

Patient NAME :		Report STATUS :	
DOB/Age/Gender :		Barcode NO :	
Patient ID / UHID :		Sample Type :	
Referred BY :		Report Date :	
Sample Collected :			



Test Description	Value(s)	Unit(s)	Reference Range
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## Sedentary Lifestyle Screening Package C


### Complete Blood Count (CBC)

RBC Parameters			
Hemoglobin <i>Cyanide-free colorimetry</i>	13.6	g/dL	13.0 - 17.0
RBC Count <i>Electrical impedance</i>	<b>6.1 H*</b>	10 <sup>6</sup> /μl	4.5 - 5.5
PCV <i>Calculated</i>	45	%	40 - 50
MCV <i>Direct Measure Impedance</i>	<b>73.7 L*</b>	fl	83 - 101
MCH <i>Calculated</i>	<b>22.3 L*</b>	pg	27 - 32
MCHC <i>Calculated</i>	<b>30.2 L*</b>	g/dL	31.5 - 34.5
RDW (CV) * <i>Calculated</i>	<b>14.2 H*</b>	%	11.6 - 14.0
RDW-SD * <i>Calculated</i>	36.9	fl	35.1 - 43.9
WBC Parameters			
TLC <i>Electrical impedance and microscopy</i>	8.5	10 <sup>3</sup> /μl	4 - 10
Differential Leucocyte Count			
Neutrophils <i>Flowcytometry</i>	70	%	40-80
Lymphocytes <i>Flowcytometry</i>	23	%	20-40
Monocytes <i>Flowcytometry</i>	5	%	2-10
Eosinophils <i>Flowcytometry</i>	2	%	1-6
Basophils <i>Flowcytometry</i>	0	%	<2
Absolute Leukocyte Counts *			
Neutrophils. *	5.95	10 <sup>3</sup> /μl	2 - 7
Lymphocytes. *	1.96	10 <sup>3</sup> /μl	1 - 3
Monocytes. *	0.43	10 <sup>3</sup> /μl	0.2 - 1.0
Eosinophils. *	0.17	10 <sup>3</sup> /μl	0.02 - 0.5
Basophils. *	<b>0</b>	10 <sup>3</sup> /μl	0.02 - 0.5
Platelet Parameters			
Platelet Count	252	10 <sup>3</sup> /μl	150 - 410

Note :- (H\* - High , L\* - Low ,CL\* - Critical Low,CH\* - Critical High)

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**Consultant Pathologist**

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<i>Electrical impedance and microscopy</i>			
Mean Platelet Volume (MPV) * <i>Calculated</i>	10.4	fL	9.3 - 12.1
PCT * <i>Calculated</i>	0.3	%	0.17 - 0.32
PDW * <i>Calculated</i>	11.6	fL	8.3 - 25.0
P-LCR * <i>Calculated</i>	28.8	%	18 - 50
P-LCC * <i>Calculated</i>	73	10 <sup>9</sup> /L	44 - 140
Mentzer Index * <i>Calculated</i>	12.08	%	> 13

**Interpretation:**  
 CBC provides information about red cells, white cells and platelets. Results are useful in the diagnosis of anemia, infections, leukemias, clotting disorders and many other medical conditions.

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### Erythrocyte Sedimentation Rate (ESR)

ESR - Erythrocyte Sedimentation Rate <i>MODIFIED WESTERGREN</i>	<b>12 H*</b>	mm/hr	0 - 10
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**Interpretation:**

ESR is also known as Erythrocyte Sedimentation Rate. An ESR test is used to assess inflammation in the body. Many conditions can cause an abnormal ESR, so an ESR test is typically used with other tests to diagnose and monitor different diseases. An elevated ESR may occur in inflammatory conditions including infection, rheumatoid arthritis, systemic vasculitis, anemia, multiple myeloma, etc. Low levels are typically seen in congestive heart failure, polycythemia, sickle cell anemia, hypo fibrinogenemia, etc.

