

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 **Register On** : 26/02/2022 9:29 AM
SID No. : 422012372 **Collection On** : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s)/ Female **Report On** : 01/03/2022 11:18 AM
Type : OP **Printed On** : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
----------------------	-----------------------	-------------	--------------------------------------


HAEMATOLOGY

Complete Blood Count With - ESR

Haemoglobin (EDTA Blood/Spectrophotometry)	13.0	g/dL	12.5 - 16.0
Packed Cell Volume(PCV)/Haematocrit (EDTA Blood/Derived from Impedance)	41.0	%	37 - 47
RBC Count (EDTA Blood/Impedance Variation)	4.82	mill/cu.mm	4.2 - 5.4
Mean Corpuscular Volume(MCV) (EDTA Blood/Derived from Impedance)	85.0	fL	78 - 100
Mean Corpuscular Haemoglobin(MCH) (EDTA Blood/Derived from Impedance)	26.9	pg	27 - 32
Mean Corpuscular Haemoglobin concentration(MCHC) (EDTA Blood/Derived from Impedance)	31.6	g/dL	32 - 36
RDW-CV (EDTA Blood/Derived from Impedance)	14.5	%	11.5 - 16.0
RDW-SD (EDTA Blood/Derived from Impedance)	43.14	fL	39 - 46
Total Leukocyte Count (TC) (EDTA Blood/Impedance Variation)	9910	cells/cu.mm	4000 - 11000
Neutrophils (EDTA Blood/Impedance Variation & Flow Cytometry)	66.23	%	40 - 75
Lymphocytes (EDTA Blood/Impedance Variation & Flow Cytometry)	26.33	%	20 - 45


DR MANJUNATHA T.M
 Consultant Pathologist
 KMC Reg No . 112205


VERIFIED BY


DR SHAMIM JAVED
 MD PATHOLOGY
 KMC 88902


APPROVED BY

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 **Register On** : 26/02/2022 9:29 AM
SID No. : 422012372 **Collection On** : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s) / Female **Report On** : 01/03/2022 11:18 AM
Type : OP **Printed On** : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
Eosinophils (EDTA Blood/Impedance Variation & Flow Cytometry)	2.53	%	01 - 06
Monocytes (EDTA Blood/Impedance Variation & Flow Cytometry)	4.75	%	01 - 10
Basophils (Blood/Impedance Variation & Flow Cytometry)	0.16	%	00 - 02
Absolute Neutrophil count (EDTA Blood/Impedance Variation & Flow Cytometry)	6.56	10 ³ / µl	1.5 - 6.6
Absolute Lymphocyte Count (EDTA Blood/Impedance Variation & Flow Cytometry)	2.61	10 ³ / µl	1.5 - 3.5
Absolute Eosinophil Count (AEC) (EDTA Blood/Impedance Variation & Flow Cytometry)	0.25	10 ³ / µl	0.04 - 0.44
Absolute Monocyte Count (EDTA Blood/Impedance Variation & Flow Cytometry)	0.47	10 ³ / µl	< 1.0
Absolute Basophil count (EDTA Blood/Impedance Variation & Flow Cytometry)	0.02	10 ³ / µl	< 0.2
Platelet Count (EDTA Blood/Impedance Variation)	273.3	10 ³ / µl	150 - 450
MPV (EDTA Blood/Derived from Impedance)	9.80	fL	8.0 - 13.3
PCT (EDTA Blood/Automated Blood cell Counter)	0.27	%	0.18 - 0.28
ESR (Erythrocyte Sedimentation Rate) (Citratd Blood/Modified Westergren)	56	mm/hr	< 20


DR MANJUNATHA T.M
 Consultant Pathologist
 KMC Reg No : 112205

VERIFIED BY


DR SHAMIM JAVED
 MD PATHOLOGY
 KMC 88902

APPROVED BY

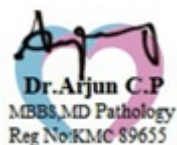
Name : Ms. D VUNGLALZOU
PID No. : MED110999489 **Register On** : 26/02/2022 9:29 AM
SID No. : 422012372 **Collection On** : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s)/ Female **Report On** : 01/03/2022 11:18 AM
Type : OP **Printed On** : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
----------------------	-----------------------	-------------	--------------------------------------

