NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 11:57AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

HAEMATOLOGY
COMPLETE BLOOD COUNT (CBC)

RED BLOOD CELLS (RBCS) COUNT AND INDICES

Test Name	Value	Unit	Biological Reference interval
HAEMOGLOBIN (HB) *by CALORIMETRIC*	12.8	gm/dL	12.0 - 16.0
RED BLOOD CELL (RBC) COUNT *by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE*	4.63	Millions/cmm	3.50 - 5.00
PACKED CELL VOLUME (PCV) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	39.3	%	37.0 - 50.0
MEAN CORPUSCULAR VOLUME (MCV) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	84.7	fL	80.0 - 100.0
MEAN CORPUSCULAR HAEMOGLOBIN (MCH) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	27.7	pg	27.0 - 34.0
MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	32.7	g/dL	32.0 - 36.0
RED CELL DISTRIBUTION WIDTH (RDW-CV) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	13.4	%	11.00 - 16.00
RED CELL DISTRIBUTION WIDTH (RDW-SD) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	42.6	fL	35.0 - 56.0
MENTZERS INDEX *by CALCULATED*	18.29	RATIO	BETA THALASSEMIA TRAIT: < 13.0 IRON DEFICIENCY ANEMIA: >13.0
GREEN & KING INDEX *by CALCULATED*	24.56	RATIO	BETA THALASSEMIA TRAIT:<= 65.0 IRON DEFICIENCY ANEMIA: > 65.0

WHITE BLOOD CELLS (WBCS)

Test Name	Value	Unit	Biological Reference interval
TOTAL LEUCOCYTE COUNT (TLC) *by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY*	6810	/cmm	4000 - 11000
NUCLEATED RED BLOOD CELLS (nRBCS) *by AUTOMATED 6 PART HEMATOLOGY ANALYZER*	NIL		0.00 - 20.00
NUCLEATED RED BLOOD CELLS (nRBCS) % *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	NIL	%	< 10 %

DIFFERENTIAL LEUCOCYTE COUNT (DLC)

Test Name	Value	Unit	Biological Reference interval
NEUTROPHILS *by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY*	60	%	50 - 70

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

Page 1 of 13

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

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 11:57AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
LYMPHOCYTES	28	%	20 - 40
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
EOSINOPHILS	5	%	1 - 6
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
MONOCYTES	7	%	2 - 12
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
BASOPHILS	0	%	0 - 1
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE LEUKOCYTES (WBC) COUNT			
ABSOLUTE NEUTROPHIL COUNT	4086	/cmm	2000 - 7500
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE LYMPHOCYTE COUNT	1907	/cmm	800 - 4900
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE EOSINOPHIL COUNT	340	/cmm	40 - 440
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE MONOCYTE COUNT	477	/cmm	80 - 880
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE BASOPHIL COUNT	0	/cmm	0 - 110
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
PLATELETS AND OTHER PLATELET PREDICTIVE MARKERS.			
PLATELET COUNT (PLT)	258000	/cmm	150000 - 450000
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELETCRIT (PCT)	0.29	%	0.10 - 0.36
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
MEAN PLATELET VOLUME (MPV)	11	fL	6.50 - 12.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELET LARGE CELL COUNT (P-LCC)	87000	/cmm	30000 - 90000
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELET LARGE CELL RATIO (P-LCR)	33.7	%	11.0 - 45.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELET DISTRIBUTION WIDTH (PDW)	16.5	%	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)

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

Page 2 of 13

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	: **012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 09:51PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

HAEMOGLOBIN - HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HB-HPLC)

HAEMOGLOBIN VARIANTS

Test Name	Value	Unit	Biological Reference interval
HAEMOGLOBIN A0 (ADULT) *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	87.3	%	83.00 - 90.00
HAEMOGLOBIN F (FOETAL) *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	<0.8	%	0.00 - 2.0
HAEMOGLOBIN A2 *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	2	%	1.50 - 3.70
PEAK 3 *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	4.5	%	< 10.0
OTHERS-NON SPECIFIC *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	ABSENT	%	ABSENT
HAEMOGLOBIN S *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	NOT DETECTED	%	< 0.02
HAEMOGLOBIN D (PUNJAB) *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	NOT DETECTED	%	< 0.02
HAEMOGLOBIN E *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	NOT DETECTED	%	< 0.02
HAEMOGLOBIN C *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	NOT DETECTED	%	< 0.02
UNKNOWN UNIDENTIFIED VARIANTS *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	NOT DETECTED	%	< 0.02
GLYCOSYLATED HAEMOGLOBIN (HbA1c): WHOLE BLOOD *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	4.6	%	4.0 - 6.4