**Reference-** Dacie and Lewis practical hematology

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### HbA1C (Glycosylated Haemoglobin)

Glycosylated Hemoglobin (HbA1c) <i>HPLC</i>	5.2	%	< 5.7
Estimated Average Glucose *	102.54	mg/dL	Refer Table Below

**Interpretation:**

Interpretation For HbA1c% As per American Diabetes Association (ADA)

Reference Group	HbA1c in %
Non diabetic adults >=18 years	<5.7
At risk (Prediabetes)	5.7 - 6.4
Diagnosing Diabetes	>= 6.5
Therapeutic goals for glycemc control	Age > 19 years Goal of therapy: < 7.0 Age < 19 years Goal of therapy: <7.5

**Note:**

1. Since HbA1c reflects long term fluctuations in the blood glucose concentration, a diabetic patient who is recently under good control may still have a high concentration of HbA1c. Converse is true for a diabetic previously under good control but now poorly controlled. 2. 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

**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 glycemc control as compared to blood and urinary glucose determinations ADA criteria for correlation between HbA1c & Mean plasma glucose levels.

HbA1c(%)	Mean Plasma Glucose (mg/dL)	HbA1c(%)	Mean Plasma Glucose (mg/dL)
6	126	12	298
8	183	14	355
10	240	16	413

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### Blood Sugar Fasting

Glucose Fasting <i>Hexokinase</i>	99.9	mg/dL	70 - 100
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**Interpretation:**

Status	Fasting plasma glucose in mg/dL
Normal	70 - 100
Impaired fasting glucose	101 - 125
Diabetes	≥126

**Reference :** American Diabetes Association

**Comment :**

Blood glucose determinations are commonly used as an aid in the diagnosis and treatment of diabetes. Elevated glucose levels (hyperglycemia) may also occur with pancreatic neoplasm, hyperthyroidism, and adrenal cortical hyper function as well as other disorders. Decreased glucose levels (hypoglycemia) may result from excessive insulin therapy, insulinoma, or various liver diseases.

**Note**

1. The diagnosis of Diabetes requires a fasting plasma glucose of  $>$  or  $=$  126 mg/dL or a random / 2 hour plasma glucose value of  $>$  or  $=$  200 mg/dL with symptoms of diabetes mellitus.
2. Very high glucose levels ( $>$ 450 mg/dL in adults) may result in Diabetic Ketoacidosis.

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### Liver Function Test (LFT)

Bilirubin Total <i>Colorimetric Diazo</i>	0.8	mg/dL	0 - 1.2
Bilirubin Direct <i>DIAZO</i>	0.5	mg/dL	0 - 0.5
Bilirubin Indirect * <i>Calculation (T Bil - D Bil)</i>	0.3	mg/dL	0.1 - 1.0
SGOT/AST <i>IFCC without P5P</i>	27	U/L	up to 40
SGPT/ALT <i>IFCC without P5P</i>	<b>56.9 H*</b>	U/L	up to 41
SGOT/SGPT Ratio *	0.47	-	-
Alkaline Phosphatase <i>para-nitrophenyl phosphate</i>	96	U/L	40 - 129
Total Protein <i>Biuret</i>	7.2	g/dL	6.0 - 7.8
Albumin <i>Bromo cresol green</i>	4.6	g/dL	3.5 - 5.2
Globulin * <i>Calculation (T.P - Albumin)</i>	2.6	g/dL	2.3 - 3.5
Albumin :Globulin Ratio * <i>Calculation (Albumin/Globulin)</i>	1.77	-	1.0 - 2.1
Gamma Glutamyl Transferase (GGT) * <i>ENZYMATIC</i>	19	U/L	5 - 40

#### Interpretation:

The liver filters blood, metabolizes nutrients, detoxifies harmful substances, and produces blood clotting proteins. Liver cells contain enzymes that facilitate these functions. When cells are damaged, enzymes leak into the blood, detectable through blood tests.

Key enzymes tested:

- AST (SGOT):** may indicate tissue injury / damage in muscles or liver.
- ALT (SGPT):** Primarily in the liver. Elevated ALT and AST suggest liver damage.
- Alkaline Phosphatase & GGT:** Linked to bile production and flow. Elevated levels may indicate bile flow issues related to the liver, gallbladder, or bile ducts.

Blood proteins, **albumin and globulin**, are essential for growth, development, and health.

- Low protein:** May indicate bleeding, liver disorders, malnutrition, or agammaglobulinemia.
- High protein (Hyperproteinemia):** Often due to dehydration or increased protein production.
- Low albumin:** Caused by poor diet, kidney, or liver disease.
- High albumin:** Usually due to severe dehydration.