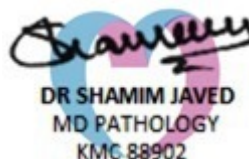
BIOCHEMISTRY

Liver Function Test

Bilirubin(Total) (Serum/Diazotized Sulfanilic Acid)	0.4	mg/dL	0.1 - 1.2
Bilirubin(Direct) (Serum/Diazotized Sulfanilic Acid)	0.1	mg/dL	0.0 - 0.3
Bilirubin(Indirect) (Serum/Derived)	0.3	mg/dL	0.1 - 1.0
Total Protein (Serum/Biuret)	8.4	gm/dL	6.0 - 8.0
Albumin (Serum/Bromocresol green)	5.0	gm/dL	3.5 - 5.2
Globulin (Serum/Derived)	3.4	gm/dL	2.3 - 3.6
A : G Ratio (Serum/Derived)	1.3		1.1 - 2.2
SGOT/AST (Aspartate Aminotransferase) (Serum/IFCC Kinetic)	23	U/L	5 - 40
SGPT/ALT (Alanine Aminotransferase) (Serum/IFCC / Kinetic)	20	U/L	5 - 41
Alkaline Phosphatase (SAP) (Serum/IFCC Kinetic)	101	U/L	42 - 98
GGT(Gamma Glutamyl Transpeptidase) (Serum/SZASZ standarised IFCC)	21	U/L	< 38



VERIFIED BY




APPROVED BY

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 **Register On** : 26/02/2022 9:29 AM
SID No. : 422012372 **Collection On** : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s)/ Female **Report On** : 01/03/2022 11:18 AM
Type : OP **Printed On** : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
<u>Lipid Profile</u>			
Cholesterol Total (Serum/Cholesterol oxidase/Peroxidase)	180	mg/dL	Optimal: < 200 Borderline: 200 - 239 High Risk: >= 240
Triglycerides (Serum/Glycerol phosphate oxidase / peroxidase)	91	mg/dL	Optimal: < 150 Borderline: 150 - 199 High: 200 - 499 Very High: >= 500


INTERPRETATION: The reference ranges are based on fasting condition. Triglyceride levels change drastically in response to food, increasing as much as 5 to 10 times the fasting levels, just a few hours after eating. Fasting triglyceride levels show considerable diurnal variation too. There is evidence recommending triglycerides estimation in non-fasting condition for evaluating the risk of heart disease and screening for metabolic syndrome, as non-fasting sample is more representative of the usual circulating level of triglycerides during most part of the day.

HDL Cholesterol (Serum/Immunoinhibition)	52	mg/dL	Optimal(Negative Risk Factor): >= 60 Borderline: 50 - 59 High Risk: < 50
LDL Cholesterol (Serum/Calculated)	109.8	mg/dL	Optimal: < 100 Above Optimal: 100 - 129 Borderline: 130 - 159 High: 160 - 189 Very High: >= 190
VLDL Cholesterol (Serum/Calculated)	18.2	mg/dL	< 30
Non HDL Cholesterol (Serum/Calculated)	128.0	mg/dL	Optimal: < 130 Above Optimal: 130 - 159 Borderline High: 160 - 189 High: 190 - 219 Very High: >= 220



Dr. Arjun C.P
 MBBS, MD Pathology
 Reg No: KMC 89655

VERIFIED BY



DR SHAMIM JAVED
 MD PATHOLOGY
 KMC 88902

APPROVED BY

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 **Register On** : 26/02/2022 9:29 AM
SID No. : 422012372 **Collection On** : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s) / Female **Report On** : 01/03/2022 11:18 AM
Type : OP **Printed On** : 01/03/2022 3:18 PM
Ref. Dr : MediWheel


<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
----------------------	-----------------------	-------------	--------------------------------------

INTERPRETATION: 1.Non-HDL Cholesterol is now proven to be a better cardiovascular risk marker than LDL Cholesterol.
 2.It is the sum of all potentially atherogenic proteins including LDL, IDL, VLDL and chylomicrons and it is the "new bad cholesterol" and is a co-primary target for cholesterol lowering therapy.