RED BLOOD CELLS (RBCS) COUNT AND INDICES

Test Name	Value	Unit	Biological Reference interval
HAEMOGLOBIN (HB) *by AUTOMATED HEMATOLOGY ANALYZER*	12.8	gm/dL	12.0 - 16.0
RED BLOOD CELL (RBC) COUNT *by AUTOMATED HEMATOLOGY ANALYZER*	4.63	Millions/cmm	3.50 - 5.00
PACKED CELL VOLUME (PCV) *by AUTOMATED HEMATOLOGY ANALYZER*	39.3	%	37.0 - 50.0
MEAN CORPUSCULAR VOLUME (MCV) *by AUTOMATED HEMATOLOGY ANALYZER*	84.7	fL	80.0 - 100.0

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

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

KOS Diagnostic Lab
(A Unit of KOS Healthcare)

KOS
EXCELLENCE IN HEALTHCARE & DIAGNOSTICS

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

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	: 012408220042
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 09:51PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
MEAN CORPUSCULAR HAEMOGLOBIN (MCH)	27.7	pg	27.0 - 34.0
by AUTOMATED HEMATOLOGY ANALYZER			
MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC)	32.7	g/dL	32.0 - 36.0
by AUTOMATED HEMATOLOGY ANALYZER			
RED CELL DISTRIBUTION WIDTH (RDW-CV)	13.4	%	11.00 - 16.00
by AUTOMATED HEMATOLOGY ANALYZER			
RED CELL DISTRIBUTION WIDTH (RDW-SD)	42.6	fL	35.0 - 56.0
by AUTOMATED HEMATOLOGY ANALYZER			

OTHERS

Test Name	Value	Unit	Biological Reference interval
NAKED EYE SINGLE TUBE RED CELL OSMOTIC FRAGILITY TEST	NEGATIVE (-ve)		NEGATIVE (-ve)
by SINGLE RED CELL OSMOTIC FRAGILITY			
MENTZERS INDEX	18.29	RATIO	BETA THALASSEMIA TRAIT: < 13.0
by CALCULATED			IRON DEFICIENCY ANEMIA: >13.0
INTERPRETATION		THE ABOVE FINDINGS ARE SUGGESTIVE OF NORMAL HAEMOGLOBIN CHROMATOGRAPHIC PATTERN	

INTERPRETATION:

The Thalassemia syndromes, considered the most common genetic disorder worldwide, are a heterogenous group of mandelian disorders, all characterized by a lack of/or decreased synthesis of either the alpha-globin chains (alpha thalassemia) or the beta-globin chains (beta thalassemia) of haemoglobin.

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC):

1. HAEMOGLOBIN VARIANT ANALYSIS, BLOOD- High Performance liquid chromatography (HPLC) is a fast & accurate method for determining the presence and for quatitation of various types of normal haemoglobin and common abnormal hb variants, including but not limited to Hb S, C, E, D and Beta –thalassemia.
2. The diagnosis of these abnormal haemoglobin should be confirmed by DNA analysis.
3. The method use has a limited role in the diagnosis of alpha thalassemia.
4. Slight elevation in haemoglobin A2 may also occur in hyperthyroidism or when there is deficiency of vitamin b12 or folate and this should be istinguished from inherited elevation of HbA2 in Beta- thalassemia trait.

NAKED EYE SINGLE TUBE RED CELL OSMOTIC FRAGILITY TEST (NESTROFT):

1. It is a screening test to distinguish beta thalassemia trait. Also called as Naked Eye Single Tube Red Cell Osmotic Fragility Test.
2. The test showed a sensitivity of 100%, specificity of 85.47%, a positive predictive value of 66% and a negative predictive value of 100%.
3. A high negative predictive value can reasonably rule out beta thalassemia trait cases. So, it should be adopted as a screening test for beta thalassemia trait, as it is not practical or feasible to employ HbA2 in every case of anemia in childhood.