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### Kidney Function Test (KFT)

Blood Urea <i>Urease</i>	18.2	mg/dL	16.6 - 48.5
Bun * <i>Calculated</i>	8.5	mg/dL	6 - 20
Creatinine <i>Jaffe</i>	0.7	mg/dL	0.70 - 1.20
eGFR (CKD-EPI) *	131.85	ml/min/1.73 sq m	Normal Or High: $\geq 90$ Mild Or Decrease: 60-89 Mild To Moderate Decrease: 45-59 Mild To Severe Decrease: 30-44 Severe Decrease: 15-29 Kidney Failure: $< 15$
Bun/Creatinine Ratio * <i>Calculated</i>	12.14		12 - 20
Urea / Creatinine Ratio * <i>Calculated</i>	26		25.68- 42.8
Uric Acid <i>Uricase</i>	4.8	mg/dL	3.4 - 7.0
Calcium Serum <i>BAPTA</i>	9.1	mg/dL	8.6 - 10.0
Phosphorus <i>Phosphomolybdate</i>	2.9	mg/dL	2.5 - 4.5
Sodium <i>ISE-Indirect</i>	<b>134 L*</b>	mmol/L	136 - 145
Potassium <i>ISE-Indirect</i>	3.9	mmol/L	3.5 - 5.1
Chloride <i>ISE-Indirect</i>	<b>96.4 L*</b>	mmol/L	98 - 107

#### Interpretation:

Kidney function tests is a collective term for a variety of individual tests and procedures that can be done to evaluate how well the kidneys are functioning. Many conditions can affect the ability of the kidneys to carry out their vital functions. Some lead to a rapid (acute) decline in kidney function others lead to a gradual (chronic) decline in function. Both result in a buildup of toxic waste substances done on urine samples, as well as on blood samples. A number of symptoms may indicate a problem with your kidneys. These include : high blood pressure, blood in urine, frequent urges to urinate, difficulty beginning urination, painful urination, swelling in the hands and feet due to a buildup of fluids in the body. A single symptom may not mean something serious. However, when occurring simultaneously, these symptoms suggest that your kidneys are not working properly. Kidney function tests can help determine the reason. Ionized calcium this test if you have signs of kidney or parathyroid disease. The test may also be done to monitor progress and treatment of these diseases."eGFR test is applicable for patients aged 18 years or more."

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### Lipid Profile

Total Cholesterol <i>Enzymatic - Cholesterol Oxidase</i>	164.9	mg/dL	<200
Triglycerides <i>Glycerol-3-phosphate oxidase phenol aminophenazone</i>	90.5	mg/dL	<150
HDL Cholesterol <i>CHOD &amp; CHER</i>	<b>34.4 L*</b>	mg/dL	> 40
Non HDL Cholesterol * <i>Calculated</i>	<b>130.5 H*</b>	mg/dL	<130
LDL Cholesterol <i>Calculated</i>	<b>112.4 H*</b>	mg/dL	<100
V.L.D.L Cholesterol * <i>Calculated</i>	18.1	mg/dL	< 30
Chol/HDL Ratio * <i>Calculated</i>	4.79	Ratio	3.5 - 5.0
HDL/ LDL Ratio * <i>Calculated</i>	<b>0.31 L*</b>	Ratio	0.5 - 3.0
LDL/HDL Ratio * <i>Calculated</i>	3.27	Ratio	-

#### Interpretation:

Lipid level assessments must be made following 9 to 12 hours of fasting, otherwise assay results might lead to erroneous interpretation. NCEP recommends of 3 different samples to be drawn at intervals of 1 week for harmonizing biological variables that might be encountered in single assays.

National Lipid Association Recommendations (NLA-2014)	Total Cholesterol (mg/dL)	Triglyceride (mg/dL)	LDL Cholesterol (mg/dL)	Non HDL Cholesterol (mg/dL)
Optimal	<200	<150	<100	<130
Above Optimal			100-129	130 - 159
Borderline High	200-239	150-199	130-159	160 - 189
High	>=240	200-499	160-189	190 - 219
Very High	-	>=500	>=190	>=220

HDL Cholesterol	
Low	High
<40	>=60

#### Risk Stratification for ASCVD (Atherosclerotic Cardiovascular Disease) by Lipid Association of India.

<b>Risk Category</b>	A. CAD with > 1 feature of high risk group
<b>Extreme risk group</b>	B. CAD with >1 feature of very high risk group of recurrent ACS (within 1 year) despite LDL-C <or = 50 mg/dl or poly vascular disease

