Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 1 of 10

LABORATORY LOCATION: (PERMANENT LABORATORY)	Jabatan Patologi, Hospital Seberang Jaya Jalan Tun Hussein Onn, 13700 Seberang Jaya, Pulau Pinang., 13700, PULAU PINANG MALAYSIA
ACCREDITED SINCE :	23 JUNE 2025
FIELD(S) OF MEDICAL TESTING:	TRANSFUSION MEDICINE

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)

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 2 of 10

CENTRAL LOCATION	Jabatan Patologi, Hospital Seberang Jaya Jalan Tun Hussein Onn, 13700 Seberang Jaya, Pulau Pinang. , 13700, Pulau Pinang
FIELD(S) OF MEDICAL TESTING:	CYTOPATHOLOGY, CHEMICAL PATHOLOGYHAEMATOLOGYTRANSFUSION MEDICINEMEDICAL MICROBIOLOGYHISTOPATHOLOGY

SCOPE OF MEDICAL TESTING: CYTOPATHOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Gynaecological Specimens	Gynaecological Cytology Examination (INOPERATIVE)	Management of cytology, specimens, slides, reports method as documented in HSJ/PAT /HC/CY/QP/01 (INOPERATIVE)
	Gynaecological Cytology Examination (INOPERATIVE)	Papanicolaou Staining (Manual Method) as documented in HSJ/PAT/ HC/CY/WI/08 (INOPERATIVE)
	Gynaecological Cytology Examination (INOPERATIVE)	Processing of Conventional PAP Smear Slides as documented in: i. HSJ/PAT/HC/CY/WI/06 ii.HSJ/PAT/HC/CY/WI/07 (PAP Stainautomated) (INOPERATIVE)
Non-gynaecological Specimens	Non-gynaecological Cytology Specimens (INOPERATIVE)	Specimen Preparation and Routine Staining (Manual Method) Method as documented in: i. HSJ/PAT/HC/CY/QP/01 ii. HSJ/PAT/HC/CY/WI/02 iii. HSJ/PAT/HC/CY/WI/03 iv. HSJ/PAT/ HC/CY/WI/04 (INOPERATIVE)
	Non-gynaecological Cytology Specimens (INOPERATIVE)	Diff-Quik as documented in HSJ/PAT/ HC/CY/WI/18 (INOPERATIVE)
	Non-gynaecological Cytology Specimens (INOPERATIVE)	Papanicolaou Stain as documented in HSJ/PAT/ HC/CY/WI/07 (INOPERATIVE)

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 3 of 10

	Non-gynaecological	May Grunwald giemsa Stain as
	Cytology Specimens (INOPERATIVE)	documented in
		HSJ/PAT/
		HC/CY/WI/09 (INOPERATIVE)
Fine Needle Aspirates	FNA Cytology	Specimen Preparation and
	Examination (INOPERATIVE)	Routine
		Staining (Manual Method)
		Method as
		documented in:
		i. HSJ/PAT/HC/CY/QP/01
		ii. HSJ/PAT/HC/CY//WI/05 - FNA
		Preparation (INOPERATIVE)
	FNA Cytology	Diff-Quick as documented in
	Examination (INOPERATIVE)	HSJ/PAT/
		HC/CY/WI/18 (INOPERATIVE)
	FNA Cytology	May Grunwald-Giemsa Stain as
	Examination (INOPERATIVE)	documented in
		HSJ/PAT/
		HC/CY/WI/09 (INOPERATIVE)
	FNA Cytology	Papanicolaou Staining
	Examination (INOPERATIVE)	(Automated) as documented in
		HSJ/PAT/
		HC/CY/WI/07 (INOPERATIVE)
	FNA Cytology	Papanicolaou Staining (Manual)
	Examination (INOPERATIVE)	as documented in
		HSJ/PAT/
		HC/CY/WI/08 (INOPERATIVE)

SCOPE OF MEDICAL TESTING: CHEMICAL PATHOLOGY

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
General Chemistry	Alanine Transaminase (INOPERATIVE)	IFCC (with Pyridoxal Phosphate
Plasma		Activation) / Cobas Pro c503 as
		documented in HSJ/JP/CP/TM-
		A04 (INOPERATIVE)
	Albumin (INOPERATIVE)	Bromocresol Purple (BCP) /
		Cobas Pro c503 as documented
		in
		HSJ/JP/CP/TM-A01 (INOPERATIVE)
	Alkaline Phosphatase (INOPERATIVE)	IFCC p-Nitrophenylphosphate /
		Cobas Pro c503 as documented
		in as documented in
		HSJ/JP/CP/TM-A03 (INOPERATIVE)

