

(A Unit of KOS Healthcare)



Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

COLLECTED BY: SURJESH REG. NO./LAB NO. : 012503250022

 REFERRED BY
 : 25/Mar/2025 09:52 AM

 BARCODE NO.
 : 01527720
 COLLECTION DATE
 : 25/Mar/2025 09:55AM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 25/Mar/2025 10:52AM

**CLIENT ADDRESS**: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

### SWASTHYA WELLNESS PANEL: G COMPLETE BLOOD COUNT (CBC)

#### RED BLOOD CELLS (RBCS) COUNT AND INDICES

HAEMOGLOBIN (HB) by CALORIMETRIC	12.4	gm/dL	12.0 - 16.0
RED BLOOD CELL (RBC) COUNT by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	5.3 <sup>H</sup>	Millions/cmm	3.50 - 5.00
PACKED CELL VOLUME (PCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	40.1	%	37.0 - 50.0
MEAN CORPUSCULAR VOLUME (MCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	75.6 <sup>L</sup>	fL	80.0 - 100.0
MEAN CORPUSCULAR HAEMOGLOBIN (MCH) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	23.4 <sup>L</sup>	pg	27.0 - 34.0
MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	31 <sup>L</sup>	g/dL	32.0 - 36.0
RED CELL DISTRIBUTION WIDTH (RDW-CV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	15.6	%	11.00 - 16.00
RED CELL DISTRIBUTION WIDTH (RDW-SD) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	44.5	fL	35.0 - 56.0
MENTZERS INDEX by CALCULATED	14.26	RATIO	BETA THALASSEMIA TRAIT: < 13.0 IRON DEFICIENCY ANEMIA: >13.0
GREEN & KING INDEX by CALCULATED	22.26	RATIO	BETA THALASSEMIA TRAIT: <= 65.0 IRON DEFICIENCY ANEMIA: > 65.0
WHITE BLOOD CELLS (WBCS)			
TOTAL LEUCOCYTE COUNT (TLC) by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	6350	/cmm	4000 - 11000
NUCLEATED RED BLOOD CELLS (nRBCS)	NIL		0.00 - 20.00



by AUTOMATED 6 PART HEMATOLOGY ANALYZER

DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST

**NIL** 



< 10 %



(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

COLLECTED BY: SURJESH REG. NO./LAB NO. : 012503250022

 REFERRED BY
 :
 REGISTRATION DATE
 : 25/Mar/2025 09:52 AM

 BARCODE NO.
 : 01527720
 COLLECTION DATE
 : 25/Mar/2025 09:55AM

**CLIENT CODE.** : KOS DIAGNOSTIC LAB **REPORTING DATE** : 25/Mar/2025 10:52AM

**CLIENT ADDRESS**: 6349/1, NICHOLSON ROAD, AMBALA CANTT

DIFFERENTIAL LEUCOCYTE COUNT (DLC)  NEUTROPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  LYMPHOCYTES by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  EOSINOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  EOSINOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  MONOCYTES 6 % 2 - 12	interval
NEUTROPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  LYMPHOCYTES by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  EOSINOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  4 % 1 - 6  by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  LYMPHOCYTES 40 % 20 - 40 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  EOSINOPHILS 4 % 1 - 6 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
LYMPHOCYTES by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY EOSINOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  1 - 6 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  EOSINOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  4 % 1 - 6	
EOSINOPHILS 4 % 1 - 6 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
MONOCYTES 6 % 2 - 12	
L FLOW OVERLY BY DE OURS A MOROCOORY	
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  PASCOPHIES	
BASOPHILS 0 % 0 - 1 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
ABSOLUTE LEUKOCYTES (WBC) COUNT	
ABSOLUTE NEUTROPHIL COUNT 3175 /cmm 2000 - 7500	
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY  A DGOLLYTEL NA ARMOCYTE GOLDNIT	
ABSOLUTE LYMPHOCYTE COUNT 2540 /cmm 800 - 4900 by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
ABSOLUTE EOSINOPHIL COUNT 254 /cmm 40 - 440	
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
ABSOLUTE MONOCYTE COUNT 381 /cmm 80 - 880	
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	
PLATELETS AND OTHER PLATELET PREDICTIVE MARKERS.	
PLATELET COUNT (PLT) 231000 /cmm 150000 - 450000	
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	
PLATELETCRIT (PCT) 0.33 % 0.10 - 0.36	
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	
MEAN PLATELET VOLUME (MPV)  14H  fL  6.50 - 12.0	
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	
PLATELET LARGE CELL COUNT (P-LCC) 130000 <sup>H</sup> /cmm 30000 - 90000	
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	
PLATELET LARGE CELL RATIO (P-LCR) 56.3H % 11.0 - 45.0	
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	
PLATELET DISTRIBUTION WIDTH (PDW) 16.1 % 15.0 - 17.0 by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	
NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD	