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Test Description	Value(s)	Unit(s)	Reference Range
<b>Very High Risk</b>	1. Established ASCVD 2. Diabetes with 2 major risk factors of evidence of end organ damage 3. Familial Homozygous Hypercholesterolemia		
<b>High Risk</b>	1. Three major ASCVD risk factors 2. Diabetes with 1 major risk factor or no evidence of end organ damage 3. CHD stage 3B or 4. 4 LDL >190 mg/dl 5. Extreme of a single risk factor 6. Coronary Artery Calcium - CAC > 300 AU 7. Lipoprotein a >= 50 mg/dl 8. Non stenotic carotid plaque		
<b>Moderate Risk</b>	2 major ASCVD risk factors		
<b>Low Risk</b>	0-1 major ASCVD risk factors		
<b>Major ASCVD (Atherosclerotic cardiovascular disease) Risk Factors</b>			
1. Age >=45 years in Males & >= 55 years in Females	3. Current Cigarette smoking or tobacco use		
2. Family history of premature ASCVD	4. High blood pressure		
5. Low HDL			

**Newer treatment goals and statin initiation thresholds based on the risk categories proposed by Lipid Association of India in 2020.**

Risk Group	Treatment Goals		Consider Drug Therapy	
	LDL-C (mg/dl)	Non-HDL (mg/dl)	LDL-C (mg/dl)	Non-HDL (mg/dl)
Extreme Risk Group Category A	<50 (Optional goal <OR = 30)	<80 (Optional goal <OR = 60)	>OR = 50	>OR = 80
Extreme Risk Group Category B	>OR = 30	>OR = 60	> 30	> 60
Very High Risk	<50	<80	>OR = 50	>OR = 80
High Risk	<70	<100	>OR = 70	>OR = 100
Moderate Risk	<100	<130	>OR = 100	>OR = 130
Low Risk	<100	<130	>OR = 130*	>OR = 160

\* After an adequate non-pharmacological intervention for at least 3 months.

**References : Management of Dyslipidaemia for the Prevention of Stroke : Clinical practice Recommendations from the Lipid Association of India. Current Vascular Pharmacology, 2022, 20, 134-155.**

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### Thyroid Profile Total

Triiodothyronine (T3) <i>ECLIA</i>	84.12	ng/dL	80 - 200
Total Thyroxine (T4) <i>ECLIA</i>	5.66	µg/dL	5.1- 14.1
Thyroid Stimulating Hormone (Ultrasensitive) <i>CMIA</i>	1.74	mIU/L	0.35 - 4.94

#### Interpretation:

Pregnancy	Reference Range TSH
1st Trimester	0.1 - 2.5
2nd Trimester	0.2 - 3.0
3rd Trimester	0.3 - 3.0

#### Clinical Use:

1. Diagnose Hypothyroidism & Hyperthyroidism
2. Monitor T4 therapy
3. Measure subnormal TSH levels

**Increased TSH:** Primary hypothyroidism, Subclinical hypothyroidism, TSH-dependent hyperthyroidism, Thyroid hormone resistance

**Decreased TSH:** Graves' disease, Autonomous thyroid hormone secretion, TSH deficiency

Thyroid malfunction (hyper or hypo) affects T3 & T4 levels. Pituitary or hypothalamic issues also influence thyroid activity.

1. **Primary Hypothyroidism:** High TSH levels.
2. **Secondary/Tertiary Hypothyroidism:** Low TSH levels.
3. **Euthyroid Sick Syndrome:** Abnormal thyroid test results due to non-thyroidal illnesses (NTI).

TBG levels are stable in healthy individuals but may be altered by pregnancy, estrogens, androgens, steroids, or glucocorticoids, causing inaccurate T3 & T4 readings.

TSH	T4	T3	Interpretation
High	Normal	Normal	Mild (subclinical) hypothyroidism
High	Low	Low Or Normal	Hypothyroidism
Low	Normal	Normal	Mild (subclinical) hyperthyroidism
Low	High Or Normal	High Or Normal	Hyperthyroidism
Low	Low Or Normal	Low Or Normal	Nonthyroidal illness; pituitary (secondary) hypothyroidism
Normal	High	High	Thyroid hormone resistance syndrome (a mutation in the thyroid hormone receptor decreases thyroid hormone function)

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### Insulin Fasting

Insulin (Fasting) ECLIA	<b>38.1 H*</b>	μU/mL	2.6 - 24.9
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**Interpretation:**

**Note**

1. A single random blood sample for insulin may provide insufficient information due to wide variation in the time responses of insulin levels and blood glucose.
2. Stimulation of insulin secretion may be caused by many factors like hyperglycemia, glucagon, amino acids, growth hormone and catecholamines.
3. Interference in insulin assay is seen due to insulin antibodies which develop in patients treated with bovine or porcine insulin.

