIS-51
	Amyloid	Congo Red Staining Technique for Amyloid HIS-85
	Basement membranes, fungi & other carbohydrates	Periodic acid-Schiffs staining technique Technique with diastase digestion HIS-57
	Connective tissue	Martius Scarlet Blue (MSB) HIS-66 Masson Trichrome HIS-64 Van Gieson Stain HIS-8
	Elastin and connective tissue	Miller's Elastic Van Gieson (EVG) HIS-61
	Fungi	Grocott's Hexamine Silver HIS-43
	Helicobacter Pylori	Giemsa staining technique for Helicobacter Pylori HIS-74



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HUMAN BODY TISSUE AND FLUIDS (cont'd)	<u>Histopathological examination of tissues for the purpose of diagnosis</u> (cont'd)	Macroscopic and Microscopic examination: Documented in house methods incorporating manufacturers' instructions where relevant:
Tissue samples (cont'd)	Special staining for identification of: (cont'd)	<u>Manual techniques</u>
	Melanin	Masson – Fontana Fontana reaction for melanin HIS-65
	Reticulin	Gordon and Sweets' silver impregnation technique for reticulin HIS-73
	Spirochetes, Helicobacter pylori	Warthin Starry Stain HIS4
	Tubercle Bacilli	Ziehl Neelsen (ZN) Staining Technique for Tubercle Bacilli HIS-1



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HUMAN BODY TISSUE AND FLUIDS (cont'd)	<u>Histopathological examination of tissues for the purpose of diagnosis</u> (cont'd)	Macroscopic and Microscopic examination: Documented in house methods incorporating manufacturers' instructions where relevant:
Tissue samples and cell blocks	Immunohistochemistry for identification of:	<u>Automated</u> Immunohistochemical staining - Ventana Benchmark
	Embryonic cell in normal tissues and germ tumours	HIS-59 Operation of Ventana Benchmark Immunostainer
	Epithelial cell types	Using antibodies to: Alpha Fetoprotein
	B cells, plasma cells follicular lymphomas and lymphomas	BerEP4 Bcl-2 Bcl-6
	Ovarian epithelial malignancies, seminal vesical carcinoma, anaplastic lymphoma	CA125
	Parafollicular cells in thyroid and medullary thyroid carcinomas	Calcitonin Calponin
	Smooth muscle cells	Caldesmon
	Marker for mesotheliomas	Calretinin
	Mature B cells, follicular dendritic cells, CALLA	CD10
	Various - mast cells, stem cells, Cajal cells, melanocytes, basal cells (skin) and mammary duct epithelium	CD117
	Plasma cells	CD 138
	Granulocytes, Reed-Sternberg cells	CD15



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Tissue samples and cell blocks (cont'd)	Immunohistochemistry for identification of: (cont'd)	<u>Automated</u> Immunohistochemical staining - Ventana Benchmark Immunostainer Using antibodies to:
	Monocytes	CD163
	Langerhans cells	CD1a
	B cell	CD20
	Mature B cells, Follicular dendritic cell	CD21
	B cells, some T cells	CD23
	T cells	CD3
	Reed-Sternberg cells, plasma cells	CD30
	Endothelial cells	CD31
	Leucocyte differentiation	CD34
	T cells (helper & mature)	CD4
	T and B cell Lymphoma's	CD43
	Leucocytes	CD45
	Mature T cells, T cell lymphomas	CD5
	Natural killer cells, neuroendocrine tissues	CD56
	T cells. Natural killer cells, thymocytes	CD68
	T cells	CD79a



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Tissue samples and cell blocks (cont'd)	Immunohistochemistry for identification of: (cont'd)	<u>Automated</u> Immunohistochemical staining - Ventana Benchmark Immunostainer Using antibodies to:
	Wide range of tumours including Ewings Sarcoma, & T cell lymphoma	CD8 CD99
	Intestinal epithelial cells, colorectal + other adenocarcinomas	CDX2
	CEA glycoproteins	CEA
	Tissues of neuroendocrine origin	Chromogranin A
	Squamous and epithelial phenotypical tumours	CK14
	Adenocarcinomas, columnar epithelial cells	CK20
	Basal cells, filamentous keratins form glandular to stratified squamous, prostate adenocarcinoma	CK34βE1/2 (HMW)
	Mesothelioma	CK5
	Normal and neoplastic epithelia	CK7
	Epithelial cells	CK8/18 (cam5.2)
	Investigation of tumorigenesis, especially useful for identifying Mantle cell Lymphoma	Cyclin D1
	Lymphatic vessels	D2-40



