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LABORATORY LOCATION: (PERMANENT LABORATORY)	JABATAN PATOLOGI,, HOSPITAL TENGKU AMPUAN RAHIMAH Jalan Langat, 41200 Klang, Selangor. , 41200, SELANGOR MALAYSIA
ACCREDITED SINCE :	26 AUGUST 2025
FIELD(S) OF MEDICAL TESTING:	CHEMICAL PATHOLOGY
	HAEMATOLOGY
	MEDICAL MICROBIOLOGY (BACTERIOLOGY)
	MEDICAL MICROBIOLOGY (SEROLOGY)
	CYTOPATHOLOGY
	HISTOPATHOLOGY
	MEDICAL MICROBIOLOGY

The standard used for assessment of this laboratory is MS ISO 15189:2022 (ISO 15189:2022, IDT).

A medical laboratory's fulfilment of the requirements of ISO 15189 means the laboratory meets both the technical competence requirements and the management system requirements necessary for it to consistently deliver technically valid test results. The management system requirements in ISO 15189 are written in language relevant to a medical laboratory's operations. Medical laboratories that implement ISO 15189 operate generally in accordance with the principles of ISO 9001. (See Joint IAF-ILAC-ISO Communiquè, November 2021)

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CENTRAL LOCATION	JABATAN PATOLOGI,, HOSPITAL TENGKU AMPUAN RAHIMAH Jalan Langat, 41200 Klang, Selangor. , 41200, Selangor
FIELD(S) OF MEDICAL TESTING:	CHEMICAL PATHOLOGY, HAEMATOLOGYMEDICAL MICROBIOLOGY (BACTERIOLOGY)MEDICAL MICROBIOLOGY (SEROLOGY)CYTOPATHOLOGYHISTOPATHOLOGYMEDICAL MICROBIOLOGY

#### SCOPE OF MEDICAL TESTING: CHEMICAL PATHOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Urine, Random	Urinalysis Bilirubin Blood Glucose Leucocytes Nitrite pH Protein Specific Gravity Urobilinogen Ketones	Equipment: Dirui H-500 Method: Dipstick PATH/ANA/WI-8
Whole Blood (edta)	HbA1c	HPLC/Biorad Variant II Turbo:PATH/CP/WI-27
Urine	Osmolality	Freezing point/ Micro-Osmometer 3320/ PATH/CP/WI-19
	Urine Biochemistry	Semi Quantitative Reflectance Photometer Assay /Dirui H500:PATH/CP/WI-25 dan Semi Quantitative Wavelength,Reflectance, Refractive and Flowcell measurement / iQ200 SPRINT & iChem Velocity:PATH/CP/WI-29
	Microscopy	HKM/PAT/MM/AK26
	Microscopy	Examination of Uncentrifuged Urine using Kova Slide As documented in
	Culture	HKM/PAT/MM/AK02
	Culture	Semi Quantitative Using Calibrated Loop As documented in
	Culture	Manual method as documented in SMC-WI-AH-LAB-MB-043.
	Legionella Urinary Antigen	Rapid immunochromatography method as documented in SMC-WI-AH-LAB-MB-050.
	Calcium	Alinity CI series as documented in SMC-SOP- AH-LAB-CP-017.
	Calcium	SMC-SOP-AH-LAB-CP-004.
	Opiates	SMC-WI-AH-LAB-CP-044.