**Clinical Utility**

- Evaluation of fasting hypoglycemia
- Evaluation of Polycystic Ovary syndrome
- Classification of Diabetes mellitus
- Predict Diabetes mellitus
- Assessment of Beta cell activity
- Select optimal therapy for Diabetes
- Investigation of insulin resistance
- Predict the development of Coronary Artery Disease

**Increased levels -**

Insulinoma, Some Type II diabetic patients, Infantile hypoglycemia, Hyperinsulinism, Obesity, Cushing's syndrome, Oral contraceptives, Acromegaly, Hyperthyroidism

**Decreased levels -**

Untreated Type I Diabetes mellitus

### C Peptide Fasting

C - PEPTIDE (Fasting) ECLIA	<b>4.48 H*</b>	ng/mL	1.1 - 4.4
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**Interpretation:**

**Clinical Use**

1. Assess pancreatic islet cell function
2. Distinguish insulin secreting tumors ( Insulinoma) from exogenous insulin administration as a cause of hypoglycemia ( commercial insulin does not contain C-peptide). Sera from Insulinoma patients have high insulin and high C-peptide levels whereas hypoglycemia from injected or exogenous insulin shows high insulin and low C-peptide levels.
3. Distinguish Type I and Type II Diabetes mellitus

**Increased Levels –**

Insulinoma & Type II Diabetes

**Decreased Levels-**

Type I Diabetes & Exogenous insulin administration

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### Lipoprotein (A)

Lipoprotein A (Lipo A) <i>Turbidimetric</i>	5.4	mg/dL	up to 30
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**Interpretation:**

**Note:**

Lp(a) is considered an important risk factor for CHD especially among Indians as Indians tend to have high prevalence of elevated levels of Lp(a)

Lp(a) in mg/dL	REMARKS
(As per Lipid Association of India 2016)	
<30	Low risk
30-49	Moderate Risk
>= 50	High risk

**Comments:**

Lipoprotein (a) [Lp(a)] consists of an LDL particle that is covalently bound to an additional protein, apolipoprotein (a) [Apo(a)]. Apo(a) has high-sequence homology with the coagulation factor plasminogen and, like LDL, Lp(a) contains apolipoprotein B100 (ApoB). Thus, Lp(a) is both proatherogenic and prothrombotic. Lp(a) is an independent risk factor for Coronary Heart Disease (CHD), Ischemic Stroke, and Aortic Valve Stenosis. Lp(a) is highly heterogenous molecule; the degree of atherogenicity of the Lp(a) particle may depend on the molecular size of the Lp(a)-specific protein. Serum concentrations of Lp(a) are related to genetic factors, and are largely unaffected by diet, exercise and lipid -lowering pharmaceuticals. However, in a patient with additional modifiable CHD risk factors, more aggressive therapy to normalize these factors may be indicated if the Lp(a) value is also increased.

**Usage**

Evaluation of increased risk for cardiovascular disease and events:

1. In individuals at intermediate risk for cardiovascular disease
2. In patients with early atherosclerosis or
3. In patients with strong family history of early CHD

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Patient NAME :	MUZAMMIL		
DOB/Age/Gender :	D/Male	Report STATUS :	
Patient ID / UHID :	IF15508949	Barcode NO :	
Referred BY :	ST	Sample Type :	
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### Apolipoproteins A1 & B

Apolipoprotein A-1 (APO-A) <i>Tina-quant</i>	<b>98.9 L*</b>	mg/dL	104 - 202
Apolipoprotein B (APO-B) <i>Tina-quant</i>	87.2	mg/dL	66 - 144
Apo B / Apo A1 Ratio	0.88		0.35 - 0.98

#### Interpretation:

The Apo A1 and Apo B blood tests are crucial for assessing lipid metabolism and cardiovascular risk. High Apo A1 and low Apo B levels are associated with a lower risk of cardiovascular disease, while low Apo A1 and high Apo B levels indicate a higher risk. Management involves lifestyle modifications, medications, and regular monitoring to maintain optimal lipid levels and reduce cardiovascular risk. Consulting healthcare providers for accurate interpretation and tailored treatment plans is essential for effective management.