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Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
HUMAN BODY TISSUE AND FLUIDS (cont'd)	<u>Histopathological examination of tissues for the purpose of diagnosis</u> (cont'd)	Macroscopic and Microscopic examination: Documented in house methods incorporating manufacturers' instructions where relevant:
Tissue samples and cell blocks (cont'd)	Immunohistochemistry for identification of: (cont'd)	<u>Automated</u> Immunohistochemical staining - Ventana Benchmark Immunostainer Using antibodies to:
	Striated and smooth muscle cells	Desmin
	Gastro Intestinal Stromal tumours (GIST)	DOG-1
	Normal duct epithelial cells, ductal carcinoma	E-cadherin
	Normal and neoplastic epithelium	EMA
	Eostrogen receptors, breast carcinoma	ER
	Breast carcinoma	GCDFP
	Schwann cells, enteric glial cells, astrocytomas, ependymomas	GFAP
	Placental trophoblasts	HCG
	Hepatocellular carcinoma	Hepatocyte
	Melanoma, melanocyte differentiation	HMB45
	Sex chord stromal tumours	Inhibin
	Proliferating Cells	Ki-67
	Epstein-Barr virus	LMP
	Epidermal differentiation	MCK (Ae1/3)
	Melanoma marker	Melan A



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Tissue samples and cell blocks (cont'd)	Immunohistochemistry for identification of: (cont'd)	<u>Automated</u> Immunohistochemical staining - Ventana Benchmark Immunostainer Using antibodies to:
	Pan CytoKeratin marker	MNF116
	Soft tissue tumours with muscle differentiation	MSA
	Lympho-haemopoietic tumours	MUM-1
	Histiocytic mediated myeloid leukaemia	Muramidase
	Rhabdomyoblastic differentiation	Myoglobin
	Peripheral nerves, neuroendocrine tumours	Myosin
	Neuroendocrine cells	NSE
	B cell germinal centre	OCT-2
	HPV	P16 CIN
	Cell proliferation	P53
	Hydatidiform moles	P57
	Prostate basal cells, proliferative cells, glandular epithelium	P63
	Differentiation of tumours with placental origin	Placental Lactogen
	Progesterone receptors, breast carcinoma	PR



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Tissue samples and cell blocks (cont'd)	Immunohistochemistry for identification of: (cont'd)	<u>Automated</u> Immunohistochemical staining - Ventana Benchmark Immunostainer Using antibodies to:
	Prostate secretory and ductal epithelium	PSA
	Glandular Prostatic epithelium	PSAP
	Renal neoplasm	RCC
	High grade PIN, Schwann cells, nerve processes, S100 +ve neoplasms	S100
	Smooth muscle cells	SMA
	Neuroendocrine cells	Synaptophysin
	Thyroid follicular epithelial cells	Thyroglobulin
	TTF-1 found in lung and thyroid (thyroid follicular cells)	TTF-1
	Cells of mesenchymal origin Epithelial cells and smooth muscle in fallopian tube	Vimentin
	Wilms tumour	Wilms Tumour
Slides prepared in-house from sample types listed above	Morphological assessment and interpretation/diagnosis	<u>Interpretive/diagnostic microscopy</u> - Olympus/Leica/Nikon microscopes. According to RCPATH Guidelines HIS-93 – Consultant Cut Up and Reporting



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<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Body fluids / Fine needle aspirations, Urines and Bronchial Aspects</p>	<p><u>Cytopathological examination of tissues and fluids for the purpose of diagnosis</u></p> <p>Examination of tissues and fluids in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis</p>	<p>Macroscopic and Microscopic examination: Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p><u>Sample preparation:</u></p> <p>NGC-24 – Preparation of Bronchial and Sputum Specimens</p> <p>NGC-30 – Preparation of Serous Fluids</p> <p>NGC-50 – Cell Block Preparation</p> <p>NGC-33 – Preparation of Cerebrospinal Fluid</p> <p>NGC-7 – Urine Preparation</p> <p>NGC-12 – Joint Fluid Preparation</p> <p>NGC-28 – Preparation of slides for Immunohistochemistry</p> <p>NGC-33 – Preparation of FNAs and Needle Washings</p> <p>NGC-29 – Preparation of Serous Fluids by the ThinPrep Method</p> <p>NGC-49 – Histopaque Preparation Method</p> <p>NGC-51 – Glacial Acetic Acid method for bloodstained samples</p>



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<p>HUMAN BODY TISSUE AND FLUIDS (cont'd)</p> <p>Body fluids / Fine needle aspirations, Urines and Bronchial Aspects (cont'd)</p>	<p><u>Cytopathological examination of tissues and fluids for the purpose of diagnosis</u> (cont'd)</p> <p>Staining for nuclear detail in cells present</p> <p>Examination of tissues and fluids in order to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis</p>	<p>Macroscopic and Microscopic examination: Documented in house methods incorporating manufacturers' instructions where relevant:</p> <p><u>Staining:</u> <u>Automated</u> - Leica Autostainer XL NGC-39 Papanicolaou Staining method – Leica Autostainer XL</p> <p><u>Manual</u> NGC-14 Hema-Gurr Rapid staining technique</p> <p>NGC-43 May Grunwald Giemsa</p> <p>Interpretive/diagnostic microscopy: Nikon Microscopes</p> <p>NGC-6 - Screening and Reporting Non-Gynae Cytology Specimens</p> <p>CPH264 – Consultant Cut Up and Reporting</p> <p>NGC-59 – Attendance and assistance at head and neck FNA clinic</p>
END		