

Lab Address:- # Plot No. 564 , 1st floor , Buddhanagar , Near Sai Baba Temple Peerzadiguda Boduppal Hyderabad, Telangana. ICMR Reg .No. SAPALAPVLHT (Covid -19)

#### LABORATORY TEST REPORT

Name : Mr. ANJANNA Sample ID : A1308261

Age/Gender : 63 Years/Male Referred by : Dr. SELF

Referring Customer : V CARE MEDICAL DIAGNOSTICS

Primary Sample : Whole Blood
Sample Tested In : Whole Blood EDTA

Client Address : Kimtee colony ,Gokul Nagar,Tarnaka

Reg. No : 0312412120002 SPP Code : SPL-CV-172

Collected On : 12-Dec-2024 08:18 AM Received On : 12-Dec-2024 12:23 PM

Reported On : 12-Dec-2024 01:14 PM

Report Status : Final Report

## **HAEMATOLOGY**

#### **SAGEPATH CARE 1.2**

Test Name	Results	Units	Biological Reference Interval
COMPLETE BLOOD COUNT (CBC)			
Haemoglobin (Hb)  Method: Cynmeth Method)	14.0	g/dL	13-17
(Method: Cell Impedence)	4.93	10^12/L	4.5-5.5
(Method: Calculated)	44.5	%	40-50
(without Calculated)  MCV (Method: Calculated)	90	fl	81-101
MCH (Method: Calculated)	28.4	pg	27-32
MCHC (Method: Calculated)	32.5	g/dL	32.5-34.5
RDW-CV (Method: Calculated)	14.5	%	11.6-14.0
Method: Cell Impedance )	195	10^9/L	150-410
Total WBC Count (Method: Impedance)	6.2	10^9/L	4.0-10.0
Neutrophils (Methot: Cell Impedence)	70	%	40-70
Absolute Neutrophils Count     (Method: Impedence)	4.34	10^9/L	2.0-7.0
Lymphocytes (Method: Cell Impedence)	23	%	20-40
Absolute Lymphocyte Count (Method: Impedence)	1.43	10^9/L	1.0-3.0
Monocytes (Method: Microscopy)	05	%	2-10
Absolute Monocyte Count (Method: Calculated)	0.31	10^9/L	0.2-1.0
Cosinophils     (Method: Microscopy)	02	%	1-6
Absolute Eosinophils Count     (Method: Calculated)	0.12	10^9/L	0.02-0.5
Basophils (Method: Microscopy)	00	%	1-2
Absolute Basophil ICount     (Method: Calculated)	0.00	10^9/L	0.0-0.3
Morphology			
WBC	Within Norn	nal Limits	
RBC	Anisocytosi	s with Normocy	tic normochromic
Platelets (Method: Microscopy)	Adequate.		

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







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Swarnabala - M
DR.SWARNA BALA
MD PATHOLOGY



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Sample Tested In : Whole Blood EDTA Reported On : 12-Dec-2024 01:39 PM

Client Address : Kimtee colony ,Gokul Nagar,Tarnaka Report Status : Final Report

#### **HAEMATOLOGY**

#### **SAGEPATH CARE 1.2**

Test Name	Results	Units	Biological Reference Interval	
Erythrocyte Sedimentation Rate (ESR)	12	mm/hr	14 or less	

Comments: ESR is an acute phase reactant which indicates presence and intensity of an inflammatory process. It is never diagnostic of a specific disease. It is used to monitor the course or response to treatment of certain diseases. Extremely high levels are found in cases of malignancy, hematologic diseases, collagen disorders and renal diseases.









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Swarnabala - M
DR.SWARNA BALA
MD PATHOLOGY





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Primary Sample : Whole Blood Received On : 12-Dec-2024 12:23 PM
Sample Tested In : Plasma-NaF(F) Reported On : 12-Dec-2024 01:27 PM

Client Address : Kimtee colony ,Gokul Nagar,Tarnaka Report Status : Final Report

## **CLINICAL BIOCHEMISTRY**

#### **SAGEPATH CARE 1.2**

Test Name Results Units Biological Reference Interval

Glucose Fasting (F) 87 mg/dL 70-100

Interpretation of Plasma Glucose based on ADA guidelines 2018

Diagnosis	FastingPlasma Glucose(mg/dL)	2hrsPlasma Glucose(mg/dL)	HbA1c(%)	RBS(mg/dL)
Prediabetes	100-125	140-199	5.7-6.4	NA
Diabetes	> = 126	>= 200	>= 6.5	>=200(with symptoms)