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)





# KOS Diagnostic Lab (A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

**COLLECTED BY** : SURJESH REG. NO./LAB NO. : 012503250022

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM **COLLECTION DATE** BARCODE NO. :01527720 : 25/Mar/2025 09:55AM

REPORTING DATE CLIENT CODE. : KOS DIAGNOSTIC LAB : 25/Mar/2025 10:52AM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Value Unit Test Name **Biological Reference interval** 



DR.VINAY CHOPRA CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)





(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

**COLLECTED BY** :012503250022 : SURJESH REG. NO./LAB NO.

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM BARCODE NO. :01527720 **COLLECTION DATE** : 25/Mar/2025 09:55AM

: KOS DIAGNOSTIC LAB **CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Value Unit Test Name **Biological Reference interval** 

REPORTING DATE

#### GLYCOSYLATED HAEMOGLOBIN (HBA1C)

GLYCOSYLATED HAEMOGLOBIN (HbA1c):

7.1H

4.0 - 6.4

: 25/Mar/2025 02:00PM

WHOLE BLOOD

CLIENT CODE.

by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)

ESTIMATED AVERAGE PLASMA GLUCOSE by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY) 157.07<sup>H</sup>

mg/dL

60.00 - 140.00

**INTERPRETATION:** 

REFERENCE GROUP	GLYCOSYLATED HEMOGL	OGIB (HBAIC) in %
Non diabetic Adults >= 18 years	<5.7	
At Risk (Prediabetes)	5.7 – 6.	4
Diagnosing Diabetes	>= 6.5	
	Age > 19 Y	ears
	Goals of Therapy:	< 7.0
Therapeutic goals for glycemic control	Actions Suggested:	>8.0
	Age < 19 Y	ears
	Goal of therapy:	<7.5

#### COMMENTS:

- 1.Glycosylated hemoglobin (HbA1c) test is three monthly monitoring done to assess compliace with therapeutic regimen in diabetic patients. 2. Since Hb1c reflects long term fluctuations in blood glucose concentration, a diabetic patient who has recently under good control may still have high concentration of HbAlc. Converse is true for a diabetic previously under good control but now poorly controlled.
- 3. Target goals of < 7.0 % may be beneficial in patients with short duration of diabetes, long life expectancy and no significant cardiovascular disease. In patients with significant complications of diabetes, limited life expectancy or extensive co-morbid conditions, targetting a goal of < 7.0% may not be
- 4.High HbA1c (>9.0 -9.5 %) is strongly associated with risk of development and rapid progression of microvascular and nerve complications 5.Any condition that shorten RBC life span like acute blood loss, hemolytic anemia falsely lower HbA1c results.
- 6.HbA1c results from patients with HbSS,HbSC and HbD must be interpreted with caution, given the pathological processes including anemia, increased red cell turnover, and transfusion requirement that adversely impact HbA1c as a marker of long-term gycemic control.
- 7. Specimens from patients with polycythemia or post-splenctomy may exhibit increse in HbA1c values due to a somewhat longer life span of the red cells.



CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)



KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana KOS Molecular Lab: IInd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt - 133 001, Haryana



(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

**COLLECTED BY** : SURJESH REG. NO./LAB NO. :012503250022

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM BARCODE NO. :01527720 **COLLECTION DATE** : 25/Mar/2025 09:55AM CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 25/Mar/2025 11:27AM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Value Unit Test Name **Biological Reference interval** 

### **ERYTHROCYTE SEDIMENTATION RATE (ESR)**

ERYTHROCYTE SEDIMENTATION RATE (ESR)

22H

mm/1st hr

0 - 20

by RED CELL AGGREGATION BY CAPILLARY PHOTOMETRY

### INTERPRETATION:

- 1. ESR is a non-specific test because an elevated result often indicates the presence of inflammation associated with infection, cancer and autoimmune disease, but does not tell the health practitioner exactly where the inflammation is in the body or what is causing it.
- 2. An ESR can be affected by other conditions besides inflammation. For this reason, the ESR is typically used in conjunction with other test such as C-reactive protein
- 3. This test may also be used to monitor disease activity and response to therapy in both of the above diseases as well as some others, such as systemic lupus erythematosus CONDITION WITH LOW ESR

A low ESR can be seen with conditions that inhibit the normal sedimentation of red blood cells, such as a high red blood cell count (polycythaemia), significantly high white blood cell count (leucocytosis), and some protein abnormalities. Some changes in red cell shape (such as sickle cells in sickle cell anaemia) also lower the ESR. NOTE:

- ESR and C reactive protein (C-RP) are both markers of inflammation.
   Generally, ESR does not change as rapidly as does CRP, either at the start of inflammation or as it resolves.
   CRP is not affected by as many other factors as is ESR, making it a better marker of inflammation.

- 4. If the ESR is elevated, it is typically a result of two types of proteins, globulins or fibrinogen.5. Women tend to have a higher ESR, and menstruation and pregnancy can cause temporary elevations.
- 6. Drugs such as dextran, methyldopa, oral contraceptives, penicillamine procainamide, theophylline, and vitamin A can increase ESR, while aspirin, cortisone, and quinine may decrease it



CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)





(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

**COLLECTED BY** : SURJESH :012503250022 REG. NO./LAB NO.

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM BARCODE NO. :01527720 **COLLECTION DATE** : 25/Mar/2025 09:55AM CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 25/Mar/2025 01:16PM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Value Unit Test Name **Biological Reference interval** 

### **CLINICAL CHEMISTRY/BIOCHEMISTRY**

GLUCOSE FASTING (F)

GLUCOSE FASTING (F): PLASMA  $108.06^{H}$ 

mg/dL NORMAL: < 100.0 by GLUCOSE OXIDASE - PEROXIDASE (GOD-POD)

PREDIABETIC: 100.0 - 125.0 DIABETIC: > 0R = 126.0

INTERPRETATION
IN ACCORDANCE WITH AMERICAN DIABETES ASSOCIATION GUIDELINES:

1. A fasting plasma glucose level below 100 mg/dl is considered normal.

2. A fasting plasma glucose level between 100 - 125 mg/dl is considered as glucose intolerant or prediabetic. A fasting and post-prandial blood test (after consumption of 75 gms of glucose) is recommended for all such patients.

3. A fasting plasma glucose level of above 125 mg/dl is highly suggestive of diabetic state. A repeat post-prandial is strongly recommended for all such patients. A fasting plasma glucose level in excess of 125 mg/dl on both occasions is confirmatory for diabetic state.



CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)





(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

COLLECTED BY : SURJESH REG. NO./LAB NO. : 012503250022

 REFERRED BY
 : 25/Mar/2025 09:52 AM

 BARCODE NO.
 : 01527720
 COLLECTION DATE
 : 25/Mar/2025 09:55AM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 25/Mar/2025 01:10PM

