

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

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

<b>NAME</b>	: Mrs. BABLI	<b>PATIENT ID</b>	: 1675969
<b>AGE/ GENDER</b>	: 72 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 042411190001
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Nov/2024 12:31 PM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 19/Nov/2024 04:06PM
<b>BARCODE NO.</b>	: A1164516	<b>REPORTING DATE</b>	: 19/Nov/2024 04:13PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC SHAHBAD		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

## HAEMATOLOGY

### HAEMOGLOBIN (HB)

HAEMOGLOBIN (HB)	10.7 <sup>L</sup>	gm/dL	12.0 - 16.0
------------------	-------------------	-------	-------------

by CALORIMETRIC

#### INTERPRETATION:-

Hemoglobin is the protein molecule in red blood cells that carries oxygen from the lungs to the body's tissues and returns carbon dioxide from the tissues back to the lungs.

A low hemoglobin level is referred to as ANEMIA or low red blood count.

#### ANEMIA ( DECREASED HAEMOGLOBIN):


- 1) Loss of blood (traumatic injury, surgery, bleeding, colon cancer or stomach ulcer)
- 2) Nutritional deficiency (iron, vitamin B12, folate)
- 3) Bone marrow problems (replacement of bone marrow by cancer)
- 4) Suppression by red blood cell synthesis by chemotherapy drugs
- 5) Kidney failure
- 6) Abnormal hemoglobin structure (sickle cell anemia or thalassemia).

#### POLYCYTHEMIA (INCREASED HAEMOGLOBIN):

- 1) People in higher altitudes (Physiological)
- 2) Smoking (Secondary Polycythemia)
- 3) Dehydration produces a falsely rise in hemoglobin due to increased haemoconcentration
- 4) Advanced lung disease (for example, emphysema)
- 5) Certain tumors
- 6) A disorder of the bone marrow known as polycythemia rubra vera,
- 7) Abuse of the drug erythropoietin (Epogen) by athletes for blood doping purposes (increasing the amount of oxygen available to the body by chemically raising the production of red blood cells).

**NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD**



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

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



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

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

**NAME** : Mrs. BABLI  
**AGE/ GENDER** : 72 YRS/FEMALE  
**COLLECTED BY** :  
**REFERRED BY** :  
**BARCODE NO.** : A1164516  
**CLIENT CODE.** : KOS DIAGNOSTIC SHAHBAD  
**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT  
**PATIENT ID** : 1675969  
**REG. NO./LAB NO.** : 042411190001  
**REGISTRATION DATE** : 19/Nov/2024 12:31 PM  
**COLLECTION DATE** : 19/Nov/2024 04:06PM  
**REPORTING DATE** : 19/Nov/2024 05:01PM

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

**GLYCOSYLATED HAEMOGLOBIN (HbA1c)**

GLYCOSYLATED HAEMOGLOBIN (HbA1c):  
 WHOLE BLOOD  
 by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)  
 ESTIMATED AVERAGE PLASMA GLUCOSE  
 by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)  
**211.6<sup>H</sup>**

**INTERPRETATION:**


AS PER AMERICAN DIABETES ASSOCIATION (ADA):	
REFERENCE GROUP	GLYCOSYLATED HEMOGLOBIN (HbA1c) in %
Non diabetic Adults >= 18 years	<5.7
At Risk (Prediabetes)	5.7 – 6.4
Diagnosing Diabetes	>= 6.5
Therapeutic goals for glycemic control	<b>Age &gt; 19 Years</b>
	Goals of Therapy: < 7.0
	Actions Suggested: >8.0
	<b>Age &lt; 19 Years</b>
	Goal of therapy: <7.5

**COMMENTS:**

- Glycosylated hemoglobin (HbA1c) test is three monthly monitoring done to assess compliance with therapeutic regimen in diabetic patients.
- 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 HbA1c. Converse is true for a diabetic previously under good control but now poorly controlled.
- 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, targeting a goal of < 7.0% may not be appropriate.
- High HbA1c (>9.0 -9.5 %) is strongly associated with risk of development and rapid progression of microvascular and nerve complications
- Any condition that shorten RBC life span like acute blood loss, hemolytic anemia falsely lower HbA1c results.
- 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 glycemic control.
- Specimens from patients with polycythemia or post-splenectomy may exhibit increase in HbA1c values due to a somewhat longer life span of the red cells.



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

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



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

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

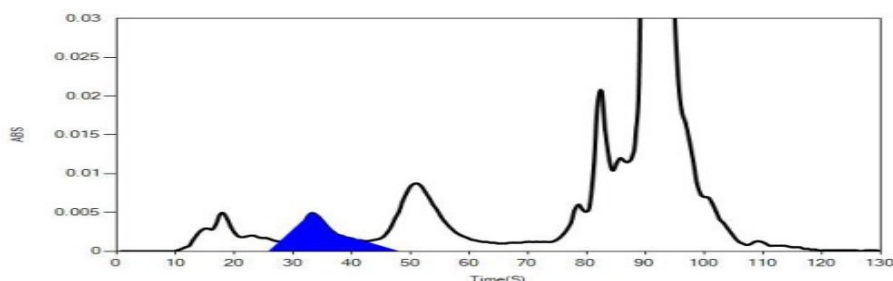
<b>NAME</b>	: Mrs. BABLI	<b>PATIENT ID</b>	: 1675969
<b>AGE/ GENDER</b>	: 72 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 042411190001
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Nov/2024 12:31 PM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 19/Nov/2024 04:06PM
<b>BARCODE NO.</b>	: A1164516	<b>REPORTING DATE</b>	: 19/Nov/2024 05:01PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC SHAHBAD		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