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Opiatos	Oniatos basad an Immuna
Opiates	Opiates based on Immuno-
	Chromatography Method as
On an abis aid (Maniis an a)	documented in
Cannabinoid (Marijuana)	Cannabinoid based rapid
	immuno- on Chromatography
	method as documented in SMC-
	WI-AH-LAB-CP-044.
Amphetamine	Amphetamine based immuno- on
	Chromatography method as
	documented in SMC-WI-AH-LAB-
	CP-045.
FEME - Macroscopic exam	Reflectance photometry as
	documented in SMC-WI-AH-LAB-
	CP-045.
- Microscopic exam	SMC-SOP-AH-LAB-CP-019.
- Microscopic exam	SMC-WI-AH-LAB-CP-045.
	UC3500 and UF5000
	documented in
FEME	Manual method as documented
	in
Protein	SMC-WI-AH-LAB-CP-007.
Protein	Manual method documented in
Pregnancy Test	SMC-WI-AH-LAB-CP-010.
Pregnancy Test	Pregnancy test based on
	Chromatography Method as
	documented in
Potassium	Alinity CI series as documented
	in SMC-SOP-AH-LAB-CP-017
Potassium	SMC-SOP-AH-LAB-CP-004.
Potassium	Electrode as documented in
Potassium	Architect ci8200 on Potassium
	Selective
Glucose	SMC-WI-AH-LAB-CP-015.
Glucose	Manual method documented in
Chloride	Alinity CI series as documented
	in SMC-SOP- AH-LAB-CP-017.
Chloride	SMC-SOP-AH-LAB-CP-004.
Chloride	Electrode as documented in
Chloride	Architect ci8200 Chloride
	Selective on
Diastase (Amylase)	Alinity CI series as documented
	in SMC-SOP- AH-LAB-CP-017.
Diastase (Amylase)	Architect ci8200 Amylase based
, , ,	on 2-chloro-PNP-alpha-
	maltotriside Liquid (IFCC) method
	as documented in SMC-SOP-AH-
	LAB-CP-004.
Microscopy	Phase Contrast Examination
,	Urine Using Kova Slide as
	documented in
	HAG/UPAT/MI/TPM-013

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	Culture	Using Calibrated Dip Strips
	Culture	Routine culture to identify the
	Guitare	pathogenic pathogen as
		documented in
Serum	Osmolality	Freezing point/ Micro-Osmometer
Corum	- Commonanty	3320/ PATH/CP/WI-19
	Leptospirosis rapid test	Latex agglutination As
		documented in
		HKM/PAT/SR/AK0O2
	Rapid Plasma Reagin (RPR)	Macroscopic flocculation As
		documented in
		HKM/PAT/SR/AK04
	FT3	Cobas e411
	FT3	HKWPAT/CP/AK03
	FT3	Electrochemiluminescent (ECL)
		method as documented in
	FT4	Cobas e411
	FT4	HKWPAT/CP/AK03
	FT4	Electrochemiluminescent (ECL)
		method as documented in
	TSH	Cobas e411
	TSH	HKM/PAT/CP/AK03
	TSH	Electrochemiluminescent (ECL)
		method as documented in
	Chloride	(Pengendalian Chemistry
		Analyser Beckman Coulter DXC700AU)
	Chloride	Indirect ISE method as
		documented in
	Potassium	(Pengendalian Chemistry
		Analyser Beckman Coulter
		DXC700AU)
	Potassium	HKM/PAT/CP/AKO2
	Sodium	Indirect ISE method as
		documented in
	Sodium	(Pengendalian Chemistry
		Analyser Beckman Coulter
		DXC700AU)
	Sodium	HKM/PAT/CP/AKO2
	Glucose	Indirect ISE method as
		documented in
	Glucose	(Pengendalian Chemistry
		Analyser Beckman Coulter
		DXC700AU)
	Glucose	HKWPAT/CP/AK02
	Uric acid	Hexokinase method as
		documented in
	Uric acid	(Pengendalian Chemistry
		Analyser Beckman Coulter
		DXC700AU)
	Uric acid	in HKM/PAT/CP/AKO2