MENTZERS INDEX:

1. The Mentzer index, helpful in differentiating iron deficiency anemia from beta thalassemia. If a CBC indicates microcytic anemia, the Mentzer index is said to be a method of distinguishing between them.
2. If the index is less than 13, thalassemia is said to be more likely. If the result is greater than 13, then iron-deficiency anemia is said to be more likely.

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

Page 4 of 13

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	PATIENT ID	: 1587584
COLLECTED BY	: SURJESH	REG. NO./LAB NO.	: 012408220042
REFERRED BY	:	REGISTRATION DATE	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	COLLECTION DATE	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	REPORTING DATE	: 22/Aug/2024 09:51PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

3.The principle involved is as follows: In iron deficiency, the marrow cannot produce as many RBCs and they are small (microcytic), so the RBC count and the MCV will both be low, and as a result, the index will be greater than 13. Conversely, in thalassemia, which is a disorder of globin synthesis, the number of RBC's produced is normal, but the cells are smaller and more fragile. Therefore, the RBC count is normal, but the MCV is low, so the index will be less than 13.

NOTE: In practice, the Mentzer index is not a reliable indicator and should not, by itself, be used to differentiate. In addition, it would be possible for a patient with a microcytic anemia to have both iron deficiency and thalassemia, in which case the index would only suggest iron deficiency.

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

Page 5 of 13

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

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

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 01:05PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

CLINICAL CHEMISTRY/BIOCHEMISTRY
GLUCOSE RANDOM (R)

GLUCOSE RANDOM (R): PLASMA	85.89	mg/dL	NORMAL: < 140.00
by GLUCOSE OXIDASE - PEROXIDASE (GOD-POD)			PREDIABETIC: 140.0 - 200.0
			DIABETIC: > 0R = 200.0

INTERPRETATION
IN ACCORDANCE WITH AMERICAN DIABETES ASSOCIATION GUIDELINES:
1. A random plasma glucose level below 140 mg/dl is considered normal.
2. A random glucose level between 140 - 200 mg/dl is considered as glucose intolerant or prediabetic. A fasting and post-prnadial blood test (after consumption of 75 gms of glucose) is recommended for all such patients.
3. A random glucose level of above 200 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.

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

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

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

KOS Diagnostic Lab
(A Unit of KOS Healthcare)

KOS
EXCELLENCE IN HEALTHCARE & DIAGNOSTICS

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

NAME	**: Mrs. DARSHIKHA GARG**		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 01:05PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

IMMUNOPATHOLOGY/SEROLOGY

HEPATITIS C VIRUS (HCV) ANTIBODY: TOTAL

HEPATITIS C ANTIBODY (HCV) TOTAL: SERUM *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	0.12	S/CO	NEGATIVE: < 1.00 POSITIVE: > 1.00
HEPATITIS C ANTIBODY (HCV) TOTAL RESULT *by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)*	NON - REACTIVE		

INTERPRETATION:-

RESULT (INDEX)	REMARKS
< 1.00	NON - REACTIVE/NOT - DETECTED
> =1.00	REACTIVE/ASYMPTOMATIC/INFECTIVE STATE/CARRIER STATE.

Hepatitis C (HCV) is an RNA virus of Favivirus group transmitted via blood transfusions, transplantation, injection drug abusers, accidental needle punctures in healthcare workers, dialysis patients and rarely from mother to infant. 10 % of new cases show sexual transmission. As compared to HAV & HBV , chronic infection with HCV occurs in 85 % of infected individuals. In high risk population, the predictive value of Anti HCV for HCV infection is > 99% whereas in low risk populations it is only 25 %.

USES:
1. Indicator of past or present infection, but does not differentiate between Acute/ Chronic/Resolved Infection.
2. Routine screening of low and high prevalence population including blood donors.

NOTE:
1. False positive results are seen in Auto-immune disease, Rheumatoid Factor, HYpergammaglobulinemia, Paraproteinemia, Passive antibody transfer, Anti-idiotypes and Anti-superoxide dismutase.
2. False negative results are seen in early Acute infection, Immunosuppression and Immuno—incompetence.
3. HCV-RNA PCR recommended in all reactive results to differentiate between past and present infection.