Total Cholesterol/HDL Cholesterol Ratio (Serum/Calculated)	3.5		Optimal: < 3.3 Low Risk: 3.4 - 4.4 Average Risk: 4.5 - 7.1 Moderate Risk: 7.2 - 11.0 High Risk: > 11.0
---	-----	--	--


Triglyceride/HDL Cholesterol Ratio (TG/HDL) (Serum/Calculated)	1.8		Optimal: < 2.5 Mild to moderate risk: 2.5 - 5.0 High Risk: > 5.0
--	-----	--	--

LDL/HDL Cholesterol Ratio (Serum/Calculated)	2.1		Optimal: 0.5 - 3.0 Borderline: 3.1 - 6.0 High Risk: > 6.0
---	-----	--	---



Dr. Arjun C.P
 MBBS, MD Pathology
 Reg No/KMC 89655

VERIFIED BY



DR SHAMIM JAVED
 MD PATHOLOGY
 KMC 88902

APPROVED BY

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 **Register On** : 26/02/2022 9:29 AM
SID No. : 422012372 **Collection On** : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s) / Female **Report On** : 01/03/2022 11:18 AM
Type : OP **Printed On** : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
<u>Glycosylated Haemoglobin (HbA1c)</u>			
HbA1C (Whole Blood/HPLC)	6.7	%	Normal: 4.5 - 5.6 Prediabetes: 5.7 - 6.4 Diabetic: >= 6.5

INTERPRETATION: If Diabetes - Good control : 6.1 - 7.0 % , Fair control : 7.1 - 8.0 % , Poor control >= 8.1 %

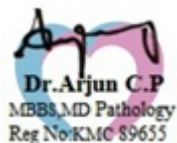
Estimated Average Glucose 145.59 mg/dL
(Whole Blood)

INTERPRETATION: Comments

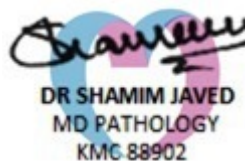
HbA1c provides an index of Average Blood Glucose levels over the past 8 - 12 weeks and is a much better indicator of long term glyceimic control as compared to blood and urinary glucose determinations.

Conditions that prolong RBC life span like Iron deficiency anemia, Vitamin B12 & Folate deficiency, hypertriglyceridemia, hyperbilirubinemia, Drugs, Alcohol, Lead Poisoning, Asplenia can give falsely elevated HbA1C values.

Conditions that shorten RBC survival like acute or chronic blood loss, hemolytic anemia, Hemoglobinopathies, Splenomegaly, Vitamin E ingestion, Pregnancy, End stage Renal disease can cause falsely low HbA1c.



VERIFIED BY



APPROVED BY

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 Register On : 26/02/2022 9:29 AM
SID No. : 422012372 Collection On : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s) / Female Report On : 01/03/2022 11:18 AM
Type : OP Printed On : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
----------------------	-----------------------	-------------	--------------------------------------

IMMUNOASSAY

THYROID PROFILE / TFT

T3 (Triiodothyronine) - Total (Serum/CMIA)	1.31	ng/mL	0.7 - 2.04
---	------	-------	------------

INTERPRETATION:

Comment :

Total T3 variation can be seen in other condition like pregnancy, drugs, nephrosis etc. In such cases, Free T3 is recommended as it is Metabolically active.

T4 (Thyroxine) - Total (Serum/CMIA)	10.33	µg/dL	4.2 - 12.0
--	-------	-------	------------

INTERPRETATION:

Comment :

Total T4 variation can be seen in other condition like pregnancy, drugs, nephrosis etc. In such cases, Free T4 is recommended as it is Metabolically active.