Reference: Diabetes care 2018:41(suppl.1):S13-S27













: Whole Blood EDTA

## Sagepath Labs Pvt. Ltd.

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: 12-Dec-2024 01:31 PM

#### LABORATORY TEST REPORT

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Sample Tested In

Age/Gender : 63 Years/Male Reg. No : 0312412120002

Referred by : Dr. SELF SPP Code : SPL-CV-172

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#### **CLINICAL BIOCHEMISTRY**

Reported On

#### **SAGEPATH CARE 1.2**

5/(0E) /(III 6/((E IIE					
Test Name	Results	Units	Biological Reference Interval		
© Glycated Hemoglobin (HbA1c)	6.2	%	Non Diabetic:< 5.7 Pre diabetic: 5.7-6.4 Diabetic:>= 6.5		
Mean Plasma Glucose (Nethod: Calculated)	131.24	mg/dL			

Glycated hemoglobins (GHb), also called glycohemoglobins, are substances formed when glucose binds to hemoglobin, and occur in amounts proportional to the concentration of serum glucose. Since red blood cells survive an average of 120 days, the measurement of GHb provides an index of a person's average blood glucose concentration (glycemia) during the preceding 2-3 months. Normally, only 4% to 6% of hemoglobin is bound to glucose, while elevated glycohemoglobin levels are seen in diabetes and other hyperglycemic states Mean Plasma Glucose (MPG): This Is Mathematical Calculations Where Glycated Hb Can Be Correlated With Daily Mean Plasma Glucose Level

NOTE: The above Given Risk Level Interpretation is not age specific and is an information resource only and is not to be used or relied on for any diagnostic or treatment purposes and should not be used as a substitute for professional diagnosis and treatment. Kindly Correlate clinically.

#### INTERPRETATION

Method: Analyzer Fully automated HPLC platform.

Average Blood Glucose(eAG) (mg/dL)	Level of Control	Hemoglobin A1c (%)
421		14%
386	_ A _	13%
350	L	12%
314	E	11%
279	R	10%
243	Т	9%
208		8%
172	POOR	7%
136	GOOD	6%
101	EXCELLENT	5%

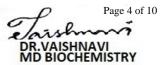
HbA1c values of 5.0- 6.5 percent indicate good control or an increased risk for developing diabetes mellitus. HbA1c values greater than 6.5 percent are diagnostic of diabetes mellitus. Diagnosis should be confirmed by repeating the HbA1c test.

NOTE: Hb F higher than 10 percent of total Hb may yield falsely low results. Conditions that shorten red cell survival, such as the presence of unstable hemoglobins like Hb SS, Hb CC, and Hb SC, or other causes of hemolytic anemia may yield falsely low results. Iron deficiency anemia may yield falsely high results.













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#### **CLINICAL BIOCHEMISTRY**

SAGEPATH CARE 1.2				
Test Name	Results	Units	Biological Reference Interval	
© Calcium (Method: Arsenazo)	9.0	mg/dL	8.5-10.1	

#### Comments:

- Calcium in the body is found mainly in the bones (approximately 99%). In serum, Calcium exists in a
  free ionised form and in bound form (with Albumin). Hence, a decrease in Albumin causes lower
  Calcium levels and vice-versa.
- Calcium levels in serum depend on the Parathyroid Hormone.
- Increased Calcium levels are found in Bone tumors, Hyperparathyroidism. decreased levels are found in Hypoparathyroidism, renal failure, Rickets.

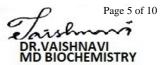
\*\*\* End Of Report \*\*\*

Excellence In Health Care













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## **CLINICAL BIOCHEMISTRY**

#### **SAGEPATH CARE 1.2**

SAGEFATTI CARE 1.2					
Test Name	Results	Units	Biological Reference Interval		
Lipid Profile					
Cholesterol Total (Method: CHOD-POD)	184	mg/dL	< 200		
Triglycerides-TGL (Method: GPO-POD)	<u>197</u>	mg/dL	< 150		
Cholesterol-HDL (Method: Direct)	42.8	mg/dL	40-60		
Cholesterol-LDL (Method: Calculated)	<u>101.8</u>	mg/dL	< 100		
Cholesterol- VLDL (Method: Calculated)	<u>39.4</u>	mg/dL	7-35		
Non HDL Cholesterol (Method: Calculated)	<u>141.2</u>	mg/dL	< 130		
Cholesterol Total /HDL Ratio	4.3	%	0-4.0		
HDL / LDL Ratio	0.42				
LDL/HDL Ratio (Method: Calculated)	2.38	%	0-3.5		

The National Cholesterol Education program's third Adult Treatment Panel (ATPIII) has issued its recommendations on evaluating and treating lipid discorders for primary and secondary.