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UIBC	Uricase PAP method as
	documented
UIBC	(Pengendalian Chemistry
	Analyser Beckman Coulter
	DXC700AU)
UIBC	in HKM/PAT/CP/AKO2
Urea	Nitroso-PSAP method as
Orea	documented
Urea	(Pengendalian Chemistry
Orea	Analyser Beckman Coulter
	DXC700AU)
Urea	GLDH, Kinetic Assay method as
Orea	documented in
Tailabassida	HKM/PAT/CP/AK02
Triglyceride	HKM/PAT/CP/AKO2
	(Pengendalian Chemistry
	Analyser Beckman Coulter
	DXC700AU)
Total protein	GPO-POD method as
	documented in
Total protein	(Pengendalian Chemistry
	Analyser Beckman Coulter
	DXC700AU)
Total protein	Biuret method as documented in
	HKM/PAT/CP/AKO2
Magnesium	(Pengendalian Chemistry
	Analyser
Magnesium	Xylidyl Blue method as
	documented in
	HKM/PAT/CP/AK02
Lactate dehydrogenase (LDH)	(Pengendalian Chemistry
	Analyser Beckman Coulter
	DXC700AU)
Lactate dehydrogenase (LDH)	IFCC method as documented in
, , , ,	HKM/PAT/CP/AKO2
Iron	(Pengendalian Chemistry
	Analyser Beckman Coulter
	DXC700AU)
Iron	HKM/PAT/ĆP/AKO2
Iron	(Pengendalian Chemistry
	Analyser Beckman Coulter
	DXC700AU) TPTZ method as
	documented in
Inorganic Phosphorus	Phosphomolybdate Complex
(Phosphate)	method as documented in
(i neophate)	HKM/PAT/CP/AK02
HDL cholesterol	(Pengendalian Chemistry
TIDE GROIGSGIO	Analyser Beckman Coulter
	DXC700AU)
	BAGIOGAG)

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HDL cholesterol  Enzymatic Immunoinhibition method as documented in HKM/PAT/CP/AK02  Direct bilirubin  Direct bilirubin  Direct bilirubin  Direct bilirubin  Direct bilirubin  DPD method as documented in (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Drect bilirubin  DPD method as documented in (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AK02  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
HKM/PAT/CP/AK02  Direct bilirubin  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Direct bilirubin  HKM/PAT/CP/AKO2  Direct bilirubin  DPD method as documented in (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Direct bilirubin  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Direct bilirubin  DPD method as documented in (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Analyser Beckman Coulter DXC700AU)  Direct bilirubin HKM/PAT/CP/AKO2  Direct bilirubin DPD method as documented in (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AKO2  Creatine kinase (CK) (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK) IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)
DXC700AU)  Direct bilirubin  DPD method as documented in  Creatinine  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Direct bilirubin  Direct bilirubin  DPD method as documented in  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AK02  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)
Direct bilirubin  Creatinine  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AK02  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Creatinine  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Analyser Beckman Coulter DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
DXC700AU)  Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AK02  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Creatinine  Modified Jaffe, Kinetic method as documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AK02  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  Cholesterol  HKM/PAT/CP/AK02
documented in HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
HKM/PAT/CP/AK02  Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Creatine kinase (CK)  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Analyser Beckman Coulter DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
DXC700AU)  Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
Creatine kinase (CK)  IFCC method as documented in HKM/PAT/CP/AKO2  Cholesterol  (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol  HKM/PAT/CP/AKO2
HKM/PAT/CP/AKO2  Cholesterol (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU)  Cholesterol HKM/PAT/CP/AKO2
Cholesterol (Pengendalian Chemistry Analyser Beckman Coulter DXC700AU) Cholesterol HKM/PAT/CP/AKO2
Analyser Beckman Coulter DXC700AU) Cholesterol HKM/PAT/CP/AKO2
DXC700AU) Cholesterol HKM/PAT/CP/AKO2
Cholesterol HKM/PAT/CP/AKO2
Cholesterol CHO-POD method as
documented in
Calcium (Pengendalian Chemistry
Analyser Beckman Coulter
DXC700AU)
Calcium HKM/PAT/CP/AKO2
Calcium Arsenazo method as documented
in
AST (Pengendalian Chemistry
Analyser Beckman Coulter
DXC700AU)
AST HKM/PAT/CP/AKO2
AST IFCC method as documented in
Amylase (Pengendalian Chemistry
Analyser Beckman Coulter
DXC700AU)
Amylase G7PNP (IFCC) method as
documented in
HKM/PAT/CP/AK02
ALT (Pengendalian Chemistry
Analyser Beckman Coulter
DXC700AU)
ALT HKM/PAT/CP/AK02
ALT IFCC method as documented in
Alkaline phosphatase (ALP) (Pengendalian Chemistry
Analyser Beckman Coulter
DXC700AU)