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**ALP / GGT Ratio**

Alkaline Phosphatase <i>para-nitrophenyl phosphate</i>	96	U/L	40 - 129
Gamma Glutamyl Transferase (GGT) * <i>ENZYMATIC</i>	19	U/L	5 - 40
ALP - GGT RATIO	5.05		

**Interpretation:**

GGT is a useful adjunct to determine the origin of elevated alkaline phosphatase activity because it is elevated by liver disease but not bone disease.

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**Consultant Pathologist**

Patient NAME :		Report STATUS :	
DOB/Age/Gender :		Barcode NO :	
Patient ID / UHID :		Sample Type :	
Referred BY :		Report Date :	
Sample Collected :			



Test Description	Value(s)	Unit(s)	Reference Range
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### Urine Routine and Microscopic Examination

Physical Examination			
Volume *	20	mL	-
Colour *	Yellow	-	Pale yellow
Transparency *	Clear	-	Clear
Deposit *	Absent	-	Absent
Chemical Examination			
Reaction (pH) <i>Double Indicator</i>	6.0	-	4.5 - 8.0
Specific Gravity <i>Ion Exchange</i>	1.015	-	1.010 - 1.030
Urine Glucose (sugar) <i>Oxidase / Peroxidase</i>	Negative	-	Negative
Urine Protein (Albumin) <i>Acid / Base Colour Exchange</i>	Negative	-	Negative
Urine Ketones (Acetone) <i>Legals Test</i>	Negative	-	Negative
Blood <i>Peroxidase Hemoglobin</i>	Negative	-	Negative
Leucocyte esterase <i>Enzymatic Reaction</i>	Negative	-	Negative
Bilirubin Urine <i>Coupling Reaction</i>	Negative	-	Negative
Nitrite <i>Griless Test</i>	Negative	-	Negative
Urobilinogen <i>Ehrlichs Test</i>	Normal	-	Normal
Microscopic Examination			
Pus Cells (WBCs) *	2-4	/hpf	0 - 5
Epithelial Cells *	1-2	/hpf	0 - 4
Red blood Cells *	Absent	/hpf	Absent
Crystals *	Absent	-	Absent
Cast *	Absent	-	Absent
Yeast Cells *	Absent	-	Absent
Amorphous deposits *	Absent	-	Absent
Bacteria *	Absent	-	Absent
Protozoa *	Absent	-	Absent

**Interpretation:**

**URINALYSIS-** Routine urine analysis assists in screening and diagnosis of various metabolic, urological, kidney and liver disorders.

**Protein:** Elevated proteins can be an early sign of kidney disease. Urinary protein excretion can also be temporarily elevated by strenuous

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Referred BY :		Report Date :	
Sample Collected :			



Test Description	Value(s)	Unit(s)	Reference Range
<p>exercise, orthostatic proteinuria, dehydration, urinary tract infections and acute illness with fever</p> <p><b>Glucose:</b> Uncontrolled diabetes mellitus can lead to presence of glucose in urine. Other causes include pregnancy, hormonal disturbances, liver disease and certain medications.</p> <p><b>Ketones:</b> Uncontrolled diabetes mellitus can lead to presence of ketones in urine. Ketones can also be seen in starvation, frequent vomiting, pregnancy and strenuous exercise.</p> <p><b>Blood:</b> Occult blood can occur in urine as intact erythrocytes or haemoglobin, which can occur in various urological, nephrological and bleeding disorders.</p> <p><b>Leukocytes:</b> An increase in leukocytes is an indication of inflammation in urinary tract or kidneys. Most common cause is bacterial urinary tract infection.</p> <p><b>Nitrite:</b> Many bacteria give positive results when their number is high. Nitrite concentration during infection increases with length of time the urine specimen is retained in bladder prior to collection.</p> <p><b>pH:</b> The kidneys play an important role in maintaining acid base balance of the body. Conditions of the body producing acidosis/ alkalosis or ingestion of certain type of food can affect the pH of urine.</p> <p><b>Specific gravity:</b> Specific gravity gives an indication of how concentrated the urine is. Increased specific gravity is seen in conditions like dehydration, glycosuria and proteinuria while decreased specific gravity is seen in excessive fluid intake, renal failure and diabetes insipidus.</p> <p><b>Bilirubin:</b> In certain liver diseases such as biliary obstruction or hepatitis, bilirubin gets excreted in urine.</p> <p><b>Urobilinogen:</b> Positive results are seen in liver diseases like hepatitis and cirrhosis and in cases of haemolytic anaemia.</p>			

