

Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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



Accredited to
ISO 15189:2012

Oxford University Hospitals NHS Foundation Trust

Issue No: 001 Issue date: 27 April 2016

Histopathology
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Testing performed at the above address only

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
<p>HUMAN TISSUES</p> <p>Benign soft tissue tumour Malignant soft tissue tumour Other soft tissue Bone Bone tumours</p>	<p><u>Histopathology</u></p> <p>Examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis</p>	<p>Macroscopic and Microscopic examination using in house procedures in conjunction with manufacturer's instructions for the following methods (where relevant):</p> <p><u>Macroanalysis, dissection & decalcification</u> using: SOP0001 SOP0004 SOP0014 SOP0016 SOP0021 SOP0044 SOP0047 SOP0057 SOP0064 HDM0001</p> <p><u>X-Ray imaging</u> using: SOP 0006 SOP 0024 and Faxitron 43855-d Kodak direct view CR-Reader</p> <p><u>Processing</u> using: SOP0022 and: Sakura VIP processor</p>



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HUMAN TISSUES (cont'd)	<u>Histopathology</u> (cont'd)	Macroscopic and Microscopic examination using in house procedures in conjunction with manufacturer's instructions for the following methods (where relevant):
Benign soft tissue tumour Malignant soft tissue tumour Other soft tissue Bone Bone tumours	Examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis	<u>Embedding</u> using: SOP0007 and Leica EG1150 H Embedding station
Benign soft tissue tumour Malignant soft tissue tumour Other soft tissue Bone Bone tumours	All tissue components	<u>Sectioning & slide production</u> using: SOP0008 SOP0009 and Leica RM2135 microtomes
Benign soft tissue tumour Malignant soft tissue tumour Other soft tissue Bone Bone tumours	Immunohistochemistry to detect the following:	<u>Routine Haemotoxylin and Eosin (H&E) staining & coverslipping</u> Automated or manual using: SOP0011 SOP0023 SOP0025 and Bayer Tissue-Tec DRS 2000 autostainer Sakura Tissue Tec GLC 550 coverslipping unit
Benign soft tissue tumour Malignant soft tissue tumour Other soft tissue Bone Bone tumours	Many tumours	<u>Immunohistochemistry</u> Automated methods using: IHCP0001-IHCP0009 and Dako Immuno autostainer and antibodies as appropriate:
	Beta-catenin cytoplasmic protein	anti-BAF47
	Beta amyloid	Beta-catenin
	Chordoma cells	Beta-2 Microglobulin
		Brachyury



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HUMAN TISSUES (cont'd)	<u>Histopathology</u> (cont'd)	Macroscopic and Microscopic examination using in house procedures in conjunction with manufacturer's instructions for the following methods (where relevant):
Benign soft tissue tumour Malignant soft tissue tumour Other soft tissue Bone Bone tumours	Examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis	
	Immunohistochemistry to detect the following:	<u>Immunohistochemistry</u> (cont'd)
	Smooth muscle cells	Caldesmon
	Smooth muscle cells	Calponin
	Transmembrane tyrosine kinase receptor (basal cells of skin) for GISTs	CD117 C-Kit
	Langerhans cells	CD1a 010
	T cells	CD3
	Normal early progenitor cells and immature B cells	CD10
	Monocytes, macrophages and langerhans cells	CD14
	B cells	CD20
	Reed-Sternberg cells/anaplastic large cell lymphoma cells	CD30 BerH2
	Endothelial cells	CD31 (JC70)
	Capillary endothelial cells	CD34 Qbend10
	Cells of haematopoietic origin	CD45 2B11+PD7/26
	Macrophages, osteoclasts	CD68 KP1
	MIC2 gene products	CD99 Mic2



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	Immunohistochemistry to detect the following:	<u>Immunohistochemistry</u> (cont'd)
	Apical border of epithelial cells in colon	CEA
	Neuroendocrine cells	Chromagranin A
	Glandular and transitional epithelial cells	CK7
	GI epithelium/urothelium and Merkel cells	CK20
	De-differentiated liposarcoma/Atypical lipomatous tumour	CDK4
	Majority of epithelial cells	CK AE1/AE3
	Majority of epithelial cells	CK LP34/ CK MNF116
	Smooth and striated muscle	Desmin D33
	Smooth and striated muscle	Desmin DER11
	Dentin matrixprotein 1	DMP-1
	DOG-1 protein for diagnosis of GISTs	DOG-1
	Epithelial cells	EMA E29
	Estrogen receptor +ve cells	ER 1D5
	Endothelial cells and megakaryocytes	Factor 8



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<p>HUMAN TISSUES (cont'd)</p> <p>Benign soft tissue tumour Malignant soft tissue tumour Other soft tissue Bone Bone tumours</p>	<p><u>Histopathology</u> (cont'd)</p> <p>Examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis</p> <p>Immunohistochemistry to detect the following:</p> <p>Fli-1 gene</p> <p>Lipoblasts</p> <p>Astrocytes</p> <p>Mitosis marker</p> <p>Muscle actin</p> <p>MHC class II</p> <p>Melanosomes</p> <p>Kappa light chains</p> <p>Lambda light chains</p> <p>Lymphatic endothelial cells</p> <p>Amyloid A</p> <p>Proliferating cells</p> <p>Mast cell tryptase</p> <p>Melanocytes</p> <p>Membrane bound mucin</p> <p>Cells of skeletal muscle origin</p> <p>Neurons of CNS and PNS</p>	<p>Macroscopic and Microscopic examination using in house procedures in conjunction with manufacturer's instructions for the following methods (where relevant):</p> <p><u>Immunohistochemistry</u> (cont'd)</p> <p>Fli (C-19):sc-356</p> <p>anti-FABP4</p> <p>GFAP</p> <p>Anti-Histone H3 (Ser10)</p> <p>Muscle actin HHF35</p> <p>HLA-DP,DQ,DR (CR3/43)</p> <p>HMB45 MAA</p> <p>Kappa</p> <p>Lambda</p> <p>Lyve-1</p> <p>MC1 amyloid A</p> <p>Ki67 MIB-1</p> <p>Mast cell tryptase MCT</p> <p>Melan A</p> <p>Mucin 4</p> <p>Myogenin</p> <p>Neurofilament 2F11</p>



