

Patient Name	: Mr. BILAL MUNIR MUHAMMAD MUNIR	Sample UID No.	: G4112885F
Age / Gender	: 35 Y / Male	Sample Collected On	: 26-08-2025 10:25
Patient ID	: QLD112336	Registered On	: 26-08-2025 16:10
Referred By	: Dr. AISHA	Reported on	: 27-08-2025 06:59
Referral Client	: CITICARE MEDICAL CENTER(INSURANCE)	External Patient ID	: 31449
Emirates ID / Passport No	:	Print Version	: V.1

Department of BIOCHEMISTRY

<u>Investigation</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>Biological Reference Interval</u>	<u>Method</u>
GLUCOSE (FASTING)	73	L	mg/dL	74 - 109	Hexokinase

Sample: Fluoride Plasma

Comments :

CLINICAL IMPLICATIONS:

ADA criteria for definitive test for diabetes:

- 1) Fasting blood glucose > 126 mg/dl (> 6.99 mmol/l) on at least two occasions.
- 2) Symptoms of diabetes plus random blood glucose > 200 mg/dl (> 11.1 mmol/l)
- 3) OGTT with 2 hrs. post load (75 gm glucose load) > 200 mg/dl (> 11.1 mmol/l) 4) HbA1c > 6.5%

INTERFERING FACTORS:

- 1) Steroids, diuretics, pregnancy, surgical procedures, anesthesia, obesity, smoking may cause elevated glucose levels.
- 2) Hematocrit > 55%, intense exercise, drug intake may cause lowered glucose level.
- 3) Dawn Phenomenon-Increase in blood glucose typically between 4.00am and 8.00 am due to counter-regulatory hormones.

RECOMMENDATION: As mild borderline cases may present with normal fasting glucose levels, recommended repeat testing different day.

REFERENCE: 1) Manual of Laboratory and Diagnostics -Frances Fischbach Marshall B. Dunning III [9th Edition]
2) Tietz clinical guide to Laboratory tests(Fourth edition) ALAN H.B.WU

"QLabs compliance with ISO 15189:2022 standards"

Sheik Mohammed Irfan

Sheik mohammed Irfan
Lab Technician

DHA No : 27218690-001



Dr. Vidhya Mohan

Dr. Vidhya Mohan
Specialist Clinical Pathologist
Clinical Pathologist
DHA No. 23553203-004

Dr. Dheepa Manoharan

Dr. Dheepa Manoharan
Medical Director
Specialist Microbiologist
DHA No. 00231751-004

Patient Name	: Mr. BILAL MUNIR MUHAMMAD MUNIR	Sample UID No.	: 4112885
Age / Gender	: 35 Y / Male	Sample Collected On	: 26-08-2025 10:25
Patient ID	: QLD112336	Registered On	: 26-08-2025 16:10
Referred By	: Dr. AISHA	Reported on	: 26-08-2025 17:37
Referral Client	: CITICARE MEDICAL CENTER(INSURANCE)	External Patient ID	: 31449
Emirates ID / Passport No	:	Print Version	: V.1

Department of BIOCHEMISTRY

Investigation	Results	Flag	Units	Biological Reference Interval	Method
* C-REACTIVE PROTEIN (CRP)	1.6		mg/L	< 5	Particle enhanced immunoturbidimetric assay

Sample: Serum

Comments :

CLINICAL IMPLICATIONS:

1. CRP is the most sensitive acute phase reactant that can increase dramatically (100-fold or more) after severe trauma, bacterial infection, inflammation, surgery or neoplastic proliferation. CRP levels may predict future cardiovascular events and can be used as a screening tool.
2. The traditional test of CRP has added significance over the elevated ESR, which may be influenced by altered physiologic states. CRP tends to increase before rises in antibody titres and ESR level occurs. CRP levels also tend to decrease sooner than ESR levels.
3. The traditional test for CRP is elevated in rheumatic fever, RA, myocardial infarction, malignancy, bacterial and viral infections. The positive test indicates active inflammation but not its cause. In RA, the traditional test for CRP becomes negative with successful treatment and indicates that the inflammation has subsided.
4. High sensitive measurement of CRP (hs-CRP) are useful in assessing vascular inflammation and cardiovascular stratification. A single test for hs-CRP may not reflect an individual patient basal hs-CRP level, therefore follow up tests or serial measurements may be required in patients presenting with increased hs-CRP levels.