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

Page 7 of 13

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 01:05PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

ANTI HUMAN IMMUNODEFICIENCY VIRUS (HIV) DUO ULTRA WITH (P-24 ANTIGEN DETECTION)

HIV 1/2 AND P24 ANTIGEN: SERUM	0.09	S/CO	NEGATIVE: < 1.00
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			POSITIVE: > 1.00
HIV 1/2 AND P24 ANTIGEN RESULT	NON - REACTIVE		
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			

INTERPRETATION:-

RESULT (INDEX)	REMARKS
< 1.00	NON - REACTIVE
> = 1.00	PROVISIONALLY REACTIVE

Non-Reactive result implies that antibodies to HIV 1/ 2 have not been detected in the sample . This menas that patient has either not been exposed to HIV 1/ 2 infection or the sample has been tested during the "window phase" i.e. before the development of detectable levels of antibodies. Hence a Non Reactive result does not exclude the possibility of exposure or infection with HIV 1/ 2.

RECOMMENDATIONS:
1. Results to be clinically correlated
2. Rarely falsenegativity/positivity may occur.

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

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

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 01:05PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

HEPATITIS B SURFACE ANTIGEN (HBsAg) ULTRA

HEPATITIS B SURFACE ANTIGEN (HBsAg): SERUM	0.24	S/CO	NEGATIVE: < 1.0
			POSITIVE: > 1.0
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			
HEPATITIS B SURFACE ANTIGEN (HBsAg) RESULT	NON REACTIVE		
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			

<u>*INTERPRETATION:*</u>

RESULT IN INDEX VALUE	REMARKS
< 1.30	NEGATIVE (-ve)
>=1.30	POSITIVE (+ve)

Hepatitis B Virus (HBV) is a member of the Hepadna virus family causing infection of the liver with extremely variable clinical features. Hepatitis B is transmitted primarily by body fluids especially serum and also spread effectively sexually and from mother to baby. In most individuals HBV hepatitis is self limiting, but 1-2 % normal adolescent and adults develop Chronic Hepatitis. Frequency of chronic HBV infection is 5-10% in immunocompromised patients and 80 % neonates. The initial serological marker of acute infection is HBsAg which typically appears 2-3 months after infection and disappears 12-20 weeks after onset of symtoms. Persistence of HBsAg for more than 6 months indicates carrier state or Chronic Liver disease.

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

Page 9 of 13

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

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

NAME	**: Mrs. DARSHIKHA GARG**		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 23/Aug/2024 07:40AM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

RUBELLA ANTIBODIES EVALUATION IgG AND IgM

Test Name	Value	Unit	Biological Reference interval
RUBELLA ANTIBODIES IgM *by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)*	0.856	IU/mL	NEGATIVE: < 2.0 EQUIVOCAL: 2.0 - 3.0 POSITIVE: > 3.0
RUBELLA ANTIBODIES IgG *by CLIA (CHEMILUMINESCENCE IMMUNOASSAY)*	8.084^H	IU/mL	**NEGATIVE: < 2.0** **POSITIVE: > 2.0**