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Alkaline phosphatase (ALP)	IFCC method as documented in
	HKM/PAT/CP/AK02
Albumin	(Pengendalian Chemistry
	Analyser Beckman Coulter
	DXC700AU)
Albumin	Bromocresol Green(BCG)
	Method as documented in
	HKM/PAT/CP/AK02
ENA Multiple	ENA Multiple tests, ELISA
21 W C Waldpie	method as SMC-WI-AH-LAB-
	MBV-072.
ANCA	SMC-WI-AH-LAB-MBV-070.
ANCA	ANCA based on Florescent
ANCA	method as
Lontoppirol IdM	Immunochromatography (ICT)
Leptospiral IgM	Test method as documented in
A 0.0.T	SMC- WI-AH-LAB-MBV-059.
ASOT	VedaLab Direct Latex Aggulation
	method as documented in SMC-
	WI-AH-LAB-MBV-054.
Anti ds-DNA	SMC-WI-AH-LAB-MBV-057.
Anti ds-DNA	Anti ds-DNA is based on Semi-
	automated, ELISA method as
	documented in
ANF	ANF is based on, Fluorescent
	Method as documented in SMC-
	WI-AH-LAB-MBV-056.
Vitamin D	Architect ci8200, CMIA
	technology as documented in
	SMC-SOP-AH-LAB-CP-004.
Procalcitonin	Architect ci8200, CMIA
	technology as documented in
	SMC-SOP-AH-LAB-CP-004.
Calcium	Architect ci8200 Calcium based
	on Arsenazo III
Vitamin B12	Architect ci8200 Vitamin B12
	based on CMIA
Free T4	Architect ci8200 Free T4 based
	on CMIA
Bilirubin Total	Architect ci8200 Total Bilirubin
••• • •••	based on
C-Reactive Protein	Turbidimetry Method as
	documented in
	HAG/UPAT/BCM/TPM-035
	Siemens Atellica CH
Chloride	ndirect IMT Method as
- C	documented in
	HAG/UPAT/BCM/TPM-022
	Siemens Atellica CH
	Siemens Atemica CIT

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Potassium	ndirect IMT Method as
	documented in
	HAG/UPAT/BCM/TPM-021
	Siemens Atellica CH
Sodium	ndirect IMT Method as
	documented in
	HAG/UPAT/BCM/TPM-020
	Siemens Atellica CH
Lactate Dehydrogenase	FCC Method as documented in
	HAG/UPAT/BCM/TPM-019
	Siemens Atellica CH
Creatine Kinase	FCC 2 part / Imidazole Buffer
	Method as documented in
	HAG/UPAT/BCM/TPM-018
	Siemens Atellica CH
Uric Acid	Uricase Method as documented
	in HAG/UPAT/BCM/TPM-015
	Siemens Atellica CH
Urea	Urease Method as documented
	in HAG/UPAT/BCM/TPM-014
	Siemens Atellica CH
Triglyceride	GPO-PAP Method as
	documented in
	HAG/UPAT/BCM/TPM-013
	Siemens Atellica CH
Total Protein	Biuret Method as documented in
	HAG/UPAT/BCM/TPM-012
	Siemens Atellica CH
Inorganic Phosphorous	Phosphomolybdate Method as
	documented in
	HAG/UPAT/BCM/TPM-011
	Siemens Atellica CH
HDL - Cholesterol	Elimination Method as
	documented in
	HAG/UPAT/BCM/TPM-010
	Siemens Atellica CH
Glucose	Hexokinase Method as
	documented in
	HAG/UPAT/BCM/TPM-009
	Siemens Atellica CH
Creatinine	Alk. Picrate-Kinetic Method as
	documented in
	HAG/UPAT/BCM/TPM-008
Chalastaval	Siemens Atellica CH
Cholesterol	CHO-POD Method as
	documented in
	HAG/UPAT/BCM/TPM-007
	Siemens Atellica CH

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Calcium	Arsenazo Dye Method as documented in HAG/UPAT/BCM/TPM-006 Siemens Atellica CH
Total Bilirubin	Chemical Oxidation (Vandate) Method as documented in HAG/UPAT/BCM/TPM-005 Siemens Atellica CH
Direct Bilirubin	Chemical Oxidation (Vandate) Method as documented in HAG/UPAT/BCM/TPM-004 Siemens Atellica CH
Alanine aminotransfarase	Modified IFCC without P-5-P Method as documented in HAG/UPAT/BCM/TPM-003 Siemens Atellica CH
Alkaline Phosphatase	IFCC Method as documented in HAG/UPAT/BCM/TPM-002 Siemens Atellica CH
Albumin	Bromocresol Method as documented in HAG/UPAT/BCM/TPM-001 Siemens Atellica CH