**CLIENT ADDRESS**: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name	Value	Unit	Biological Reference interval			
LIPID PROFILE : BASIC						
CHOLESTEROL TOTAL: SERUM by CHOLESTEROL OXIDASE PAP	98.19	mg/dL	OPTIMAL: < 200.0 BORDERLINE HIGH: 200.0 - 239.0 HIGH CHOLESTEROL: > OR = 240.0			
TRIGLYCERIDES: SERUM by GLYCEROL PHOSPHATE OXIDASE (ENZYMATIC)	49.54	mg/dL	OPTIMAL: < 150.0 BORDERLINE HIGH: 150.0 - 199.0 HIGH: 200.0 - 499.0 VERY HIGH: > OR = 500.0			
HDL CHOLESTEROL (DIRECT): SERUM by SELECTIVE INHIBITION	49.29	mg/dL	LOW HDL: < 30.0 BORDERLINE HIGH HDL: 30.0 - 60.0 HIGH HDL: > OR = 60.0			
LDL CHOLESTEROL: SERUM by CALCULATED, SPECTROPHOTOMETRY	38.99	mg/dL	OPTIMAL: < 100.0 ABOVE OPTIMAL: 100.0 - 129.0 BORDERLINE HIGH: 130.0 - 159.0 HIGH: 160.0 - 189.0 VERY HIGH: > OR = 190.0			
NON HDL CHOLESTEROL: SERUM by CALCULATED, SPECTROPHOTOMETRY	48.9	mg/dL	OPTIMAL: < 130.0 ABOVE OPTIMAL: 130.0 - 159.0 BORDERLINE HIGH: 160.0 - 189.0 HIGH: 190.0 - 219.0 VERY HIGH: > OR = 220.0			
VLDL CHOLESTEROL: SERUM by CALCULATED, SPECTROPHOTOMETRY	9.91	mg/dL	0.00 - 45.00			
TOTAL LIPIDS: SERUM by CALCULATED, SPECTROPHOTOMETRY	245.92 <sup>L</sup>	mg/dL	350.00 - 700.00			
CHOLESTEROL/HDL RATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY	1.99	RATIO	LOW RISK: 3.30 - 4.40 AVERAGE RISK: 4.50 - 7.0			



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)





(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mrs. USHA GAUTAM

AGE/ GENDER : 68 YRS/FEMALE **PATIENT ID** : 1805247

**COLLECTED BY** :012503250022 : SURJESH REG. NO./LAB NO.

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM BARCODE NO. :01527720 **COLLECTION DATE** : 25/Mar/2025 09:55AM CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 25/Mar/2025 01:10PM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name	Value	Unit	Biological Reference interval
LDL/HDL RATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY	0.79	RATIO	MODERATE RISK: 7.10 - 11.0 HIGH RISK: > 11.0 LOW RISK: 0.50 - 3.0 MODERATE RISK: 3.10 - 6.0 HIGH RISK: > 6.0
TRIGLYCERIDES/HDL RATIO: SERUM	1.01 <sup>L</sup>	RATIO	3.00 - 5.00

1.Measurements in the same patient can show physiological analytical variations. Three serial samples 1 week apart are recommended for Total Cholesterol, Triglycerides, HDL & LDL Cholesterol.

2. As per NLA-2014 guidelines, all adults above the age of 20 years should be screened for lipid status. Selective screening of children above the age of 2 years with a family history of premature cardiovascular disease or those with at least one parent with high total cholesterol is

3. Low HDL levels are associated with increased risk for Atherosclerotic Cardiovascular disease (ASCVD) due to insufficient HDL being available to participate in reverse cholesterol transport, the process by which cholesterol is eliminated from peripheral tissues.

4. NLA-2014 identifies Non HDL Cholesterol (an indicator of all atherogeniclipoproteins such as LDL, VLDL, IDL, Lpa, Chylomicron remnants) along with LDL-cholesterol as co- primary target for cholesterol lowering therapy. Note that major risk factors can modify treatment goals for LDL &Non LDL.