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HUMAN TISSUES (cont'd)	<u>Histopathology</u> (cont'd)	Macroscopic and Microscopic examination using in house procedures in conjunction with manufacturer's instructions for the following methods (where relevant):
Benign soft tissue tumour	Examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis	
Malignant soft tissue tumour	Special stains to detect the following:	<u>Special staining</u> Manual methods using: SSP0001-SSP0037 and stains as appropriate:
Other soft tissue	Acid mucins	Alcian Blue
Bone	Acid mucins and glycogen	AB/PAS
Bone tumours	Amyloid	Congo Red
	Selective glycogen staining	Diastase Periodic Acid Schiffs (DPAS)
	Bone marrow cells	Giemsa stain
	Mineralised bone, osteoclast/osteoblast activity	Goldner's Trichrome
	Gram positive organisms	Gram stain
	Argyrophil cells	Grimelius
	Fungi	Grocott's modification of Gomori's methenamine silver method
	All tissue components	Haematoxylin and eosin
	Osteoid	Haematoxylin phloxine tartrazine
	Collagen	Haematoxylin van gieson
	Amyloid	Highman's congo red
	Melanin	Masson's fontana for melanin
	Connective tissue and fibrin	Masson's trichrome



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Benign soft tissue tumour	Examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis	
Malignant soft tissue tumour	Special stains to detect the following:	<u>Special staining</u> (cont'd)
Other soft tissue		
Bone		
Bone tumours		
	DNA and RNA	Methyl green pyronin for RNA + DNA
	Elastic fibres	Miller's elastic van gieson (EVG)
	Elastic fibres	Orcein stain for elastin
	Fibrin	Martius scarlet blue (MSB) for fibrin
	Glycogen	Periodic acid schiffs (PAS)
	Haemosiderin	Perl's technique for haemosiderin
	Connective tissue	PTAH
	Collagen and osteiod	Picro-sirius red
	Reticulin fibres	Reticulin stain
	Non-specific esterase activity	Non Specific Esterase (NASDCLE)
	Cartilage	Safranin O
	Cartilage and mast cells	Toluidine blue
	Elastic fibres	Verhoeff's haematoxylin elastic stain
	Leprosy bacilli	Wade Fite
	Acid/alcohol fast bacilli	Ziehl Neelsen



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<p>HUMAN TISSUES (cont'd)</p> <p>Slides prepared in house from samples listed above</p> <p>Benign soft tissue tumours Malignant soft tissue tumours Soft tissue revision arthroplasty Other soft tissue Bone tumours Bone</p> <p>Slides prepared in house from samples listed above</p>	<p><u>Histopathology</u> (cont'd)</p> <p>Examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis</p> <p>Morphological assessment and interpretation/diagnosis</p> <p>Frozen section examination to identify or exclude morphological and cytological abnormalities for the purpose of diagnosis</p> <p>All tissue components</p> <p>Alkaline phosphatase activity</p> <p>Nonspecific esterase activity</p> <p>Morphological assessment and interpretation/diagnosis</p>	<p>Macroscopic and Microscopic examination using in house procedures in conjunction with manufacturer's instructions for the following methods (where relevant):</p> <p><u>Microscopy (qualitative analysis) and reporting</u> Light & polarising microscopy using: SOP0005 SOP0031 SOP0037 and microscopes: Nikon Elipse 80i R Leica DM4000B Olympus BH-S</p> <p><u>Cryotomy</u> using: SOP0003 SOP0020 and: Thermo Scientific cryostat Brights cryostat</p> <p><u>H&E staining</u> Manual method using: SSP0015 (H+E for FS)</p> <p><u>Enzyme Histochemistry</u> Manual methods using: Alkaline phosphatase SSP0005 Nonspecific esterase (NASDCLE) SSP0031</p> <p><u>Special staining</u> Manual methods using: SSP0001-SSP0037 and stains as appropriate, as listed above</p> <p><u>Microscopy (qualitative analysis) and reporting</u> As above</p>



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HUMAN TISSUES AND FLUIDS	<u>Diagnostic cytopathology</u>	Macroscopic and Microscopic examination using in house procedures in conjunction with manufacturer's instructions for the following methods (where relevant):
Cyst fluid Synovial fluid	Examination to identify or exclude cytological abnormalities or infection for the purpose of diagnosis	<u>Preparation/centrifugation</u> using: SOP0012 and Shandon cytospin
	All cell components	<u>H&E staining</u> Manual method using: SSP0014 H+E
	Gram positive organisms	<u>Gram Stain</u> Manual method using: SSP0011 Gram
Slides prepared in house from samples listed above	Morphological assessment and interpretation/diagnosis	<u>Microscopy (qualitative analysis) and reporting</u> As for Histopathology above
Synovial fluid	Examination to identify or exclude the presence of urate and pyrophosphate crystals for the purpose of diagnosis	<u>Preparation/centrifugation</u> using: SOP0012 and Shandon cytospin
		<u>Microscopy (qualitative analysis) and reporting</u> As for Histopathology above
END		