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#### **SCOPE OF MEDICAL TESTING: HAEMATOLOGY**

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Satellite Laboratory Whole Blood	Full Blood Count White Blood Cell Count (WBC) Red Blood Cell Count (RBC) Hemoglobin Hematocrit Mean Corpuscular Volume (MCV) Mean Corpuscular Hemoglobin (MCH) Mean corpuscular hemoglobin (MCHC) Red blood cell distribution width (RDWCV) Platelet Mean platelet volume (MPV)	Equipment: Sysmex XN 1000 Series Method: Hydro dynamic focusing, flowcytomtry and SLS- hemogobin method PATH/ANA/WI-3
	Direct Antiglobulin Test	(Ujian Coomb's Kaedah Kad Ge
	Direct Antiglobulin Test	Documented in HKM/PAT/TM/AK11
	Direct Antiglobulin Test	Gel card method (Antigenantibody reaction)
	Crossmatch	(Ujian Keserasian Darah)
	Crossmatch	Documented in HKM/PAT/TM/AKO8
	Crossmatch	(Antigen-antibody reaction) Tube method (Immediate spin)
	Crossmatch	Gel card method
	RBC Phenotyping	(Ujian Fenotip Sel Darah Merah
	RBC Phenotyping	Documented in HKM/PAT/TM/AKO7
	RBC Phenotyping	Test tube method/ Gel card method (Antigen-antibody reaction)
	Antibody Identification	(Ujian Identifikasi Antibodi Kaedah Kad Gel)
	Antibody Identification	Documented in HKWPAT/TM/AK06
	Antibody Identification	Gel card method (Antigenantibody reaction)
	Antibody Screening (Indirect Coomb's Test)	(Ujian Saringan Antibodi Kaedah Kad Gel)
	Antibody Screening (Indirect Coomb's Test)	Documented in HKM/PAT/TM/AK04
	Antibody Screening (Indirect	Gel card method (Antigen-
	Coomb's Test)	antibody reaction)
	ABO & Rh D Grouping	Test tube method / Gel card method
	Malaria Parasite	Thick and Thin film staining method as documented in SMC-WI-AH-LAB-HM-030

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Rh Genotype	Antigen-Antibody reaction as documented in SMC-WI-AH-LAB-HM-020.
FBP - Morphology	Manual method read by Haematologist as documented in
EDO I Dis - I E'il-	SMC-WI-AH-LAB-HM-002.
FBC and Blood Film FBC Reticulocyte Count Full	None Hydrodynamically focused
Blood Picture (FBP)	differential count detection
Dioca i iciaro (i Di )	method, flow cytometry method
	and SLS-haemoglobin method as
	documented in SMC-SOP-AH-LAB-015.
ESR	HM-007.
ESR	Alifax ESR stopped flow kinetic
	Analysis Method as documented in SMC-SOP-AH-LAB-
Direct Agglutination Test (DAT)	Antigen-Antibody reaction as
	documented in SMC-WI-AH-LAB-
Total	HM-051.
Troponin T	Dual monoclonal ?andwich?method as
	documented in SMC-SOP-AH-
	LAB-CP-003.
G6PD	Alinity CI series as documented
	in SMC-SOP-AH-LAB-CP-017.
G6PD	SMC-SOP-AH-LAB-CP-004,
0.000	SMC-SOP-AH-LAB-CP-017.
G6PD	Architect ci8200 HbA1c based on
	Enzymatic method as documented in
G6PD	CareSTART Biosensor 1 as
00. 5	documented
Coom bs Test : IAT (Indirect	Column Agglutination Method
Antiglobulin Test)/ Antibody	Using ID-Card ?LISS/Coombs? /
Screening DAT (Direct I	ID ?Incubator, as documented in
Antiglobulin Test)	HAG/UPAT/BB/TPM003
Crossmatching	Column Agglutination Method
	Using ID-Card ?LISS/Coombs? /
	ID ?Incubator, ID-Centrifuge as documented in
	HAG/UPAT/BB/TPM004
Rh Blood grouping	Tube Method / Serofuge as
3 3 4 7	documented in
Blood Grouping	Tube Method / Serofuge as
	documented in
Erythrocyte Sedimentation Rate	Vital Diagnostic Monosed
Erythrocyte Sedimentation Rate	Infrared Detection Method as
	documented in
	HAG/UPAT/HM/WI-004 & HAG/UPAT/HM/TPM-005
	TIAG/OFAT/TIIVI/TEIVI-003