LIFOTRONIC Graph Report

Name :	Case :	Patient Type :	Test Date : 19/11/2024 16:44:59
Age :	Department :	Sample Type : Whole Blood EDTA	Sample Id : A1164516
Gender :			Total Area : 9358

Peak Name	Retention Time(s)	Absorbance	Area	Result (Area %)
HbA0	67	2997	7964	81.3
HbA1c	37	88	752	9.0
La1c	24	49	312	3.2
HbF	17	20	93	0.9
Hba1b	13	50	151	1.5
Hba1a	11	29	86	0.9



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

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



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

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

<b>NAME</b>	: Mrs. BABLI	<b>PATIENT ID</b>	: 1675969
<b>AGE/ GENDER</b>	: 72 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 042411190001
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Nov/2024 12:31 PM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 19/Nov/2024 03:58PM
<b>BARCODE NO.</b>	: A1164515	<b>REPORTING DATE</b>	: 19/Nov/2024 05:04PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC SHAHBAD		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

## CLINICAL CHEMISTRY/BIOCHEMISTRY

### CHOLESTEROL: SERUM

CHOLESTEROL TOTAL: SERUM  
 by CHOLESTEROL OXIDASE PAP

**254.83<sup>H</sup>**

mg/dL

OPTIMAL: < 200.0  
 BORDERLINE HIGH: 200.0 - 239.0  
 HIGH CHOLESTEROL: > OR = 240.0

#### INTERPRETATION:

NATIONAL LIPID ASSOCIATION RECOMMENDATIONS (NLA-2014)	CHOLESTEROL IN ADULTS (mg/dL)	CHOLESTEROL IN ADULTS (mg/dL)
DESIRABLE	< 200.0	< 170.0
BORDERLINE HIGH	200.0 – 239.0	171.0 – 199.0
HIGH	>= 240.0	>= 200.0

#### NOTE:

- 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.
- As per National Lipid association - 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 recommended.



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

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





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

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

NAME : Mrs. BABLI  
AGE/ GENDER : 72 YRS/FEMALE  
COLLECTED BY :  
REFERRED BY :  
BARCODE NO. : A1164517  
CLIENT CODE. : KOS DIAGNOSTIC SHAHBAD  
CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

PATIENT ID : 1675969  
REG. NO./LAB NO. : 042411190001  
REGISTRATION DATE : 19/Nov/2024 12:31 PM  
COLLECTION DATE : 19/Nov/2024 04:06PM  
REPORTING DATE : 19/Nov/2024 05:14PM

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

## CLINICAL PATHOLOGY

### URINE ROUTINE & MICROSCOPIC EXAMINATION

#### PHYSICAL EXAMINATION

QUANTITY RECEIVED	10	ml	
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
COLOUR	AMBER YELLOW		PALE YELLOW
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
TRANSPARANCY	HAZY		CLEAR
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
SPECIFIC GRAVITY	1.01		1.002 - 1.030
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			

#### CHEMICAL EXAMINATION

REACTION	ACIDIC		
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
PROTEIN	Negative		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
SUGAR	2+		NEGATIVE (-ve)
by DIP STICK/REFLECTANCE SPECTROPHOTOMETRY			
pH	<=5.0		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

RED BLOOD CELLS (RBCs)	NEGATIVE (-ve)	/HPF	0 - 3
by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT			



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

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



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

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


<b>NAME</b>	: Mrs. BABLI	<b>PATIENT ID</b>	: 1675969
<b>AGE/ GENDER</b>	: 72 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 042411190001
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Nov/2024 12:31 PM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 19/Nov/2024 04:06PM
<b>BARCODE NO.</b>	: A1164517	<b>REPORTING DATE</b>	: 19/Nov/2024 05:14PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC SHAHBAD		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
PUS CELLS <i>by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT</i>	1-3	/HPF	0 - 5
EPITHELIAL CELLS <i>by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT</i>	2-4	/HPF	ABSENT
CRYSTALS <i>by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT</i>	NEGATIVE (-ve)		NEGATIVE (-ve)
CASTS <i>by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT</i>	NEGATIVE (-ve)		NEGATIVE (-ve)
BACTERIA <i>by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT</i>	NEGATIVE (-ve)		NEGATIVE (-ve)
OTHERS <i>by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT</i>	NEGATIVE (-ve)		NEGATIVE (-ve)
TRICHOMONAS VAGINALIS (PROTOZOA) <i>by MICROSCOPY ON CENTRIFUGED URINARY SEDIMENT</i>	ABSENT		ABSENT

\*\*\* End Of Report \*\*\*



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

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