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 4 of 10

	Page: 4 of 10		
Ammonia (inoperative)	Enzymatic using Glutamate Dehydrogenase) / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A20 (INOPERATIVE)		
Amylase (INOPERATIVE)	Enzymatic Colorimetric 4,6-ethylidene (G7) Pnitrophenyl(G1)-D Maltoheptaoside / Cobas Pro c503 as documented in HSJ/JP/CP/TMA05 (INOPERATIVE)		
Aspartate Transaminase (INOPERATIVE)	IFCC (with Pyridexal Phosphate Activation) / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A06 (INOPERATIVE)		
Bilirubin, Direct (INOPERATIVE)	Colorimetric Diaze / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A07 (INOPERATIVE)		
Bilirubin, Total	Colorimetric Diazo / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A08		
Bilirubin, Tota (INOPERATIVE)	Colorimetric Diazo / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A08 (INOPERATIVE)		
Calcium (INOPERATIVE)	NM-BAPTA / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A09 (INOPERATIVE)		
Chloride (INOPERATIVE)	Ion Selective Electrode, indirect potentiometry / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A16 (INOPERATIVE)		
Cholesterol (INOPERATIVE)	Enzymatic Colorimetric (Cholesterol exidase (CHOD-PAP) as documented in HSJ/JP/CP/TM-A10 (INOPERATIVE)		
Creatine Kinase (INOPERATIVE)	UV Imidazole Buffer IFCC / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A11 (INOPERATIVE)		
Creatinine (INOPERATIVE)	Colorimetric-Jaffe / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A12 (INOPERATIVE)		
Glucose (INOPERATIVE)	Enzymatic UV, Hexokinase / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A14 (INOPERATIVE)		

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 5 of 10

Page: 5 of 10		
High Density Lipoprotein (HDL-Cholestrol) (INOPERATIVE)	Enzymatic Colorimetric Direct HDL: PEG mod. / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A15 (INOPERATIVE)	
Lactate (inoperative)	Enzymatic (Lactate to Pyruvate) / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A17 (INOPERATIVE)	
Lactate Dehydrogenase (INOPERATIVE)	IFCC-Lactate to Pyruvate / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A18 (INOPERATIVE)	
Magnesium (INOPERATIVE)	Colorimetric Endpoint (Xylidyl Blue) / Cobas Pro c503 as documented in HSJ/JP/CP/TMA19 (INOPERATIVE)	
Phosphate / Inorganic (INOPERATIVE)	Molybdate, UV / Cobas Pro c503 as documented in HSJ/JP/CP/TM- A21 (INOPERATIVE)	
Potassium (INOPERATIVE)	lon Selective Electrode, indirect potentiometry / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A16 (INOPERATIVE)	
Protein / Total (INOPERATIVE)	Colorimetric / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A22 (INOPERATIVE)	
Sodium (INOPERATIVE)	lon Selective Electrode, indirect potentiometry / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A16 (INOPERATIVE)	
Triglycerides / Total (INOPERATIVE)	Lipase/GPO-PAP (without glycerol correction) / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A24 (INOPERATIVE)	
Urea (INOPERATIVE)	Urease / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A26 (INOPERATIVE)	
Uric Acid (INOPERATIVE)	Uricase / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A25 (INOPERATIVE)	
C Reactive Protein (INOPERATIVE)	Immuno-turbidimetric assay / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A13 (INOPERATIVE)	
Urine Creatinine (random and 24 hrs) (INOPERATIVE)	Kinetic Colorimetric Jaffe / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A12 (INOPERATIVE)	

