

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

LABORATORY LOCATION:
(PERMANENT LABORATORY)



**CLINICAL RESEARCH CENTER
SARAWAK GENERAL HOSPITAL LABORATORY
SARAWAK GENERAL HOSPITAL
LEVEL 4, CRC BUILDING
JALAN TUN AHMAD ZAIDI ADRUCE
93586 KUCHING
SARAWAK
MALAYSIA**

FIELDS OF MEDICAL TESTING: **CHEMICAL PATHOLOGY, HAEMATOLOGY &
PHYSIOLOGY TESTING**

SITE LOCATION:

**MOLECULAR LABORATORY
LEVEL 1, PATHOLOGY
DEPARTMENT
SARAWAK HEART CENTER
94300 KOTA SAMARAHAN
SARAWAK**

**FIELD(S) OF MEDICAL TESTING:
MOLECULAR GENETIC**

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 Communiqué dated November 2021).

SCOPE OF MEDICAL TESTING: CHEMICAL PATHOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Routine Chemistry Plasma	γ – glutamyltransferase (GGT) Amylase (AMYL) Alkaline Phosphatase (ALP) Total Cholesterol (TCHO) High Density Cholesterol (HDL-C)	Multilayered Film method by using Fuji Dri-Chem NX 500 as documented in CRCSGH-QWI-LAB-3-002 Colorimetric and Non-Selective Electrode method by using Roche Cobas c311 as documented in CRCSGH-QWI-LAB-3-027

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SCOPE OF MEDICAL TESTING: CHEMICAL PATHOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Routine Chemistry Plasma	Total Protein (TP) Aspartate Aminotransferase (GOT/AST) Glutamic Pyruvic Transaminase (GPT/ALT) Magnesium (Mg) Calcium (Ca) Lipase (LIP) Lactate Dehydrogenase (LDH) Triglycerides (TG) Total Bilirubin (TBIL) Creatinine (CRE) Blood Urea Nitrogen (BUN) Urea Albumin (ALB) Uric Acid (UA) Inorganic Phosphate (IP) Direct Bilirubin (DBIL) Glucose (GLU) Electrolyte: 1. Sodium (Na+), 2. Potassium (K+) 3. Chloride (Cl-)	Multilayered Film method by using Fuji Dri-Chem NX 500 as documented in CRCSGH-QWI-LAB-3-002 Colorimetric and Non-Selective Electrode method by using Roche Cobas c311 as documented in CRCSGH-QWI-LAB-3-027

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SCOPE OF MEDICAL TESTING: CHEMICAL PATHOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Routine Chemistry - Immunoassay Plasma/ Serum	Thyroid-Stimulating Hormone (TSH)	Fluorescent measurement through Two Wavelength Detection (Top-Top) method by using TOSOH AIA-900 as documented in CRCSGH-QWI-LAB-3-003
	Free Thyroxine (FT4)	
	Free triiodothyronine (FT3)	
	Creatine Kinase (CK)	Colorimetric and Non- Selective Electrode method by using Roche Cobas c311 as documented in CRCSGH-QWI-LAB-3- 027
	Creatine Kinase MB (CKMB)	
	Hemoglobin A1c (hbA1c)	
	C Reactive protein HS (CRPHS)	
	Iron (Fe)	
	Lipoprotein (a) (LP-a)	Calculated value by using Roche Cobas c311 as documented in CRCSGH-QWI-LAB-3- 027
	Lactate	
	Estimated Glomerular Filtration Rate (eGFR)	
	Indirect Bilirubin	
	Globulin	

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SCOPE OF MEDICAL TESTING: HAEMATOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Routine Haematology Whole Blood	Complete Blood Count (CBC)	Cell Count by using Abbott Cell Dyn Ruby as documented in CRCSGH-QWI-LAB-3-017
	Automated Differential Count / Parameter: 1. Neutrophil (NEUT) 2. Lymphocyte (LYMPH) 3. Monocyte (MONO) 4. Eosinophil (EO) 5. Basophil (BASO)	Cell Count by using Sysmex Automated Hematology Analyzer XN550 as documented in CRCSGH-QWI-LAB-3-028
	Platelet Count (PLT)	
	Haematocrit (HCT)	
	Haemoglobin (Hb)	
	Red Cell Counts (RCC)	
	White Cell Count (WCC)	
	Mean Corpuscular Volume (MCV)	

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SCOPE OF MEDICAL TESTING: HAEMATOLOGY