INTERFERING FACTORS: Haemolysed or lipemic sample may alter the results.

REFERENCE:

- 1) Manual of Laboratory and Diagnostics -Frances Fischbach Marshall B. Dunning III [9th Edition]
- 2) Tietz clinical guide to Laboratory tests(Fourth edition) ALAN H.B.WU

Note:

"The analytes with asterisk (*) symbol are non-accredited parameters."
"QLabs compliance with ISO 15189:2022 standards"



Sheik mohammed Irfan
Lab Technician

DHA No : 27218690-001





Dr. Vidhya Mohan
Specialist Clinical Pathologist
Clinical Pathologist
DHA No. 23553203-004



Dr. Dheepa Manoharan
Medical Director
Specialist Microbiologist
DHA No. 00231751-004

Patient Name	: Mr. BILAL MUNIR MUHAMMAD MUNIR	Sample UID No.	: 4112885
Age / Gender	: 35 Y / Male	Sample Collected On	: 26-08-2025 10:25
Patient ID	: QLD112336	Registered On	: 26-08-2025 16:10
Referred By	: Dr. AISHA	Reported on	: 27-08-2025 06:59
Referral Client	: CITICARE MEDICAL CENTER(INSURANCE)	External Patient ID	: 31449
Emirates ID / Passport No	:	Print Version	: V.1

Department of BIOCHEMISTRY

LIPID PROFILE TEST

<u>Investigation</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>Biological Reference Interval</u>	<u>Method</u>
CHOLESTEROL (TOTAL)	188		mg/dl	Desirable: < 200 Borderline High: 200-239 High: > 240	Enzymatic colorimetric assay
TRIGLYCERIDES	176	H	mg/dl	Normal Up to 150 Borderline-High 150-199 High 200-499 Very High > 500	Enzymatic colorimetric test
HDL CHOLESTEROL	33		mg/dl	High risk up to 40 Low risk > 60	Homogeneous Enzymatic Colorimetric
LDL CHOLESTEROL DIRECT	126		mg/dl	Optimal up to < 100 Near Optimal: 100-129 Borderline : 130-159 High: 160-189 Very High: > 190	Enzymatic, colorimetric method
VLDL CHOLESTEROL	35		mg/dl	10-35	Calculation
NON-HDL CHOLESTEROL	155	H	mg/dl	Desirable < 130 Borderline 130 – 159 High >159	Calculation
TOTAL CHOLESTEROL / HDL RATIO	5.7	H	--	< 4.5	Calculation
LDL / HDL RATIO	3.8		--	Low Risk < 3.0 Borderline 3.1-6.0 High Risk >6.0	Calculation

Interpretation Notes :

CLINICAL IMPLICATIONS:

1. Cholesterol testing evaluates the risk for atherosclerosis, myocardial occlusion, and coronary artery occlusion. Elevated cholesterol levels are a major component in the hereditary hyper lipoproteinemia. It is also used to monitor effectiveness of diet, medications, lifestyle, and stress management.
2. The cholesterol to HDL ratio provides more information than does either value alone. When a slightly increased cholesterol is due to high HDL, therapy is not indicated.
3. LDL cholesterol has a longer shelf life and determines the CHD risk.