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Haemoglobin	HAG/UPAT/HM/WI-005,
	HAG/UPAT/HM/W1-006 Sysmex
	XN 550 & Sysmex XN 1500
Haemoglobin	Hemoglobin Count: SLS
	haemoglobin detection method
	as documented in
	HAG/UPAT/HM/TPM-001
Hematocrit	HAG/UPAT/HM/WI-005,
	HAG/UPAT/HM/W1-006 Sysmex
	XN 550 & Sysmex XN 1500
Hematocrit	HAG/UPAT/HM/TPM-001
Hematocrit	Hematocrit Count: RBC
	cumulative pulse height detection
	method as documented in
Platelet	HAG/UPAT/HM/WI-005,
	HAG/UPAT/HM/W1-006 Sysmex
	XN 550 & Sysmex XN 1500
Platelet	HAG/UPAT/HM/TPM-001
Platelet	Platelet Count: Hydrodynamic
T latelet	focusing direct current detection
	method as documented in
Red Blood Cell Count	HAG/UPAT/HM/WI-005,
Red Blood Cell Count	HAG/UPAT/HM/W1-006 Sysmex
	XN 550 & Sysmex XN 1500
Red Blood Cell Count	HAG/UPAT/HM/TPM-001
Red Blood Cell Count	Red Blood Cell Count:
Red Blood Cell Coult	
	Hydrodynamic focusing direct
	current detection method as
VA/In:talk Indianal and Indianat	documented in
White blood cell count	HAG/UPAT/HM/WI-005,
	HAG/UPAT/HM/WI-006 Sysmex
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	XN 550 & Sysmex XN 1500
White blood cell count	cytometry method using
	semiconductor laser as
	documented in
	HAG/UPAT/HM/TPM-001
White blood cell count	White Blood Cell Count:
	Fluorescence flow
pO2	Potentiometric Method as
	documented in
	HAG/UPAT/BCM/TPM-030 Gem
	Premier 3500
pCOz	Potentiometric Method as
	documented in
	HAG/UPAT/BCM/TPM-029 Gem
	Premier 3500
рН	Potentiometric Method as
	documented in
	HAG/UPAT/BCM/TPM-028 Gem
	Premier 3500

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Cd4/cd8 Immunophenotyping	CD3 Cell Count	Flow cytometry / Aquios CL Flow Cytometer / PATH/HE/WI-39
	CD3/CD4 Cell Count	Flow cytometry / Aquios CL Flow Cytometer / PATH/HE/WI-39
	CD3/CD8 Cell Count	Flow cytometry / Aquios CL Flow Cytometer / PATH/HE/WI-39
Hb Analysis (hplc)	Hb A2	High Performance Liquid Chromatography (HPLC) / Tosoh HLC-723G11 / PATH/HE/WI-37 PATH/HE/WI-45: TOSOH G11
	Hb F	High Performance Liquid Chromatography (HPLC) / Tosoh HLC-723G11 / PATH/HE/WI-37 PATH/HE/WI-45: TOSOH G11
Hb Analysis (ce)	Hb A2	Capillary Electrophoresis / Sebia Capillarys / PATH/HE/WI-26 & PATH/HE/WI-37
	Hb F	Capillary Electrophoresis / Sebia Capillarys / PATH/HE/WI-26 & PATH/HE/WI-37
	Hb Variant	Capillary Electrophoresis / Sebia Capillarys / PATH/HE/WI-26 & PATH/HE/WI-37
Haemostasis	Prothrombin Time (PT)	Clotting method (optical detection) / Sysmex CN-3000 / PATH/HE/WI-46: CN-3000 PATH/HE/WI-36: Coagulation Test
	Activated Partial Thromboplastin Time (APTT)	Clotting method (optical detection) / Sysmex CN-3000/ PATH/HE/WI-46: CN-3000 PATH/HE/WI-36: Coagulation Test