NCEP Recommendations	Cholesterol Total in (mg/dL)	I rialvcerides	HDL Cholesterol (mg/dL)	LDL Cholesterol	Non HDL Cholesterol in (mg/dL)
()ntimal	Adult: < 200 Children: < 170	< 150	40-59	Adult:<100 Children: <110	<130
Above Optimal				100-129	130 - 159
Borgerline High	Adult: 200-239 Children:171-199	150-199		Adult: 130-159 Children: 111-129	160 - 189
High	Adult:>or=240 Children:>or=200	200-499	≥ 60	Adult:160-189 Children:>or=130	190 - 219
Very High		>or=500		Adult: >or=190	>=220

Note: LDL cholesterol cannot be calculated if triglyceride is >400 mg/dL (Friedewald's formula). Calculated values not provided for LDL and VLDL











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## **CLINICAL BIOCHEMISTRY**

#### **SAGEPATH CARE 1.2**

SAGEFATH CARE 1.2				
Test Name	Results	Units	Biological Reference Interval	
Liver Function Test (LFT)				
Bilirubin(Total)  (Method: Diazo)	0.3	mg/dL	0.2-1.2	
Bilirubin (Direct) (Method: Dlazo)	0.1	mg/dL	0.0 - 0.3	
Bilirubin (Indirect) (Method: Calculated)	0.2	mg/dL	0.2-1.0	
Aspartate Aminotransferase (AST/SGOT)  (Method: IFCC UV Assay)	18	U/L	5-48	
Alanine Aminotransferase (ALT/SGPT)	16	U/L	0-55	
Alkaline Phosphatase(ALP)     (Method: Kinetic PNPP-AMP)	105	U/L	30-120	
Gamma Glutamyl Transpeptidase (GGTP)	16	U/L	15-85	
Protein - Total	6.6	g/dL	6.4-8.2	
Albumin     (Methad: Bromacresol Green (BCG))	3.8	g/dL	3.4-5.0	
Globulin     (Method: Calculated)	2.8	g/dL	2.0-4.2	
A:G Ratio     (Method: Calculated)	1.36	%	0.8-2.0	
SGOT/SGPT Ratio	1.13			

Alanine Aminotransferase(ALT) is an enzyme found in liver and kidneys cells. ALT helps create energy for liver cells. Damaged liver cells release ALT into the bloodstream, which can elevate ALT levels in the blood.

Aspartate Aminotransferase (AST) is an enzyme in the liver and muscles that helps metabolizes amino acids. Similarly to ALT, elevated AST levels may be a sign of liver damage or liver disease.

Alkaline phosphate (ALP) is an enzyme present in the blood. ALP contributes to numerous vital bodily functions, such as supplying nutrients to the liver, promoting bone growth, and metabolizing fat in the intestines.

Gamma-glutamyl Transpeptidase (GGTP) is an enzyme that occurs primarily in the liver, but it is also present in the kidneys, pancreas, gallbladder, and spleen. Higher than normal concentrations of GGTP in the blood may indicate alcohol-related liver damage. Elevated GGTP levels can also increase the risk of developing certain types of cancer.

**Bilirubin** is a waste product that forms when the liver breaks down red blood cells. Bilirubin exits the body as bile in stool. High levels of bilirubin can cause jaundice - a condition in which the skin and whites of the eyes turn yellow- and may indicate liver damage.

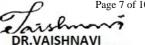
**Albumin** is a protein that the liver produces. The liver releases albumin into the bloodstream, where it helps fight infections and transport vitamins, hormones, and enzymes throughout the body. Liver damage can cause abnormally low albumin levels.

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









MD BIOCHEMISTRY

Client Address



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## **CLINICAL BIOCHEMISTRY**

#### SAGEPATH CARE 1.2

SAGEPATH CARE 1.2					
Test Name	Results	Units	Biological Reference Interval		
Kidney Profile-KFT					
Creatinine (Method: Jaffes Kinetic)	1.23	mg/dL	0.70-1.30		
Urea-Serum (Method: Calculated)	19.0	mg/dL	17.1-49.2		
Blood Urea Nitrogen (BUN)	8.88	mg/dL	8.0-23.0		
BUN / Creatinine Ratio	7.22		6 - 22		
Uric Acid (Method: Uricase)	5.7	mg/dL	3.5-7.2		
Sodium (Method: ISE Direct)	138	mmol/L	135-150		
Potassium (Method: ISE Direct)	4.1	mmol/L	3.5-5.0		
Chloride (Method: ISE Direct)	102	mmol/L	94-110		

#### Interpretation:

• The kidneys, located in the retroperitoneal space in the abdomen, are vital for patient health. They process several hundred liters of fluid a day and remove around two liters of waste products from the bloodstream. The volume of fluid that passes though the kidneys each minute is closely linked to cardiac output. The kidneys maintain the body's balance of water and concentration of minerals such as sodium, potassium, and phosphorus in blood and remove waste by-products from the blood after digestion, muscle activity and exposure to chemicals or medications. They also produce renin which helps regulate blood pressure, produce erythropoietin which stimulates red blood cell production, and produce an active form of vitamin D, needed for bone health.











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# **CLINICAL BIOCHEMISTRY**

#### **SAGEPATH CARE 1.2**

Test Name	Results	Units	Biological Reference Interval	
Iron Profile-I				
Iron(Fe) (Method: Ferrozine)	<u>53</u>	μg/dL	65-175	
Total Iron Binding Capacity (TIBC)	362	μg/dL	250-450	
Transferrin (Method: Calculated)	253.15	mg/dL	215-365	
Iron Saturation((% Transferrin Saturation)	<u>14.64</u>	%	20-50	
Unsaturated Iron Binding Capacity (UIBC)	309	μg/dL	110 - 370	

#### Interpretation:

- Serum transferrin (and TIBC) high, serum iron low, saturation low. Usual causes of depleted iron stores include blood loss, inadequate dietary iron. RBCs in moderately severe iron deficiency are hypochromic and microcytic. Stainable marrow iron is absent. Serum ferritin decrease is the earliest indicator of iron deficiency if inflammation is absent.
- Anemia of chronic disease: Serum transferrin (and TIBC) low to normal, serum iron low, saturation low or normal. Transferrin decreases with many inflammatory diseases. With chronic disease there is a block in movement to and utilization of iron by marrow. This leads to low serum iron and decreased erythropoiesis. Examples include acute and chronic infections, malignancy and renal failure.
- Sideroblastic Anemia: Serum transferrin (and TIBC) normal to low, serum iron normal to high, saturation high.
- Hemolytic Anemia: Serum transferrin (and TIBC) normal to low, serum iron high, saturation high.
- Hemochromatosis: Serum transferrin (and TIBC) slightly low, serum iron high, saturation very high.
- Protein depletion: Serum transferrin (and TIBC) may be low, serum iron normal or low (if patient also is iron deficient). This may occur as a result of malnutrition, liver disease, renal
- Liver disease: Serum transferrin variable; with acute viral hepatitis, high along with serum iron and ferritin. With chronic liver disease (eg, cirrhosis), transferrin may be low. Patients who have cirrhosis and portacaval shunting have saturated TIBC/transferrin as well as high ferritin.









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## **CLINICAL BIOCHEMISTRY**

#### **SAGEPATH CARE 1.2**

Test Name	Results	Units	Biological Reference Interval
Thyroid Profile-I(TFT)			
T3 (Triiodothyronine)	124.3	ng/dL	40-181
(Method: CLIA) (Method: CLIA)	8.6	μg/dL	3.2-12.6
TSH -Thyroid Stimulating Hormone (Method: CLIA)	3.62	μIU/mL	0.35-5.5

#### Pregnancy & Cord Blood

T3 (Triiodothyronine):		T4 (Thyroxine)	TSH (Thyroid Stimulating Hormone)
First Trimester	: 81-190 ng/dL	15 to 40 weeks:9.1-14.0 μg/dL	First Trimester : 0.24-2.99 µIU/mL
Second&Third Trimester :100-260 ng/dL			Second Trimester: 0.46-2.95 µIU/mL
			Third Trimester : 0.43-2.78 µIU/mL
Cord Blood: 30-70 n	ng/dL	Cord Blood: 7.4-13.0 µg/dL	Cord Blood: : 2.3-13.2 µIU/mL

#### **Interpretation:**

- Thyroid gland is a butterfly-shaped endocrine gland that is normally located in the lower front of the neck. The thyroid's job is to make thyroid hormones, which are secreted into the blood and then carried to every tissue in the body. Thyroid hormones help the body use energy, stay warm and keep the brain, heart, muscles, and other organs working as they should.
- Thyroid produces two major hormones: triiodothyronine (T3) and thyroxine (T4). If thyroid gland doesn't produce enough of these hormones, you may experience symptoms such as weight gain, lack of energy, and depression. This condition is called hypothyroidism.
- Thyroid gland produces too many hormones, you may experience weight loss, high levels of anxiety, tremors, and a sense of being on a high. This is called hyperthyroidism.
- TSH interacts with specific cell receptors on the thyroid cell surface and exerts two main actions. The first action is to stimulate cell reproduction and hypertrophy. Secondly, TSH stimulates the thyroid gland to synthesize and secrete T3 and T4.
- The ability to quantitate circulating levels of TSH is important in evaluating thyroid function. It is especially useful in the differential diagnosis of primary (thyroid) from secondary (pituitary) and tertiary (hypothalamus) hypothyroidism. In primary hypothyroidism, TSH levels are significantly elevated, while in secondary and tertiary hypothyroidism, TSH levels are low.