General Chemistry

Urine

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 6 of 10

	Urine Albumin/	Immunoturbidimetric / Cobas Pro
	Microalbumin (INOPERATIVE)	c503 as documented in HSJ/JP/CP/TM-A02 (INOPERATIVE)
	Urine Magnesium (INOPERATIVE)	Colorimetric Endpoint (Xylidyl Blue) / Cobas Pro c503 as documented in HSJ/JP/CP/TMA19 (INOPERATIVE)
	Urine Phosphate, Inorganic (INOPERATIVE)	Molybdate, UV / Cobas Pro c503 as documented in HSJ/JP/CP/TM- A21 (INOPERATIVE)
	Urine Potassium (INOPERATIVE)	lon Selective Electrode, Indirect Potentiometry / Cobas Pro c503 as documented in HSJ/JP/CP/TM- A16 (INOPERATIVE)
	Urine Protein, Total (INOPERATIVE)	Benzathonium Chloride / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A24 (INOPERATIVE)
	Urine Sodium (INOPERATIVE)	lon Selective Electrode, Indirect Potentiometry / Cobas Pro c503 as documented in HSJ/JP/CP/TM- A16 (INOPERATIVE)
	Urine Urea (INOPERATIVE)	Urease / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A26 (INOPERATIVE)
	Urine Uric Acid (INOPERATIVE)	Uricase / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A25 (INOPERATIVE)
General Chemistry Heparinized Blood	Blood Gases (pH, PO2, PGO2) (INOPERATIVE)	Selective Electrode Technology / ABL 90 Flex Plus as documented in HSJ/JP/CP/TM-C01 (INOPERATIVE)
Csf	CSF Glucose (INOPERATIVE)	Enzymatic UV, Hexokinase (G-6-PDH) / Cobas Pro c503 as documented in HSJ/JP/CP/TMA14 (INOPERATIVE)
	CSF Protein (INOPERATIVE)	Benzathonium Chloride / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A24 (INOPERATIVE)
	CSF Lactate (INOPERATIVE)	Enzymatic (Lactate to Pyruvate) / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A17 (INOPERATIVE)
Urine	Urine Calcium (INOPERATIVE)	NM-BAPTA / Cobas Pro c503 as documented in HSJ/JP/CP/TM-A09 (INOPERATIVE)

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 7 of 10

	Urine Chloride (INOPERATIVE)	lon Selective Electrode, Indirect Petentiometry / Cobas Pro c503 as documented in HSJ/JP/CP/TM- A16 (INOPERATIVE)
Special Chemistry	Thyroid Stimulating Hormone	Electrochemiluminescence /
Plasma	(TSH) (INOPERATIVE)	Cobas Pro e801 as documented
		HSJ/JP/CP/TM-A30 (INOPERATIVE)
	Thyroxine / Free (FT4) (INOPERATIVE)	Electrochemiluminescence / Cobas Pro e801 as documented in HSJ/JP/CP/TM-A29 (INOPERATIVE)
	? HCG (INOPERATIVE)	Electrochemiluminescence / Cobas Pro e801 as documented
		HSJ/JP/CP/TM-A28 (INOPERATIVE)

SCOPE OF MEDICAL TESTING: HAEMATOLOGY

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Routine Haematology	1. Full Blood Count (INOPERATIVE)	Haemoglobin: Colorimetric
Whole Blood		method Cell differentiation and
		counting: Impedance method,
		laser scatter and SF Cube cell
		analysis technology / Automated
		Mindray BC 6200 Haematology
		Analyzer as documented in
		HSJ/PAT/HEM/WI01 (INOPERATIVE)
	2. Slide Review (INOPERATIVE)	Automated blood film preparation
		and staining / Automated Mindray
		SC120 as documented in
		HSJ/PAT/HEM/WI05 (INOPERATIVE)
	3. Full Blood Picture (INOPERATIVE)	Automated blood film preparation
		and staining / Automated Mindray
		SC120 as documented in
		HSJ/PAT/HEM/WI04 (INOPERATIVE)
	4. Erythrocyte sedimentation rate	Westergreen method /
	(ESR) (INOPERATIVE)	Automated Jokoh Smart Rate as
	, ,	documented in
		HSJ/PAT/HEM/WI07 (INOPERATIVE)

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 8 of 10

Plasma	Prothrombin Time (PT), Activated Partial Thrombin Time (APTT), Fibrinogen and D-Dimer Quantitative (INOPERATIVE)	PT/APTT: Coagulometric measurement (changed in optical density), Fibrinogen:Chromogenic measurement, D- dimer:Immunologic measurement/ Automated ACL Top 550 Coagulation analyzer as documented in HSJ/PAT/HEM/WI03 (INOPERATIVE)
Special Haematology Plasma	Mixing test for PT and APTT (INOPERATIVE)	Coagulometric measurement (changed in optical density)/ Automated ACL Top 550 Coagulation Analyser as documented in HSJ/PAT/HEM/WI11 (INOPERATIVE)
Bone Marrow	Bone Marrow Aspirate (INOPERATIVE)	Manual slide making and staining as documented in HSJ/PAT/HEM/WI08 (INOPERATIVE)