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

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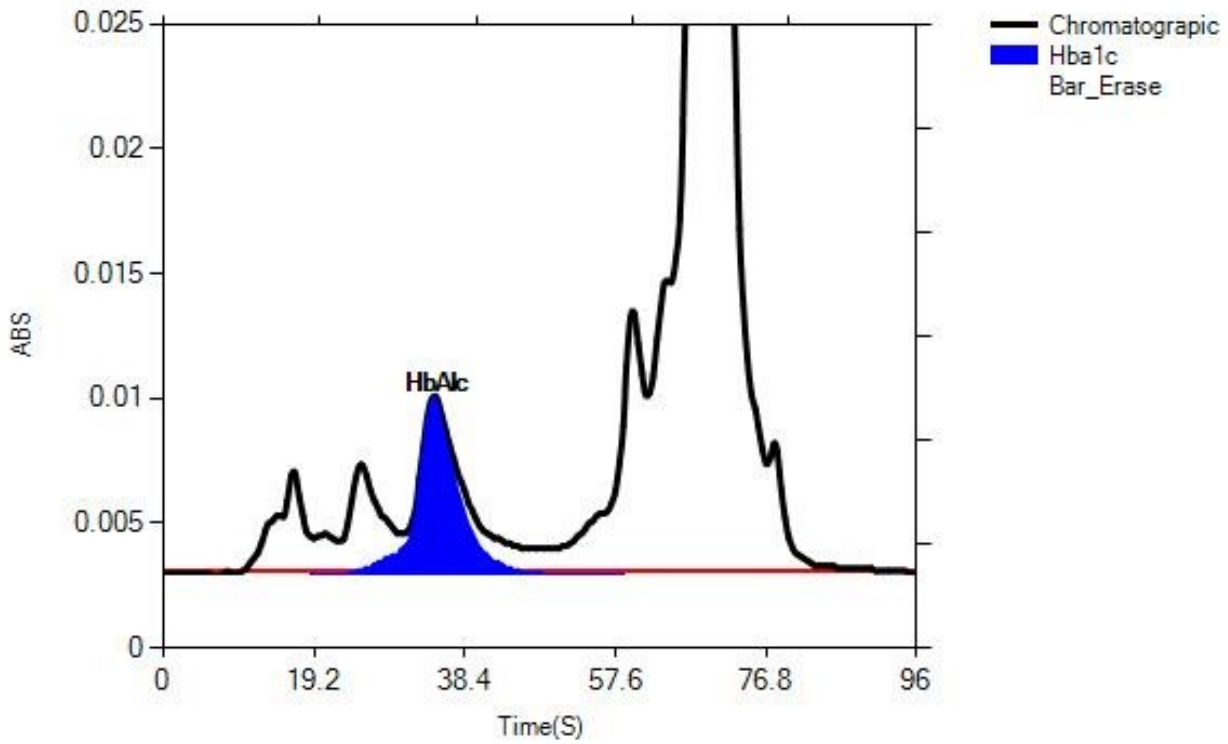


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ADPL HBA1c Graph Report

Name : Sample Id :  
 Sample Type : Whole Blood EDTA Total Area : **10.969**

Peak Name	Retention Time(s)	Absorbance	Area	Result (Area %)
HbA0	69	0.2878	9.96	91.2
HbA1c	35	0.0058	0.605	5.2
La1c	33	0.0066	0.158	1.4
HbF	22	0.0013	0.079	0.7
Hba1b	16	0.0041	0.123	1.1
Hba1a	12	0.0012	0.044	0.4



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1. The presented findings in the Reports are intended solely for informational and interpretational purposes by the referring physician or other qualified medical professionals possessing a comprehensive understanding of reporting units, reference ranges, and technological limitations. The laboratory shall not be held liable for any interpretation or misinterpretation of the results, nor for any consequential or incidental damages arising from such interpretation.
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