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	Fibrinogen	Clotting method/Clauss assay (optical clot detection) / Sysmex CN-3000 / PATH/HE/WI-46: CN-3000 PATH/HE/WI-36: Coagulation Test
	International Normalized Ratio (INR)	Derived value (from established PT cal curve) / Sysmex CN-3000 / PATH/HE/WI-46: CN-3000 PATH/HE/WI-36: Coagulation Test
	Thrombin Time (TT)	Clotting method (optical detection) / Sysmex CN-3000 / PATH/HE/WI-46: CN-3000 PATH/HE/WI-36: Coagulation Test
Full Blood Count (fbc)	White Cell Count (WCC)	Flow cytometry with semi- conductor laser / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC)
	Red Cell Count (RCC)	DC detection with hydro dynamic focusing / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC)
	Hemoglobin (Hb)	SLS Haemoglobin / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC)

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Hematocrit (Hct)  Mean Corpuscular Volume (MCV)	RBC pulse height detection / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC) Calculated value / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood
Mean Corpuscular Hemoglobin (MCH)  Mean Corpuscular	Count (FBC) Calculated value / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC) Calculated value / Sysmex
Hemoglobin Concentration (MCHC)	XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC)
Red Cell Distribution Width (RDW)	Calculated value / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC)
Platelet (Plt)	DC detection with hydro dynamic focusing / Sysmex XN Series / PATH/HE/WI-43 Sysmex XN Series and SP-10 PATH/HE/WI-34: Full Blood Count (FBC)

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Mean Platelet Volume	DC detection with hydro
(MPV)	dynamic focusing / Sysmex
	XN Series /
	PATH/HE/WI-43 Sysmex
	XN Series and SP-10
	PATH/HE/WI-34: Full Blood
	Count (FBC)
Reticulocyte count	Flow cytometry with semi-
	conductor laser / Sysmex
	XN Series /
	PATH/HE/WI-43 Sysmex
	XN Series and SP-10
	PATH/HE/WI-34: Full Blood
	Count (FBC)

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (SEROLOGY)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY

Specimen Tested	Type of Test/	Test Methods, Specifications/
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#### SCOPE OF MEDICAL TESTING: CYTOPATHOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Aspiration Sample (eg; Thyroid,	Fine Needle Aspiration (FNAC)	Special Staining (Manual
Breast, Lymph Node Etc)	The Needle Alephanen (1147.6)	Method): Method as documented
		in: PATH/CY/WI-5 Process of
		Aspiration Material from FNAC
	Fine Needle Aspiration (FNAC)	PATH/CY/WI-3 May Grunwald
	The Needle Nophallon (114710)	Giemsa stain (MGG)
	Fine Needle Aspiration (FNAC)	PATH/CY/WI-4 (Papanicolaou
	in a resource represent (in the co)	stain), manual
	Fine Needle Aspiration (FNAC)	PATH/CY/WI-10 (Papanicolaou
	The Needle Alephanen (1147.6)	stain-2, automated)
	Fine Needle Aspiration (FNAC)	PATH/CY/WI-7 Cell block
	Fine Needle Aspiration (FNAC)	PATH/CY/WI-6 Quick dip
Sputum, Urine, Bronchial Brushing	Non-Gynecology Test	Special Staining (Manual
And Washing, Effusion, Csf And	Their Cyricology Foot	Method): Method as documented
Other Fluid		in: PATH/CY/WI-2 Preparation of
Other Flaid		Smear for Non- gynae Specimen
	Non-Gynecology Test	PATH/CY/WI-3 May Grunwald
	Non-Gynecology Test	Giemsa stain (MGG)
	Non-Gynecology Test	PATH/CY/WI-4 (Papanicolaou
	Non-Gynecology Test	stain), manual
	Non-Gynecology Test	PATH/CY/WI-10 (Papanicolaou
	Non-Gynecology Test	stain-2, automated)
	Non-Gynecology Test	PATH/CY/WI-7 Cell block
	Non-Gynecology Test	PATH/CY/WI-6 Quick dip
Cynacology Specimen (pen	PAP smear (Conventional and	PATH/CY/WI-1 (Labelling of
Gynecology Specimen (pap	,	` `
Smear)	liquid based)	Cytological Specimen)
		PATH/CY/WI-4 (Papanicolaou
	DAD amous (Conventional and	stain), manual
	PAP smear (Conventional and	PATH/CY/WI-9 (Processing of
	liquid based)	Fluid-Based Cytology samples)
	PAP smear (Conventional and	PATH/CY/WI-10 (Papanicolaou
Cutan athalasus Chasimana	liquid based)	stain-2, automated)
Cytopathology Specimens	Cytology examination	Specimen Preparation and
		Routine Staining: Method as
	O tales a seriestica	documented in:
	Cytology examination	PATH/CY/QP-1 (Receipt,
		recording and reporting of Gynea
		and Body Fluids in Cytology
	0.111	laboratory)
	Cytology examination	PATH/CY/QP-2 (Preparing and
		reporting of Fine Needle
		Aspiration)
	Cytology examination	PATH/CY/QP-3 (Retention and
		disposal of specimen in Cytology
		laboratory)