5. Additional testing for Apolipoprotein B, hsCRP,Lp(a) & LP-PLA2 should be considered among patients with moderate risk for ASCVD for risk refinement



CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST



KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana



(A Unit of KOS Healthcare)



Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. USHA GAUTAM

AGE/ GENDER : 68 YRS/FEMALE PATIENT ID : 1805247

COLLECTED BY : SURJESH REG. NO./LAB NO. : 012503250022

 REFERRED BY
 : 25/Mar/2025 09:52 AM

 BARCODE NO.
 : 01527720
 COLLECTION DATE
 : 25/Mar/2025 09:55AM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 25/Mar/2025 01:10PM

**CLIENT ADDRESS**: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

#### LIVER FUNCTION TEST (COMPLETE)

BILIRUBIN TOTAL: SERUM by DIAZOTIZATION, SPECTROPHOTOMETRY	0.29	mg/dL	INFANT: 0.20 - 8.00 ADULT: 0.00 - 1.20
BILIRUBIN DIRECT (CONJUGATED): SERUM by DIAZO MODIFIED, SPECTROPHOTOMETRY	0.12	mg/dL	0.00 - 0.40
BILIRUBIN INDIRECT (UNCONJUGATED): SERUM by CALCULATED, SPECTROPHOTOMETRY	0.17	mg/dL	0.10 - 1.00
SGOT/AST: SERUM by IFCC, WITHOUT PYRIDOXAL PHOSPHATE	19.6	U/L	7.00 - 45.00
SGPT/ALT: SERUM by IFCC, WITHOUT PYRIDOXAL PHOSPHATE	22.3	U/L	0.00 - 49.00
AST/ALT RATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY	0.88	RATIO	0.00 - 46.00
ALKALINE PHOSPHATASE: SERUM  by Para Nitrophenyl phosphatase by amino methyl Propanol	95.24	U/L	40.0 - 130.0
GAMMA GLUTAMYL TRANSFERASE (GGT): SERUM by SZASZ, SPECTROPHTOMETRY	14.27	U/L	0.00 - 55.0
TOTAL PROTEINS: SERUM by BIURET, SPECTROPHOTOMETRY	7.07	gm/dL	6.20 - 8.00
ALBUMIN: SERUM by BROMOCRESOL GREEN	3.43 <sup>L</sup>	gm/dL	3.50 - 5.50
GLOBULIN: SERUM by CALCULATED, SPECTROPHOTOMETRY	3.64 <sup>H</sup>	gm/dL	2.30 - 3.50
A : G RATIO: SERUM by CALCULATED, SPECTROPHOTOMETRY	$0.94^{L}$	RATIO	1.00 - 2.00

#### **INTERPRETATION**

NOTE:- To be correlated in individuals having SGOT and SGPT values higher than Normal Referance Range.

**USE**:- Differential diagnosis of diseases of hepatobiliary system and pancreas.

#### **INCREASED:**

DRUG HEPATOTOXICITY	> 2
ALCOHOLIC HEPATITIS	> 2 (Highly Suggestive)
CIRRHOSIS	1.4 - 2.0
INTRAHEPATIC CHOLESTATIS	> 1.5



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST MBBS , MD (PATHOLOGY)



8.00



(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mrs. USHA GAUTAM

**AGE/ GENDER PATIENT ID** : 68 YRS/FEMALE : 1805247

**COLLECTED BY** : SURJESH : 012503250022 REG. NO./LAB NO.

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM BARCODE NO. :01527720 **COLLECTION DATE** : 25/Mar/2025 09:55AM

CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 25/Mar/2025 01:10PM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name	Value	Unit	Biological Reference interval
HEPATOCELLULAR CARCINOMA & CHRONIC HEPATITIS		> 1.3 (Slightly Increased)	
DECDEASED.	•		

1. Acute Hepatitis due to virus, drugs, toxins (with AST increased 3 to 10 times upper limit of normal)

2. Extra Hepatic cholestatis: 0.8 (normal or slightly decreased). **PROGNOSTIC SIGNIFICANCE**:

I ROGNOSTIO SIGNII IOANOE.	
NORMAL	< 0.65
GOOD PROGNOSTIC SIGN	0.3 - 0.6
POOR PROGNOSTIC SIGN	1.2 - 1.6



DR.VINAY CHOPRA CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY)



KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana KOS Molecular Lab: IInd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt -133 001, Haryana 0171-2643898, +91 99910 43898 | care@koshealthcare.com | www.koshealthcare.com



(A Unit of KOS Healthcare)



Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. USHA GAUTAM

**AGE/ GENDER** : 68 YRS/FEMALE **PATIENT ID** : 1805247

COLLECTED BY : SURJESH REG. NO./LAB NO. : 012503250022

 REFERRED BY
 : 25/Mar/2025 09:52 AM

 BARCODE NO.
 : 01527720
 COLLECTION DATE
 : 25/Mar/2025 09:55AM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 25/Mar/2025 01:10PM

**CLIENT ADDRESS**: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name	Value	Unit	<b>Biological Reference interval</b>
-----------	-------	------	--------------------------------------

#### KIDNEY FUNCTION TEST (COMPLETE)

UREA: SERUM	24.01	mg/dL	10.00 - 50.00
by UREASE - GLUTAMATE DEHYDROGENASE (GLDH)	24.01	mg/uL	10.00 - 50.00
CREATININE: SERUM	1.12	mg/dL	0.40 - 1.20
by ENZYMATIC, SPECTROPHOTOMETERY		8	
BLOOD UREA NITROGEN (BUN): SERUM	11.22	mg/dL	7.0 - 25.0
by CALCULATED, SPECTROPHOTOMETRY			
BLOOD UREA NITROGEN (BUN)/CREATININE	10.02	RATIO	10.0 - 20.0
RATIO: SERUM			
by CALCULATED, SPECTROPHOTOMETRY			
UREA/CREATININE RATIO: SERUM	21.44	RATIO	
by CALCULATED, SPECTROPHOTOMETRY			• • • • • • • • • • • • • • • • • • • •
URIC ACID: SERUM	6.97 <sup>H</sup>	mg/dL	2.50 - 6.80
by URICASE - OXIDASE PEROXIDASE	0.6	/ JT	9.50 10.60
CALCIUM: SERUM by ARSENAZO III, SPECTROPHOTOMETRY	9.6	mg/dL	8.50 - 10.60
PHOSPHOROUS: SERUM	3.3	mg/dL	2.30 - 4.70
by PHOSPHOMOLYBDATE, SPECTROPHOTOMETRY	3.3	mg/uL	2.30 - 4.70
ELECTROLYTES			
	107.5	1.7	125.0 150.0
SODIUM: SERUM by ISE (ION SELECTIVE ELECTRODE)	137.5	mmol/L	135.0 - 150.0
POTASSIUM: SERUM	4.21	mmol/L	3.50 - 5.00
by ISE (ION SELECTIVE ELECTRODE)	4.21	IIIIIOI/L	3.30 - 3.00
CHLORIDE: SERUM	103.13	mmol/L	90.0 - 110.0
by ISE (ION SELECTIVE ELECTRODE)	103.13	IIIIIQI/L	70.0 - 110.0
-, - (			

#### **ESTIMATED GLOMERULAR FILTERATION RATE**

ESTIMATED GLOMERULAR FILTERATION RATE 53.6

(eGFR): SERUM by CALCULATED INTERPRETATION:

To differentiate between pre- and post renal azotemia.

#### INCREASED RATIO (>20:1) WITH NORMAL CREATININE:

1. Prerenal azotemia (BUN rises without increase in creatinine) e.g. heart failure, salt depletion, dehydration, blood loss) due to decreased glomerular filtration rate.



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)





(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

**NAME** : Mrs. USHA GAUTAM

AGE/ GENDER : 68 YRS/FEMALE **PATIENT ID** : 1805247

**COLLECTED BY** :012503250022 : SURJESH REG. NO./LAB NO.

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM BARCODE NO. :01527720 **COLLECTION DATE** : 25/Mar/2025 09:55AM CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 25/Mar/2025 01:10PM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit **Biological Reference interval** 

- 2. Catabolic states with increased tissue breakdown.
- 3. GI haemorrhage.
- 4. High protein intake.
- 5. Impaired renal function plus
- 6. Excess protein intake or production or tissue breakdown (e.g. infection, GI bleeding, thyrotoxicosis, Cushing's syndrome, high protein diet, burns, surgery, cachexia, high fever).
- 7. Urine reabsorption (e.g. ureter colostomy)
- 8. Reduced muscle mass (subnormal creatinine production)
- 9. Certain drugs (e.g. tetracycline, glucocorticoids)

#### INCREASED RATIO (>20:1) WITH ELEVATED CREATININE LEVELS:

- 1. Postrenal azotemia (BUN rises disproportionately more than creatinine) (e.g. obstructive uropathy).
- 2. Prerenal azotemia superimposed on renal disease.