INTERFERING FACTORS:

1. Seasonal and positional variations may alter cholesterol levels. Estrogens, ascorbic acid, bilirubin decrease the cholesterol levels. Pregnancy, bile salt, high saturated fat, and high cholesterol diet may increase the cholesterol values. Prolonged fasting with ketosis may increase the value.
2. Increased levels of HDL may be associated with estrogen therapy, drugs like steroids, alcohol and insulin therapy. Decreased levels are associated with stress, recent illness, starvation, obesity, smoking, hyper triglyceridemia, lack of exercise.
3. Increased LDL may be associated with pregnancy, drugs like steroids. Decreased LDL are found in women under estrogen therapy. No fasting may cause false elevation.
4. A transient increase in triglycerides occurs following heavy meal, alcohol ingestion, pregnancy, acute illness like cold ,flu, obesity, physical inactivity ,smoking. Transient decrease occurs after strenuous exercise, weight loss.

"QLabs compliance with ISO 15189:2022 standards"

Maqsood Rahman

Maqsood Rahman
Lab Technologist

DHA No:48036476-001



Dr. Vidhya Mohan

Dr. Vidhya Mohan
Specialist Clinical Pathologist
Clinical Pathologist
DHA No. 23553203-004

Dr. Dheepa Manoharan

Dr. Dheepa Manoharan
Medical Director
Specialist Microbiologist
DHA No. 00231751-004

Patient Name	: Mr. BILAL MUNIR MUHAMMAD MUNIR	Sample UID No.	: 4112885
Age / Gender	: 35 Y / Male	Sample Collected On	: 26-08-2025 10:25
Patient ID	: QLD112336	Registered On	: 26-08-2025 16:10
Referred By	: Dr. AISHA	Reported on	: 27-08-2025 06:59
Referral Client	: CITICARE MEDICAL CENTER(INSURANCE)	External Patient ID	: 31449
Emirates ID / Passport No	:	Print Version	: V.1

Department of BIOCHEMISTRY

LIPID PROFILE TEST

Investigation **Results** **Flag** **Units** **Biological Reference Interval** **Method**

RECOMMENDATION:

1. Cholesterol levels >200 mg/dl should be retested and the results averaged and if the results differ by > than 10%, a third test need to be done for confirmation. Perform a comprehensive lipoprotein analysis if cholesterol levels are not lowered within 6 months after start of therapy. If the values are altered in a normal condition, recommended to follow a stable diet for 1 week and overnight fasting (9 to 12 hours) before repeating the test.
2. Cholesterol and HDL should not be measured immediately after MI. A 3 month wait is suggested.
3. If triglyceride levels are more than 400mg/dl or >10.36mmol/L recommended to fast overnight(9 to 12 hours) and retest .Because of biological and analytical variation, at least 2 serial sample may be necessary for clinical decision making. VLDL cannot be calculated if triglycerides are more than 400mg/dl

REFERENCE: 1) Manual of Laboratory and Diagnostics -Frances Fischbach Marshall B. Dunning III [9th Edition]
2) Tietz clinical guide to Laboratory tests(Fourth edition) ALAN H.B.WU

Sample: Serum

"QLabs compliance with ISO 15189:2022 standards"

Maqsood Rahman

Maqsood Rahman
Lab Technologist

DHA No:48036476-001



Dr. Vidhya Mohan

Dr. Vidhya Mohan
Specialist Clinical Pathologist
Clinical Pathologist
DHA No. 23553203-004

Dr. Dheepa Manoharan

Dr. Dheepa Manoharan
Medical Director
Specialist Microbiologist
DHA No. 00231751-004

Patient Name	: Mr. BILAL MUNIR MUHAMMAD MUNIR	Sample UID No.	: 4112885
Age / Gender	: 35 Y / Male	Sample Collected On	: 26-08-2025 10:25
Patient ID	: QLD112336	Registered On	: 26-08-2025 16:10
Referred By	: Dr. AISHA	Reported on	: 26-08-2025 21:08
Referral Client	: CITICARE MEDICAL CENTER(INSURANCE)	External Patient ID	: 31449
Emirates ID / Passport No	:	Print Version	: V.1