TSH (Thyroid Stimulating Hormone) (Serum/Chemiluminescent Microparticle Immunoassay(CMIA))	1.33	µIU/mL	0.35 - 5.50
--	------	--------	-------------

INTERPRETATION:

Reference range for cord blood - upto 20

1 st trimester: 0.1-2.5

2 nd trimester 0.2-3.0

3 rd trimester : 0.3-3.0

(Indian Thyroid Society Guidelines)

Comment :

1.TSH reference range during pregnancy depends on Iodine intake, TPO status, Serum HCG concentration, race, Ethnicity and BMI.

2.TSH Levels are subject to circadian variation, reaching peak levels between 2-4am and at a minimum between 6-10PM.The variation can be of the order of 50%,hence time of the day has influence on the measured serum TSH concentrations.

3.Values$0.03 \mu\text{IU/mL}$ need to be clinically correlated due to presence of rare TSH variant in some individuals.



DR SHAMIM JAVED
MD PATHOLOGY
KMC 88902
APPROVED BY

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 Register On : 26/02/2022 9:29 AM
SID No. : 422012372 Collection On : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s) / Female Report On : 01/03/2022 11:18 AM
Type : OP Printed On : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
----------------------	-----------------------	-------------	--------------------------------------


IMMUNOHAEMATOLOGY

BLOOD GROUPING AND Rh TYPING (EDTA Blood/Agglutination)	'B' Positive'		
--	---------------	--	--



Dr. Arjun C.P
MBBS, MD Pathology
Reg No:KMC 89655

VERIFIED BY



DR SHAMIM JAVED
MD PATHOLOGY
KMC 88902

APPROVED BY

Name : Ms. D VUNGLALZOU
PID No. : MED110999489 **Register On** : 26/02/2022 9:29 AM
SID No. : 422012372 **Collection On** : 26/02/2022 9:56 AM
Age / Sex : 34 Year(s)/ Female **Report On** : 01/03/2022 11:18 AM
Type : OP **Printed On** : 01/03/2022 3:18 PM
Ref. Dr : MediWheel

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
<u>BIOCHEMISTRY</u>			
BUN / Creatinine Ratio	10		6 - 22
Glucose Fasting (FBS) (Plasma - F/GOD - POD)	126	mg/dL	Normal: < 100 Pre Diabetic: 100 - 125 Diabetic: >= 126

INTERPRETATION: Factors such as type, quantity and time of food intake, Physical activity, Psychological stress, and drugs can influence blood glucose level.

Glucose Postprandial (PPBS) (Plasma - PP/GOD - POD)	110	mg/dL	70 - 140
--	-----	-------	----------

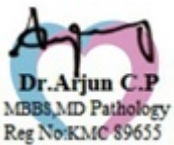
INTERPRETATION:

Factors such as type, quantity and time of food intake, Physical activity, Psychological stress, and drugs can influence blood glucose level. Fasting blood glucose level may be higher than Postprandial glucose, because of physiological surge in Postprandial Insulin secretion, Insulin resistance, Exercise or Stress, Dawn Phenomenon, Somogyi Phenomenon, Anti-diabetic medication during treatment for Diabetes.

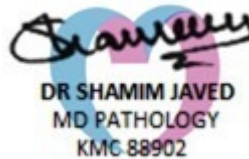
Blood Urea Nitrogen (BUN) (Serum/Urease-GLDH)	9	mg/dL	7.0 - 21
Creatinine (Serum/Jaffe Kinetic)	0.9	mg/dL	0.6 - 1.1

INTERPRETATION: Elevated Creatinine values are encountered in increased muscle mass, severe dehydration, Pre-eclampsia, increased ingestion of cooked meat, consuming Protein/ Creatine supplements, Diabetic Ketoacidosis, prolonged fasting, renal dysfunction and drugs such as cefoxitin ,cefazolin, ACE inhibitors ,angiotensin II receptor antagonists,N-acetylcyteine , chemotherapeutic agent such as flucytosine etc.

Uric Acid (Serum/Uricase/Peroxidase)	4.6	mg/dL	2.6 - 6.0
---	-----	-------	-----------



VERIFIED BY



APPROVED BY

-- End of Report --