INTERPRETATION:
Rubella virus, the only member of rubivirus genus, causes rubella (also known as german measles), an acute exanthematous infection of children and adults. The clinical illnss is characterized by rash, fever and lymphadenopathy and can resemble a mild case of measles. The virus also cause arthralgias and occasional encephalitis. Infection is particularly disastrous if contracted during the first 4 months of pregnancy. If not immunologically protected, women infected during pregnancy run a high risk of embryo-foetal damage. Congenital Rubella causes a wide range of severe defects in foetus, including cataract, deafness, hepatosplenomegaly, psychomotor retardation, bone alterations, cardiopathies, neuropathies and diabetes.
TEST UTILITY:
1. IgM antibodies become detectable in a few days after the onset of signs and symptoms and reach peak level in 7 – 10 days. These antibodies persist, but rapidly diminishes in concentration over the next 4 – 5 weeks until the antibody is no longer clinically detectable. While the presence of IgM antibodies suggests current or recent infection, low levels of IgM antibodies may occasionally persist for more than 12 months post-infection or immunization. The presence of IgM antibodies in a new born indicates that the bay was infected during pregnancy because the mother IgM antibodies do not pass to the baby through umbilical cord.
2. Rubella IgG antibody can be formed following rubella infection or after rubella vaccination. A reactive result is consistent with immune status to rubella virus. The presence of IgG antibodies, but not IgM antibodies, in a newborn means that the mothers IgG antibodies have passed to the baby in utero and these antibodies may protect the infant from rubella infection during the initial six months of life.
LIMITATIONS:
1. Rubella IgM test results are intended as an aid to the diagnose of active or recent infection. They should however, be interpreted in conjugation with other clinical findings and diagnostic procedures
2. The antibody titre of a single serum specimen cannot be used to determine recent infection. Specimens obtained too early, or too late, during the course of infection, may not demonstrate detectable levels of IgM antibody. Samples collected too early may not have detectable levels of IgG. Paired samples (acute & convalescent) should be collected and tested concurrently to demonstrate seroconversation.
3. A positive Rubella IgM result may not always indicate a primary acute infection, as IgM has a tendency to persist, even at high levels, after primay infection. *FALSE POSITIVE RESULTS MAY ALSO OCCUR DUE TO RHEUMATOID FACTOR AND ANTI-NUCLEUR ANTIBODIES.* Hence, IgG avidity testing is recommended to differentiate between primay infection, IgM persistence and reactivation. IgG antibody results should be interpreted in conjugation with clinical evaluation and the and the results of other diagnostic procedures.

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

Page 10 of 13

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

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 12:15PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

VDRL

VDRL	NON REACTIVE	NON REACTIVE

by IMMUNOCHROMATOGRAPHY

INTERPRETATION:
1. Does not become positive until 7 - 10 days after appearance ofchancre.
2. **High titer (>1:16) - active disease.**
3. **Low titer (<1:8) - biological falsepositive test in 90% cases or due to late or late latent syphillis.**
4. Treatment of primary syphillis causes progressive decline tonegative VDRL within 2 years.
5. Rising titer (4X) indicates relapse,reinfection, or treatment failure and need for retreatment.
6. May benonreactive in early primary, late latent, and late syphillis (approx. 25% ofcases).
7. **Reactive and weakly reactive tests should always be confirmedwith FTA-ABS (fluorescent treponemal antibody absorptiontest).**

SHORTTERM FALSE POSITIVE TEST RESULTS (<6 MONTHS DURATION) MAY OCCURIN:
1. Acute viral illnesses (e.g., hepatitis, measles, infectious mononucleosis)
2. M. pneumoniae; Chlamydia; Malaria infection.
3. Some immunizations
4. Pregnancy (rare)

LONGTERM FALSE POSITIVE TEST RESULTS (>6 MONTHS DURATION) MAY OCCUR IN:
1. Serious underlying disease e.g., collagen vascular diseases, leprosy ,malignancy.
2. Intravenous drug users.
3. Rheumatoid arthritis, thyroiditis, AIDS, Sjogren's syndrome.
4. <l0 % of patients older thanage 70 years.
5. Patients taking some anti-hypertensive drugs.

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

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

KOS Diagnostic Lab
(A Unit of KOS Healthcare)

KOS™
EXCELLENCE IN HEALTHCARE & DIAGNOSTICS

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

NAME	**: Mrs. DARSHIKHA GARG**		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 12:31PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval

CLINICAL PATHOLOGY
URINE ROUTINE & MICROSCOPIC EXAMINATION

PHYSICAL EXAMINATION

Test Name	Value	Unit	Biological Reference interval
QUANTITY RECIEVED	10	ml	
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
COLOUR	PALE YELLOW		PALE YELLOW
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
TRANSPARANCY	CLEAR		CLEAR
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
SPECIFIC GRAVITY	1.02		1.002 - 1.030
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			

CHEMICAL EXAMINATION

Test Name	Value	Unit	Biological Reference interval
REACTION	ACIDIC		
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
PROTEIN	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
SUGAR	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
pH	5.5		5.0 - 7.5
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
BILIRUBIN	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
NITRITE	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY.			
UROBILINOGEN	Normal	EU/dL	0.2 - 1.0
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
KETONE BODIES	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
BLOOD	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
ASCORBIC ACID	NEGATIVE (-ve)		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			