Department of BIOCHEMISTRY

LIVER FUNCTION TEST

<u>Investigation</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>Biological Reference Interval</u>	<u>Method</u>
ALT / SGPT	35.6		U/L	10-50	IFCC with P5P
AST / SGOT	37		U/L	10-50	IFCC with P5P
ALP (ALKALINE PHOSPHATASE)	75		U/L	40-129	Colorimetric assay
GGT (GAMMA GLUTAMYL TRANSFERASE)	18		U/L	8-61	Enzymatic colorimetric assay
BILIRUBIN (TOTAL)	0.6		mg/dl	0.1-1.2	Diazo
BILIRUBIN (DIRECT)	0.24		mg/dl	0-0.3	Diazo
INDIRECT BILIRUBIN	0.36		mg/dl	0-1.1	Calculated Parameter
TOTAL PROTEIN	7.3		g/dl	6.6-8.7	Colorimetric assay
ALBUMIN (SERUM)	4.3		g/dl	3.97-4.94	Colorimetric assay
GLOBULIN	3.0		g/dl	2.35 - 3.5	Calculated Parameter
A/G RATIO	1.4			1.1-2.5	Calculated Parameter

Interpretation Notes :

CLINICAL IMPLICATIONS:

- 1) Total Bilirubin elevation accompanied by jaundice is due to hepatic, obstructive, hemolytic and blood group compatibility.
- 2) Increase albumin is associated with dehydration and decrease is due to acute and chronic inflammation, burns and heart failure.
- 3) Although AST levels always increase in acute MI, ALT level doesn't always increase unless there also liver damage.
- 4) ALT is usually increased more than AST in acute extra hepatic biliary obstruction.
- 5) ALT is more specific than AST for liver disease but AST is more sensitive to liver disease.
- 6) Alkaline phosphatase normal values are higher in pediatric patient and in pregnancy. Values may increase up to 3 times in puberty.
- 7) GGT is used to confirm biliary abnormality and is elevated in hepatobiliary disease but not in uncomplicated bone disease.
- 8) GGT values are higher in new born, first 3 to 6 month . Adult male have 25% higher values than female.

"QLabs compliance with ISO 15189:2022 standards"

Maqsood Rahman

Maqsood Rahman
Lab Technologist

DHA No:48036476-001



Dr. Vidhya Mohan

Dr. Vidhya Mohan
Specialist Clinical Pathologist
Clinical Pathologist
DHA No. 23553203-004

Dr. Dheepa Manoharan

Dr. Dheepa Manoharan
Medical Director
Specialist Microbiologist
DHA No. 00231751-004

Patient Name	: Mr. BILAL MUNIR MUHAMMAD MUNIR	Sample UID No.	: 4112885
Age / Gender	: 35 Y / Male	Sample Collected On	: 26-08-2025 10:25
Patient ID	: QLD112336	Registered On	: 26-08-2025 16:10
Referred By	: Dr. AISHA	Reported on	: 26-08-2025 21:08
Referral Client	: CITICARE MEDICAL CENTER(INSURANCE)	External Patient ID	: 31449
Emirates ID / Passport No	:	Print Version	: V.1

Department of BIOCHEMISTRY

LIVER FUNCTION TEST

Investigation **Results** **Flag** **Units** **Biological Reference Interval** **Method**

INTERFERING FACTORS:

- 1) Certain foods like carrots, yam, drugs, anorexia, prolonged fasting may falsely increase bilirubin level.
- 2) Albumin levels may reduce in pregnancy, over hydration, edema, drugs, obesity.
- 3) Young children, pregnant women, post-menopausal women have physiological high level of ALT. Alkaline phosphatase increase after fatty meal.
- 4) Slight reduce level of AST can be seen during pregnancy and false reduced level in severe liver disease.