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Routine Haematology Whole Blood	Mean Corpuscular Hemoglobin (MCH)	Cell Count by using Abbott Cell Dyn Ruby as documented in CRCSGH-QWI-LAB-3-017
	Mean Corpuscular Hemoglobin Concentration (MCHC)	Cell Count by using Sysmex Automated Hematology Analyzer XN550 as documented in CRCSGH-QWI-LAB-3-028
	Red Blood Cell Distribution Width (RDW-CV)	
	Mean Platelet Volume (MPV)	
	Reticulocyte (Absolute Count) (%)	New Methylene Blue NCCLS method, Supravital Staining Technique by using Abbott Cell Dyn Ruby as documented in CRCSGH-QWI-LAB-3-017
		Cell Count by using Sysmex Automated Hematology Analyzer XN550 as documented in CRCSGH-QWI-LAB-3-028
Coagulation Plasma	Prothrombin Time (PT)	Clotting method by using SYSMEX CA-600 series as documented in CRCSGH-QWI-LAB-3-005
	Activated Partial Thromboplastin Time (APTT)	

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SCOPE OF MEDICAL TESTING: PHYSIOLOGY TESTING

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Heart mechanical system	Interventricular septal width in diastole (IVSd) Left ventricular internal dimension in diastole (LVIDd) Left ventricular posterior wall width in diastole (LVPWd) Left ventricular mass (LVd Mass) Left ventricular ejection fraction (LVEF) Left ventricular end-diastolic volume (LVEDV) Left ventricular end-systolic volume (LVESV) Mitral valve maximal velocity early and atrial filling ratio (MV E/A) Tricuspid regurgitation maximal velocity (TR Vmax) Septal early myocardial relaxation velocity (e' Sept) Lateral early myocardial relaxation velocity (e' Lat) Average septal-lateral E/e' ratio (E/e') Left atrial volume index (LAVI) Tricuspid annular plane systolic excursion (TAPSE) Global longitudinal strain (GLS)	Echocardiogram by using GE Vivid E95 and Philips CX50 as documented in CRCSGH-QWI-LAB-3-029.

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SCOPE OF MEDICAL TESTING: PHYSIOLOGY TESTING

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Heart rhythm/ Heart electrical system	Horizontal axis time Vertical axis voltage Bradycardia Tachycardia P wave PR interval QRS complex Corrected QT interval (QTC)	Electrocardiogram by using Norav ECG-LAN as documented in CRCSGH-QWI-LAB-3-030 and cardiac monitoring method by using NR-302 as documented in CRCSGH-QWI-LAB-3-031 and Norav ECGBT2 as documented in CRCSGH-QWI-LAB-3-032
Blood pressure	Average total systole Average total diastole Average day systole Average day diastole Average night systole Average night diastole Total validity Standard Deviation systole Standard Deviation diastole	Ambulatory blood pressure monitoring method by using Norav NBP-24 NG as documented in CRCSGH-QWI-LAB-3-033

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SCOPE OF MEDICAL TESTING: PHYSIOLOGY TESTING

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Pulmonary/ Exercise ability	Peak oxygen content (PVo ₂) Maximum heart rate (HR _{max}) Heart rate reserve (HRR) Blood pressure (BP) Speed (RPM) Oxygen saturation (SpO ₂) O ₂ pulse (Vo ₂ /HR) Respiratory rate (RR) Minute ventilation/carbon dioxide output ratio (VE/Vco ₂) at VAT	Cardiopulmonary exercise test method using Medgraphics Ultima Pf and Corival Bicycle 912900 as documented in CRCSGH-QWI-LAB-3-035.

NO: SAMM 946

(Issue 02, 22 May 2026 replacement
of SAMM 946 dated 30 January 2026)

SITE LOCATION:

**MOLECULAR LABORATORY
LEVEL 1, PATHOLOGY DEPARTMENT
SARAWAK HEART CENTER
94300 KOTA SAMARAHAN
SARAWAK**

FIELDS OF MEDICAL TESTING: MOLECULAR GENETICS

Specimen Tested	Type of Test/ Properties Measured/	Test Methods, Specifications/ Equipment/Techniques Used
Whole Blood	Detection of Familial Hypercholesterolemia Genetic Variants for: 1) LDLR 2) APOB 3) PCSK9 4) LDLRAP1	DNA Sequencing method by using NGS (MiSeq) as documented in CRCSGH-QWI- LAB-7-018