MICROSCOPIC EXAMINATION

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

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

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

NAME	: Mrs. DARSHIKHA GARG		
AGE/ GENDER	: 30 YRS/FEMALE	**PATIENT ID**	: 1587584
COLLECTED BY	: SURJESH	**REG. NO./LAB NO.**	**: 012408220042**
REFERRED BY	:	**REGISTRATION DATE**	: 22/Aug/2024 11:30 AM
BARCODE NO.	: 01515489	**COLLECTION DATE**	: 22/Aug/2024 11:45AM
CLIENT CODE.	: KOS DIAGNOSTIC LAB	**REPORTING DATE**	: 22/Aug/2024 12:31PM
CLIENT ADDRESS	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
RED BLOOD CELLS (RBCs) *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	NEGATIVE (-ve)	/HPF	0 - 3
PUS CELLS *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	3-4	/HPF	0 - 5
EPITHELIAL CELLS *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	2-3	/HPF	ABSENT
CRYSTALS *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	NEGATIVE (-ve)		NEGATIVE (-ve)
CASTS *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	NEGATIVE (-ve)		NEGATIVE (-ve)
BACTERIA *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	NEGATIVE (-ve)		NEGATIVE (-ve)
OTHERS *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	NEGATIVE (-ve)		NEGATIVE (-ve)
TRICHOMONAS VAGINALIS (PROTOZOA) *by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT*	ABSENT		ABSENT

*** End Of Report ***

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

Page 13 of 13

Patient report

Bio-Rad

D-10

S/N: #DJ6F040603

Sample ID: 01515489

Injection date   08/22/2024 12:54 AM

Injection #: 3

Rack #: ---

DATE: 08/22/2024

TIME: 01:13 AM

Software version: 4.30-2

Method: HbA2/F

Rack position: 3
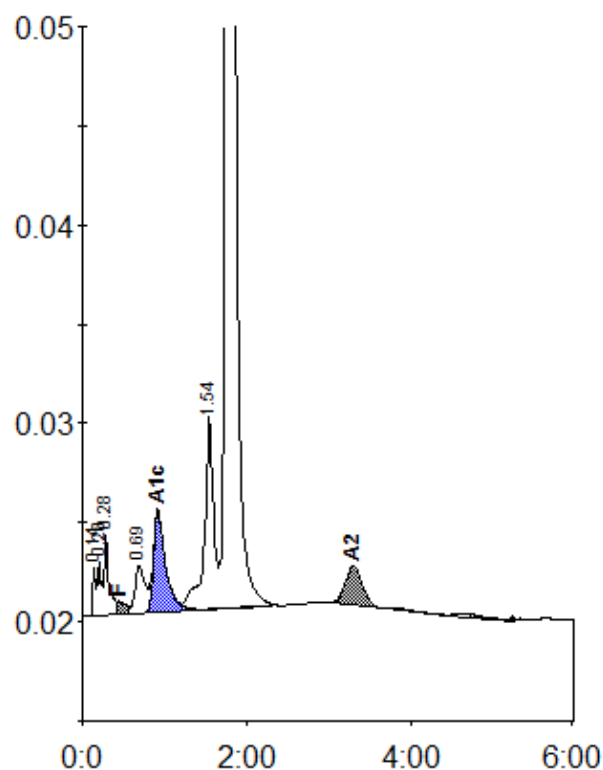
Peak table - ID: 01515489

Peak	R.time	Height	Area	Area %
Unknown	0.14	2478	5377	0.3
A1a	0.20	2758	10295	0.6
A1b	0.28	4080	14676	0.9
F	0.44	659	8117	< 0.8 *
LA1c/CHb-1	0.69	2370	20280	1.2
A1c	0.92	5106	52014	4.6
P3	1.54	9676	75367	4.5
A0	1.75	307400	1478710	87.3
A2	3.30	1976	28592	2.0
Total Area:	1693428			

Concentration:	%
F	< 0.8 *
A1c	4.6
A2	2.0