REFERENCE: 1) Manual of Laboratory and Diagnostics -Frances Fischbach Marshall B. Dunning III [9th Edition]
2) Tietz clinical guide to Laboratory tests(Fourth edition) ALAN H.B.WU

Sample: Serum

"QLabs compliance with ISO 15189:2022 standards"

Maqsood Rahman

Maqsood Rahman
Lab Technologist

DHA No:48036476-001



Dr. Vidhya Mohan

Dr. Vidhya Mohan
Specialist Clinical Pathologist
Clinical Pathologist
DHA No. 23553203-004

Dr. Dheepa Manoharan

Dr. Dheepa Manoharan
Medical Director
Specialist Microbiologist
DHA No. 00231751-004

Patient Name	: Mr. BILAL MUNIR MUHAMMAD MUNIR	Sample UID No.	: EB4112885
Age / Gender	: 35 Y / Male	Sample Collected On	: 26-08-2025 10:25
Patient ID	: QLD112336	Registered On	: 26-08-2025 16:10
Referred By	: Dr. AISHA	Reported on	: 27-08-2025 06:59
Referral Client	: CITICARE MEDICAL CENTER(INSURANCE)	External Patient ID	: 31449
Emirates ID / Passport No	:	Print Version	: V.1

Department of HEMATOLOGY

COMPREHENSIVE COMPLETE BLOOD COUNT

<u>Investigation</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<u>Biological Reference Interval</u>	<u>Method</u>
HEMOGLOBIN	14.3		g/dl	13-17	photometric
RBC COUNT	5.15		10 ⁶ /uL	4.5-5.5	Electrical Impedance
HEMATOCRIT	42		%	42-52	Calculation
MCV	81.5		fL	78-100	Calculation
MCH	27.8		pg	27-31	Calculation
MCHC	34.1		g/dl	31-35	Calculation
RDW	13.5		%	9.3-16	Calculation
RDW-SD	38.9		fL	38.9-49	Calculation
MPV	10.4		fL	8.8-12.5	Calculation
PLATELET COUNT	180		10 ³ /uL	150-400	Electrical Impedance
* PCT	0.2		%	0.01-9.99	Calculation
* PDW	16.9			0.1-99.9	Calculation
* NUCLEATED RBC (NRBC)^	0.05		/100 WBC		Flow Cytometry
* ABSOLUTE NRBC COUNT^	0		10 ³ /uL		Calculation
* EARLY GRANULOCYTE COUNT (EGC)^	0.27		%		Flow Cytometry
* ABSOLUTE EGC^	0.02		10 ³ /uL		Calculation
WBC COUNT	6.4		10 ³ /uL	4-11	Electrical Impedance
* Neutrophil	58.96		%	40-80	VCS-Method
* Lymphocyte	28.71		%	20-40	VCS-Method
* Eosinophil	4.54		%	1-8	VCS-Method
* Monocyte	7.51		%	2-10	VCS-Method
* Basophil	0.28		%	0-2	VCS-Method
* ABSOLUTE NEUTROPHIL COUNT	3.77		10 ³ /uL	1.5-7	Calculation
* ABSOLUTE LYMPHOCYTE COUNT	1.83		10 ³ /uL	1.5-4	Calculation
* ABSOLUTE MONOCYTE COUNT	0.48		10 ³ /uL	0-0.8	Calculation
* ABSOLUTE EOSINOPHIL COUNT	0.29		10 ³ /uL	0-0.6	Calculation
* ABSOLUTE BASOPHIL COUNT	0.02		10 ³ /uL	0-0.2	Calculation

Sample: EDTA Whole Blood

- END OF REPORT -

Note:

"The analytes with asterisk (*) symbol are non-accredited parameters."

"QLabs compliance with ISO 15189:2022 standards"



Ebin C Lorange
Lab Technologist

DHA No. 57146854-002





Dr. Vidhya Mohan
Specialist Clinical Pathologist
Clinical Pathologist

DHA No. 23553203-004

Page 7 of 7