#### DECREASED RATIO (<10:1) WITH DECREASED BUN:

- Acute tubular necrosis.
- 2. Low protein diet and starvation.
- 3. Severe liver disease.
- 4. Other causes of decreased urea synthesis.
- 5. Repeated dialysis (urea rather than creatinine diffuses out of extracellular fluid).
- 6. Inherited hyperammonemias (urea is virtually absent in blood).
- 7. SIADH (syndrome of inappropiate antidiuretic harmone) due to tubular secretion of urea.
- 8. Pregnancy.

#### DECREASED RATIO (<10:1) WITH INCREASED CREATININE:

- 1. Phenacimide therapy (accelerates conversion of creatine to creatinine).
- 2. Rhabdomyolysis (releases muscle creatinine).
- 3. Muscular patients who develop renal failure.

#### **INAPPROPIATE RATIO:**

1. Diabetic ketoacidosis (acetoacetate causes false increase in creatinine with certain methodologies, resulting in normal ratio when dehydration should produce an increased BUN/creatinine ratio).

2. Cephalosporin therapy (interferes with creatinine measurement) ESTIMATED GLOMERULAR FILTERATION RATE:

ESTIMATED GLOWIERGEAR TIETERATION RATE.					
CKD STAGE	DESCRIPTION	GFR ( mL/min/1.73m2 )	ASSOCIATED FINDINGS		
G1	Normal kidney function	>90	No proteinuria_		
G2	Kidney damage with	>90	Presence of Protein,		
	normal or high GFR		Albumin or cast in urine		
G3a	Mild decrease in GFR	60 -89			
G3b	Moderate decrease in GFR	30-59			
G4	Severe decrease in GFR	15-29			
G5	Kidney failure	<15			



CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY)

KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana



(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

: 25/Mar/2025 01:10PM

**NAME** : Mrs. USHA GAUTAM

AGE/ GENDER : 68 YRS/FEMALE **PATIENT ID** : 1805247

COLLECTED BY : SURJESH REG. NO./LAB NO. :012503250022

REFERRED BY **REGISTRATION DATE** : 25/Mar/2025 09:52 AM BARCODE NO. :01527720 **COLLECTION DATE** : 25/Mar/2025 09:55AM

: KOS DIAGNOSTIC LAB **CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit **Biological Reference interval** 

REPORTING DATE

COMMENTS:

CLIENT CODE.

1. Estimated Glomerular filtration rate (eGFR) is the sum of filtration rates in all functioning nephrons and so an estimation of the GFR provides a measure of functioning nephrons of the kidney.

2. eGFR calculated using the 2009 CKD-EPI creatinine equation and GFR category reported as per KDIGO guideline 2012

3. In patients, with eGFR creatinine between 45-59 ml/min/1.73 m2 (G3) and without any marker of Kidney damage, It is recommended to measure

4. eGFR category G1 OR G2 does not fullfill the criteria for CKD, in the absence of evidence of Kidney Damage
5. In a suspected case of Acute Kidney Injury (AKI), measurement of eGFR should be done after 48-96 hours of any Intervention or procedure
6. eGFR calculated by Serum Creatinine may be less accurate due to certain factors like Race, Muscle Mass, Diet, Certain Drugs. In such cases, eGFR should be calculated using Serum Cystatin C
7. A decrease in eGFR implies either progressive renal disease, or a reversible process causing decreased nephron function (eg, severe dehydration).

KDIGO guideline, 2012 recommends Chronic Kidney Disease (CKD) should be classified based on cause, eGFR category and Albuminuria (ACR) category. GFR & ACR category combined together reflect risk of progression and helps Clinician to identify the individual who are progressing at more rapid rate than anticipated

End Of Report \*\*\*



CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)