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Cytology examination	PATH/CY/QP-4 (Offline
	procedure in Cytology laboratory)
Cytology examination	PATH/HI/QP-5 (Quality
	Assurance in Cytology
	laboratory)
Cytology examination	PATH/HI/QP-6 (Chemical waste
	disposal procedure in
	Histopathology and Cytology
	laboratory)

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#### **SCOPE OF MEDICAL TESTING: HISTOPATHOLOGY**

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Histochemistry	Histochemistry Examination	Special Staining (Manual Method): Method as documented in:
	Histochemistry Examination	PATH/HI/WI-5 (Periodic Acid Schiff's (PAS) for neutral mucopolysaccharides)
	Histochemistry Examination	PATH/HI/WI-7 (Alcian Blue stain)
	Histochemistry Examination	PATH/HI/WI-8 (Grocott Gomori Methenamine Silver (GGMS) for fungi)
	Histochemistry Examination	PATH/HI/WI-9 (Periodic Acid Schiff's with Diastase)
	Histochemistry Examination	PATH/HI/WI-12 (Ziehl Neelson Stain for Acid Fast Bacilli)
	Histochemistry Examination	PATH/HI/WI-16 (Periodic Acid Schiff's with Alcian Blue)
Immunohistochemistry	Immunohistochemistry Examination	PATH/HI/WI-15 (Immunohistochemistry staining technique)
	Immunohistochemistry Examination	PATH/HI/HI-26 (Validation of Immunohistochemistry antibody)
	Immunohistochemistry Examination	PATH/HI/WI-30 (Immunohistochemistry Staining Technique (automation)
Surgical Pathology Specimens	Histology Examination	Specimen Preparation and Routine Staining: Method as documented in:
	Histology Examination	PATH/HI/QP-1 (Receipt, recording and reporting of sample in Histopathology laboratory)
	Histology Examination	PATH/HI/QP-2 (Storage and disposal of specimen in Histopathology laboratory)
	Histology Examination	PATH/HI/QP-5 (Offline procedure in Histopathology laboratory)
	Histology Examination	PATH/HI/QP-6 (Chemical waste disposal procedure in Histopathology and Cytology laboratory)
	Histology Examination	PATH/HI/QP-7 (Quality Assurance in Histopathology laboratory)
	Histology Examination	PATH/HI/WI-1 (Labelling of histopathology specimen)

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Histology Examination	PATH/HI/WI-21 (Grossing of
	histopathological specimens)
Histology Examination	PATH/HI/WI-2 (Processing tissue
	on automated tissue processor)
Histology Examination	PATH/HI/WI-23 (Process tissue
	into paraffin block)
Histology Examination	PATH/HI/WI-20 (Prepare slide
	from Paraffin block)
Histology Examination	PATH/HI/WI-4 (Routine
	morphological staining using
	Haematoxylin and Eosin)
Histology Examination	PATH/HI/WI-25 (Haematoxylin
	and Fosin Staining-2)

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SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY (SEROLOGY)

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used

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NOTE: