



Name	: MD ASHRAFUL ALAM	Branch	: Penang Lab
PP	: A01856220	Lab No	: 11L0168842
DOB	: 12.12.1997	MRN	: HH1100382300
Age/Gender	: 26 y 1 m 17 d / Male	Location	: PENANG HEALTH SCREENING CENTRE
		Collected	: 29.01.2024 10:12:24
		Received	: 29.01.2024 10:13:32
		Reported	: 29.01.2024 12:12

Reference:
Page No : 1 / 6

Requester : DR Don Wyane Thakur Singh
Pantai Hospital Penang, 82, Jalan Tengah, Bayan Baru, Bayan Lepas, Pulau Pinang 11900

TEST	RESULT	FLAG	UNIT	REFERENCE RANGE
HAEMATOLOGY				
Full Blood Count				
Haemoglobin	15.2		g/dL	(13.0 - 18.0)
Red Blood Cell	5.39		x10 ¹² /L	(4.50 - 6.50)
Red Cell Distribution Width	13.0		%	(<14.3)
Packed Cell Volume	48		%	(40 - 54)
Mean Cell Volume	88		fL	(76 - 96)
Mean Cell Haemoglobin	28		pg	(28 - 34)
Mean Corpuscular Hb Concentration	32		g/dL	(30 - 36)
White Blood Cell	4.9		x10 ⁹ /L	(4.0 - 11.0)
Neutrophils (%)	46.1		%	(40.0 - 75.0)
Lymphocytes (%)	42.2		%	(20.0 - 45.0)
Monocytes (%)	7.8		%	(2.0 - 10.0)
Eosinophils (%)	3.1		%	(0.0 - 6.0)
Basophils (%)	0.8		%	(0.0 - 1.0)
Neutrophils (Absolute Value)	2.3		x10 ⁹ /L	(2.0 - 7.5)
Lymphocytes (Absolute Value)	2.1		x10 ⁹ /L	(1.5 - 4.5)
Monocytes (Absolute Value)	0.4		x10 ⁹ /L	(0.2 - 0.8)
Eosinophils (Absolute Value)	0.15		x10 ⁹ /L	(0.04 - 0.40)
Basophils (Absolute Value)	0.0		x10 ⁹ /L	
Platelet	194		x10 ⁹ /L	(150 - 400)
Erythrocyte Sedimentation Rate	2		mm/hr	(<31)

BLOOD BANK

Blood Group (ABO & Rh) AB Rh (D) Positive



Name	: MD ASHRAFUL ALAM	Branch	: Penang Lab
PP	: A01856220	Lab No	: 11L0168842
DOB	: 12.12.1997	MRN	: HH1100382300
Age/Gender	: 26 y 1 m 17 d / Male	Location	: PENANG HEALTH SCREENING CENTRE
		Collected	: 29.01.2024 10:12:24
		Received	: 29.01.2024 10:13:32
		Reported	: 29.01.2024 12:12

Reference:
Page No : 2 / 6

Requester : DR Don Wyane Thakur Singh
Pantai Hospital Penang, 82, Jalan Tengah, Bayan Baru, Bayan Lepas, Pulau Pinang 11900

TEST	RESULT	FLAG	UNIT	REFERENCE RANGE
BIOCHEMISTRY				
Liver Function Test				
Total Protein	76		g/L	(64 - 83)
Albumin	49		g/L	(35 - 50)
Globulin	27		g/L	(23 - 35)
Albumin-Globulin Ratio	1.81			
Alkaline Phosphatase	83		U/L	(56 - 167)
Aspartate Transaminase	22		U/L	(5 - 34)
Alanine Transaminase	22		U/L	(0 - 55)
Gamma-Glutamyl Transferase	32		U/L	(12 - 64)
Bilirubin, Total	31.5	*	umol/L	(3.4 - 20.5)
Bilirubin, Direct	7.4		umol/L	(0 - 8.6)
Bilirubin, Indirect	24.1	*	umol/L	(0 - 7.0)



Name : MD ASHRAFUL ALAM Branch : Penang Lab
PP : A01856220 Lab No : 11L0168842 Collected : 29.01.2024 10:12:24
DOB : 12.12.1997 MRN : HH1100382300 Received : 29.01.2024 10:13:32
Age/Gender : 26 y 1 m 17 d / Male Location : PENANG HEALTH SCREENING CENTRE Reported : 29.01.2024 12:12

Reference:

Page No : 3 / 6

Requester : DR Don Wyane Thakur Singh
Pantai Hospital Penang, 82, Jalan Tengah, Bayan Baru, Bayan Lepas, Pulau Pinang 11900

TEST	RESULT	FLAG	UNIT	REFERENCE RANGE
Renal Function Profile				
Sodium	141		mmol/L	(136 - 146)
Potassium	4.0		mmol/L	(3.5 - 5.1)
Chloride	106		mmol/L	(96 - 109)
Urea Nitrogen	3.2		mmol/L	(2.1 - 7.1)
Creatinine	77		umol/L	(53 - 106)
Estimated - GFR (CKD-EPI)	>90		ml/min/1.73m2	(>90)
Uric Acid	0.41		mmol/L	(0.22 - 0.45)
Glucose	4.9		mmol/L	(3.9 - 6.0)

Interpretation:

Category	Plasma Glucose (mmol/L)	
	Fasting	Random
Normal	3.9 - 6.0	3.9 - 7.7
IFG (Prediabetes)	6.1 - 6.9	
Indeterminate		7.8 - 11.0
Diabetes Mellitus	>=7.0	>=11.1

IFG: Impaired fasting glucose;

Recommend Oral Glucose Tolerance Test (OGTT) for fasting plasma glucose levels 6.1 - 6.9 mmol/L or random plasma glucose levels 7.8 - 11.0 mmol/L.

Source: 2020 Clinical Practice Guidelines for the Management of Type 2 Diabetes Mellitus (6th Edition). Kuala Lumpur: Joint Publication of the Ministry of Health Malaysia, Academy of Medicine Malaysia, Malaysian Endocrine & Metabolic Society and Diabetes Malaysia.



Name	: MD ASHRAFUL ALAM	Branch	: Penang Lab
PP	: A01856220	Lab No	: 11L0168842
DOB	: 12.12.1997	MRN	: HH1100382300
Age/Gender	: 26 y 1 m 17 d / Male	Location	: PENANG HEALTH SCREENING CENTRE
		Collected	: 29.01.2024 10:12:24
		Received	: 29.01.2024 10:13:32
		Reported	: 29.01.2024 12:12

Reference: **Page No** : 4 / 6

Requester : DR Don Wyane Thakur Singh
Pantai Hospital Penang, 82, Jalan Tengah, Bayan Baru, Bayan Lepas, Pulau Pinang 11900

TEST	RESULT	FLAG	UNIT	REFERENCE RANGE
------	--------	------	------	-----------------

Glycated Haemoglobin (HbA1c)

HbA1c, NGSP unit	5.4		%	(<5.7)
HbA1c, SI unit	36		mmol/mol	

(Method: Ion exchange HPLC)

Diagnostic Values of HbA1c in Malaysian Adults

HbA1c (NGSP) %	HbA1c (IFCC) mmol/mol	
< 5.7	< 39	Normal
5.7-6.2	39-44	*Prediabetes (IFG or IGT)
≥ 6.3**	≥ 45**	T2DM

IFG: Impaired fasting glucose; IGT: Impaired Glucose Tolerance;
OGTT: Oral Glucose Tolerance Test; T2DM: Type 2 Diabetes Mellitus

*Recommend OGTT for HbA1c levels 5.7-6.2%.

**As type 1 diabetes mellitus (T1DM) may develop rapidly, HbA1c may not be raised, and cannot be used reliably to diagnose T1DM.

Individualised HbA1c Target for Known Diabetes

HbA1c (NGSP) %	HbA1c (IFCC) mmol/mol	
≤ 6.5	≤ 48	A: Tight target range for young, newly diagnosed diabetes without hypoglycaemia.
6.6-7.0	49-53	B: Target range for all other individuals not in category A or C.
7.1-8.0	54-64	C: Target range for diabetes and comorbidities, short life expectancy and/or prone to hypoglycaemia.

Source: 2020 Clinical Practice Guidelines for the Management of Type 2 Diabetes Mellitus (6th Edition). Kuala Lumpur: Joint Publication of the Ministry of Health Malaysia, Academy of Medicine Malaysia, Malaysian Endocrine & Metabolic Society and Diabetes Malaysia.



Name	: MD ASHRAFUL ALAM	Branch	: Penang Lab
PP	: A01856220	Lab No	: 11L0168842
DOB	: 12.12.1997	MRN	: HH1100382300
Age/Gender	: 26 y 1 m 17 d / Male	Location	: PENANG HEALTH SCREENING CENTRE
		Collected	: 29.01.2024 10:12:24
		Received	: 29.01.2024 10:13:32
		Reported	: 29.01.2024 12:12

Reference:
Page No : 5 / 6

Requester : DR Don Wyane Thakur Singh
Pantai Hospital Penang, 82, Jalan Tengah, Bayan Baru, Bayan Lepas, Pulau Pinang 11900

TEST	RESULT	FLAG	UNIT	REFERENCE RANGE
Lipid Profile				
Cholesterol, Total	6.3	*	mmol/L	(<5.2)
Cholesterol, HDL	1.1		mmol/L	(>1)
Cholesterol, Non-HDL	5.2	*	mmol/L	(<3.4)
Cholesterol, LDL	4.6	*	mmol/L	(<2.6)
Triglycerides	1.4		mmol/L	(<1.7)
Cholesterol/HDL Ratio	5.7	*		(<3.5)

IMMUNOLOGY & SEROLOGY

Hepatitis Bs Antigen	Non-Reactive		
Hepatitis Bs Antibody	Non-Reactive (<10 IU/L)	IU/L	(Reactive (>10))

FEME

Urine FEME

Appearance	Clear		
Colour	Yellow		
pH	6.0		(5.0 - 8.0)
Urine Specific Gravity	1.004	*	(1.005 - 1.030)
Urine Nitrite	Negative		
Urine Protein	Negative		
Urine Glucose	Negative		
Urine Ketone	Negative		
Urine Urobilinogen	3.2		umol/L (<16)
Urine Bilirubin	Negative		
Urine Blood	Negative		
Urine Leucocytes	Negative		

Microscopic Examination

Red Blood Cell	Nil	/uL	(<4)
White Blood Cell	Nil	/uL	(<7)
Epithelial Cell	Nil	/uL	
Crystal	Nil		
Cast	Nil		
Bacteria	Nil		
Mucus	Nil		
Other	Nil		

This e-report is copyrighted and contains confidential medical information of the patient named above ('patient') that is intended solely for the use of Premier Integrated Labs, the patient and the healthcare professional rendering healthcare services to the patient. The e-report is the property of Premier Integrated Labs, and may not be reproduced or distributed save as otherwise stated herein in any manner without the express written permission of Premier Integrated Labs. Premier Integrated Labs shall not be responsible or liable in any manner whatsoever either for the receipt or non- receipt of the e-report by the patient or any delay thereof for any reason whatsoever and shall not be held liable for any unauthorized modification of the e-report. Premier Integrated Labs assumes no liability for any errors or omissions in the content of this e-report. Premier Integrated Labs does not assume any risk for your use of any information provided in this e-report. References to specific treatments, products, or services do not constitute or imply recommendation by Premier Integrated Labs and the patient is recommended to consult a healthcare professional of his/her choice to interpret the e-report. In case of any discrepancy found between the e-report and the original report, the original shall be deemed final.



Name	: MD ASHRAFUL ALAM	Branch	: Penang Lab
PP	: A01856220	Lab No	: 11L0168842
DOB	: 12.12.1997	MRN	: HH1100382300
Age/Gender	: 26 y 1 m 17 d / Male	Location	: PENANG HEALTH SCREENING CENTRE
		Reference:	
Requester	: DR Don Wyane Thakur Singh	Page No	: 6 / 6
	Pantai Hospital Penang, 82, Jalan Tengah, Bayan Baru, Bayan Lepas, Pulau Pinang 11900		

Test(s) requested: BILSF,ZHBA1,PHP1

Specimen Received: EDTAB,PLSF,S,U