SCOPE OF MEDICAL TESTING: TRANSFUSION MEDICINE

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Immunohaematology	Blood Grouping including ABO,	Tube method (Manual) as
Plasma And Red Blood Cell	Rh (D)	documented in:
		i. HSJ/PAT/TM/WI/017
		ii. HSJ/PAT/TM/WI/021
	Blood Grouping including ABO,	Gel Card Method (Automated) /
	Rh (D)	Automated Analyser IH-500 as
		documented in
		HSJ/PAT/TM/WI/063
Plasma	Antibody Screening	Gel Card Method (Manual) as
		documented in
		HSJ/PAT/TM/WI/024
	Antibody Screening	Gel Card Method (Automated) /
		Automated Analyser IH-500 as
		documented in
		HSJ/PAT/TM/WI/066
Plasma, Donor Red Cells	Compatibility Test (Crossmatch)	Gel Card Method (Manual) as
		documented in
		HSJ/PAT/TM/WI/027

SCOPE OF MEDICAL TESTING: MEDICAL MICROBIOLOGY

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 9 of 10

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Bacteriology Urine Blood csf/body Fluids Sputum/respiratory Specimen Pus/swab/tissue Stool/rectal Swab High Vaginal Swab Antibiotic sensitivity Testing	Culture and Sensitivity	Routine culture as documented in: i. HSJ/PAT/MM/BC/WI 13 ii. HSJ/PAT/MM/BC/WI 14 iii. HSJ/PAT/MM/BC/WI 20 iv. HSJ/PAT/MM/BC/WI 22 v. HSJ/PAT/MM/BC/WI 15 vi. HSJ/PAT/MM/BC/WI 16 vii. HSJ/PAT/MM/BC/WI 17 viii. HSJ/PAT/MM/BC/WI 27
Sputum	AFB Microscopy	Immunofluorescence stain/ AFB stain as documented in HSJ/PAT/MM/BC/WI 30 and HSJ/PAT/MM/BC/WI 08
Serum	Enzyme Immunoassay: 1. HIV test (INOPERATIVE)	Electrochemiluminescence Immuneassay (ECLIA) method/ Cobas e402 as documented in HSJ/PAT/MM/SR/WI 11 (INOPERATIVE)
	2. Hepatitis B Surface Antigen Test (INOPERATIVE)	Electrochemiluminescence Immuneassay (ECLIA) method/ Cobas e402 as documented in HSJ/PAT/MM/SR/WI 12 (INOPERATIVE)
	3. Hepatitis B Surface Antibody Test (INOPERATIVE)	Electrochemiluminescence Immuneassay (ECLIA) method/ Cobas e402 as documented in HSJ/PAT/MM/SR/WI 14 (INOPERATIVE)
	4. Hepatitis G Antibody Test (INOPERATIVE)	Electrochemiluminescence Immunoassay (ECLIA) method/ Cobas e402 as documented in HSJ/PAT/MM/SR/WI 13 (INOPERATIVE)
	Manual Test: HIV Particle Agglutination 1 and 2 Mix (INOPERATIVE)	Particle Agglutination method as documented in HSJ/PAT/MM/SR/WI 16 (INOPERATIVE)
	Rapid Plasma Reagin (RPR) (INOPERATIVE)	Flocculation method as documented in HSJ/PAT/MM/SR/WI 19 (INOPERATIVE)
	Treponemal Pallidum Particle Agglutination (TPPA) (INOPERATIVE)	Particle Agglutination method as documented in HSJ/PAT/MM/SR/WI

Issue date: 23 June 2025

Valid Until: -



NO: SAMM 920

(Issue 2, 23 June 2025 replacement of SAMM 920 dated 07 January 2025)

Page: 10 of 10

SCOPE OF MEDICAL TESTING: HISTOPATHOLOGY

Specimen Tested	Type of Test/	Test Methods, Specifications/
	Properties Measured/	Equipment/Techniques Used
Surgical Pathology Specimens	Specimen Preparation (INOPERATIVE)	Manual Method as documented in HSJ/PAT/HC/QP/01 (INOPERATIVE)
	Specimen Preparation (INOPERATIVE)	Validation of Histology Database as documented in HSJ/PAT/HC/WI05 (INOPERATIVE)
	Specimen Preparation (INOPERATIVE)	Barcode Reader/ Scanner Verification Procedure as documented in HSJ/PAT/HC/WI06 (INOPERATIVE)
Intra-operative Frozen Section For Fresh Tissue Specimens And Biopsies	Histology Examination (INOPERATIVE)	Specimen preparation and Routine Staining (Manual Method) Method as documented in HSJ/PAT/HC/QP/01 and HSJ/PAT/HC/WI/03 (INOPERATIVE)

NOTE: