tenet DIAGNOSTICS
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Name	: **MR.NAGENDRA RAO K**	TID/SID	: UMR2331753/ 28799012
Age / Gender	: 65 Years / Male	Registered on	: 28-Dec-2024 / 14:32 PM
Ref.By	: DR KALYAN	Collected on	: 28-Dec-2024 / 14:38 PM
Req.No	: BIL5109258	Reported on	: 28-Dec-2024 / 19:55 PM
		Reference	: Uppaluri K&H Personalized

TEST REPORT

DEPARTMENT OF CLINICAL CHEMISTRY II

Copper, Serum

Investigation	Observed Value	Biological Reference Interval
Copper Method:Spectrophotometry	110	80-155 µg/dL

Interpretation: Wilson's disease or hepatolenticular degeneration is an autosomal recessive genetic disorder in which copper accumulates in tissues; this manifests as neurological or psychiatric symptoms and liver disease. It is treated with medication that reduces copper absorption or removes the excess copper from the body, but occasionally a liver transplant is required.

* Sample processed at National Reference Laboratory,
Tenet Diagnostics,Hyderabad

--- End Of Report ---

Dr Afreen Anwar
Consultant Biochemist

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Req.No	: BIL5109258	Reported on	: 28-Dec-2024 / 18:23 PM
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TEST REPORT

DEPARTMENT OF CLINICAL CHEMISTRY II

Transferrin

Investigation	Observed Value	Biological Reference Interval
Transferrin Method:Calculated	265	160-340 mg/dL

Interpretation: Transferrinis a protein largely produced by the liver which binds to Iron and transports it throughout the body. It is responsible for 50%-70% of the iron binding capacity of serum. Healthy liver function and nutrition are important to the body's ability to produce transferrin in the proper amount. Transferrin levels increase in cases of iron deficiency and decrease in cases of iron overload. A transferrin test may be done to monitor liver function or nutritional status.

Reference: Tietz fundamentals of Clinical biochemistry

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--- End Of Report ---

Dr.Abdur Rehman Asif
Consultant Biochemist
Reg.No - APMC/FMR/78102

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	TEST REPORT	Reference	: Uppaluri K&H Personalized

DEPARTMENT OF HEMATOPATHOLOGY

Complete Blood Picture (CBP)

Investigation	Observed Value	Biological Reference Interval
Hemoglobin Method:Spectrophotometry	13.4	13.0-17.0 g/dL
PCV/HCT Method:Calculated	**39.1**	40.0-50.0 vol%
Total RBC Count Method:Electrical Impedance	4.60	4.50-5.50 mill /cu.mm
MCV Method:Calculated	84.9	83.0-101.0 fL
MCH Method:Calculated	29.1	27.0-32.0 pg
MCHC Method:Calculated	34.3	31.5-34.5 g/dL
RDW (CV) Method:Calculated	**14.6**	11.6-14.0 %
MPV Method:Calculated	9.8	7.0-10.0 fL
Total WBC Count Method:Electrical Impedance	4770	4000-10000 cells/cumm
Platelet Count Method:Electrical Impedance	2.17	1.50-4.10 lakhs/cumm
Differential Count		
Neutrophils	51.3	40.0-80.0 %
Lymphocytes	35.1	20.0-40.0 %
Eosinophils	3.7	1.0-6.0 %
Monocytes	9.2	2.0-10.0 %
Basophils Method:Flow Cytometer - Microscopy	0.7	0.0-2.0 %
Absolute Neutrophil Count	2447	2000-7000 cells/cumm
Absolute Lymphocyte Count	1674	1000-3000 cells/cumm
Absolute Eosinophil Count	176	20-500 cells/cumm
Absolute Monocyte Count	439	200-1000 cells/cumm
Absolute Basophil Count Method:Calculated	33	20-100 cells/cumm

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TEST REPORT

Neutrophil - Lymphocyte Ratio(NLR) Method:Calculated	1.46	0.78-3.53

Peripheral Blood Smear Examination

RBC	Normocytic normochromic
WBC	Normal in Morphology & Distribution
Platelets Method:Microscopy	Adequate

Method: Automated Hematology Analyzer, Microscopy

Reference: Dacie and Lewis Practical Hematology,12th Edition

Interpretation: A Complete Blood Picture (CBP) is a screening test which can aid in the diagnosis of a variety of conditions and diseases such as anemia, leukemia, bleeding disorders and infections. This test is also useful in monitoring a person's reaction to treatment when a condition which affects blood cells has been diagnosed. All the abnormal results are to be correlated clinically.

Note: These results are generated by a fully automated hematology analyzer and the differential count is computed from a total of several thousands of cells. Therefore the differential count appears in decimalised numbers and may not add upto exactly 100. It may fall between 99 and 101.

* Sample processed at National Reference Laboratory,
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--- End Of Report ---

Dr Vikas Reddy
Consultant Pathologist

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DEPARTMENT OF HEMATOPATHOLOGY

Hemogram

Investigation	Observed Value	Biological Reference Interval
Hemoglobin Method:Cyanide Free Lyse Hemoglobin	13.4	13.0-17.0 g/dL
PCV/HCT Method:Calculated	**39.1**	40.0-50.0 vol%
Total RBC Count Method:Electrical Impedance	4.60	4.50-5.50 mill /cu.mm
MCV Method:Calculated	84.9	83.0-101.0 fL
MCH Method:Calculated	29.1	27.0-32.0 pg
MCHC Method:Calculated	34.3	31.5-34.5 g/dL
RDW (CV) Method:Calculated	**14.6**	11.6-14.0 %
MPV Method:Calculated	9.8	7.0-10.0 fL
Total WBC Count Method:Electrical Impedance	4770	4000-10000 cells/cumm
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Differential Count		
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Absolute Neutrophil Count	2447	2000-7000 cells/cumm
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Peripheral Blood Smear Examination

RBC	Normocytic normochromic
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Platelets Method:Microscopy	Adequate

Method: Automated Hematology Cell Counter, Microscopy

Reference: Dacie and Lewis Practical Hematology,12th Edition
Wallach's interpretation of diagnostic tests, Soth Asian Edition.

Interpretation: A Complete Blood Picture (CBP) is a screening test which can aid in the diagnosis of a variety of conditions and diseases such as anemia, leukemia, bleeding disorders and infections. This test is also useful in monitoring a person's reaction to treatment when a condition which affects blood cells has been diagnosed. All the abnormal results are to be correlated clinically.

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DEPARTMENT OF CLINICAL CHEMISTRY I

25-Hydroxy Vitamin D

Investigation	Observed Value	Biological Reference Interval
25 Hydroxy Vitamin D Method:ECLIA	**25.6**	Deficiency: < 20 ng/mL Insufficiency: 20 - 30 ng/mL Sufficiency: 30 - 100 ng/mL Toxicity: >100 ng/mL **Note:** Biological Reference Ranges are changed due to change in method of testing.
Note	Kindly correlate clinically	

Interpretation:
1.Vitamin D is a family of compounds that is essential for the proper growth and formation of teeth and bones. This test measures the level of vitamin D in the blood.
2.Two forms of vitamin D can be measured in the blood, 25-hydroxyvitamin D and 1,25-dihydroxyvitamin D. The 25-hydroxyvitamin D is the major form found in the blood and is the relatively inactive precursor to the active hormone, 1,25-dihydroxyvitamin D. Because of its long half-life and higher concentration, 25-hydroxyvitamin D is commonly measured to assess and monitor vitamin D status in individuals.
3. The main role of vitamin D is to help regulate blood levels of calcium, phosphorus, and (to a lesser extent) magnesium.
4 Vitamin D is vital for the growth and health of bone; without it, bones will be soft, malformed, and unable to repair themselves normally, resulting in diseases called rickets in children and osteomalacia in adults.
5. Vitamin D has also been shown to influence the growth and differentiation of many other tissues and to help regulate the immune system. These other functions have implicated vitamin D in other disorders, such as autoimmunity and cancer.

Blood Urea Nitrogen (BUN)

Investigation	Observed Value	Biological Reference Interval
Blood Urea Nitrogen. Method:Calculated	15.4	8-23 mg/dL
Urea. Method:Urease	32.9	17.1-49.2 mg/dL

Interpretation: Urea is a waste product formed in the liver when protein is metabolized. Urea is released by the liver into the blood and is carried to the kidneys, where it is filtered out of the blood and released into the urine. Since this is a continuous process, there is usually a small but stable amount of urea nitrogen in the blood. However, when the kidneys cannot filter wastes out of the blood due to disease or damage, then the level of urea in the blood will rise. The blood urea nitrogen (BUN) evaluates kidney function in a wide range of circumstances, to diagnose kidney disease, and to monitor people with acute or chronic kidney dysfunction or failure. It also may be used to evaluate a person's general health status as well.

Reference: Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics

Calcium, Serum

Investigation	Observed Value	Biological Reference Interval
Calcium Method:BAPTA	**8.6**	8.8-10.2 mg/dL

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Note — Kindly correlate clinically

Interpretation: Calcium is essential for bones, heart, nerves, kidneys, and teeth. Serum calcium levels are vital to detect hypocalcemia, hypercalcemia and associated disorders. Parathormone (PTH) and vitamin D are responsible for maintaining calcium concentrations in the blood within a narrow range of values. Serum calcium levels are diagnostic in cases of Kidney stones, Bone diseases and Neurologic disorders.

Creatinine, Serum

Investigation	Observed Value	Biological Reference Interval
Creatinine. Method:Alkaline Picrate	0.81	0.70-1.20 mg/dL

Interpretation:

Creatinine is a nitrogenous waste product produced by muscles from creatine. Creatinine is majorly filtered from the blood by the kidneys and released into the urine, so serum creatinine levels are usually a good indicator of kidney function. Serum creatinine is more specific and more sensitive indicator of renal function as compared to BUN because it is produced from muscle at a constant rate and its level in blood is not affected by protein catabolism or other exogenous products. It is also not reabsorbed and very little is secreted by tubules making it a reliable marker. Serum creatinine levels are increased in pre renal, renal and post renal azotemia, active acromegaly and gigantism. Decreased serum creatinine levels are seen in pregnancy and increasing age.

Glycosylated Hemoglobin (HbA1C)

Investigation	Observed Value	Biological Reference Interval
Glycosylated Hemoglobin (HbA1c) Method:High-Performance Liquid Chromatography	**8.5**	Non-diabetic: <= 5.6 % Pre-diabetic: 5.7 - 6.4 % Diabetic: >= 6.5 %
Estimated Average Glucose (eAG) Method:Calculated	**197**	mg/dL %

Note — Kindly correlate clinically

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Interpretation:

It is an index of long-term blood glucose concentrations and a measure of the risk for developing microvascular complications in patients with diabetes. Absolute risks of retinopathy and nephropathy are directly proportional to the mean HbA1c concentration. In persons without diabetes, HbA1c is directly related to risk of cardiovascular disease.

1) Low glycated haemoglobin (below 4%) in a non-diabetic individual are often associated with systemic inflammatory diseases, chronic anaemia (especially severe iron deficiency & haemolytic), chronic renal failure and liver diseases. Clinical correlation suggested.

2) Interference of Hemoglobinopathies in HbA1c estimatiion:
A. For HbF > 25%, an alternate platform (Fructosamine) is recommended for testing of HbA1c.
B. Homozygous hemoglobinopathy is detected, fructosamine is recommended for monitoring diabetic status
C. Heterozygous state detected (D10 is corrected for HbS and HbC trait).
3) In known diabetic patients, HbA1c can be considered as a tool for monitoring the glycemic control.
Excellent Control - 6 to 7 %,
Fair to Good Control - 7 to 8 %,
Unsatisfactory Control - 8 to 10 %
and Poor Control - More than 10 %.
Reference: American Diabetes Association. Standards of Medical Care in Diabetes-2022.

Vitamin B12 (Cyanocobalamin)

Investigation	Observed Value	Biological Reference Interval
Vitamin B12 (Cyanocobalamin) ,Serum Method:ECLIA	**1025**	197-771 pg/mL **Note:** Biological Reference Ranges are changed due to change in method of testing.
Note	Kindly correlate clinically	

Interpretation:
1.Vitamin B12 is essential in DNA synthesis,haematopoiesis and CNS integrity.
2.Measurement of vitamin B12 is intended to identify and monitor vitamin B12 deficiency. This can arise from the following; (1) defect in the secretion of Intrinsic Factor, resulting in inadequate absorption from food (pernicious anemia); (2) gastrectomy and malabsorption due to surgical resection; and (3) a variety of bacterial or inflammatory diseases affecting the small intestine.(4) Decreased dietary intake.
3.Reduced concentrations of vitamin B12 may indicate the presence of vitamin dependent anemia.
4.Elevated concentrations of vitamin B12 have been associated with pregnancy, the use of oral contraceptives and multivitamins and in myeloproliferative diseases, such as chronic granulocytic leukemia and myelomonocytic leukemia. An elevated concentration of vitamin B12 is not known to cause clinical problems.

* Sample processed at National Reference Laboratory,
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--- End Of Report ---

Dr.Abdur Rehman Asif
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DEPARTMENT OF CLINICAL CHEMISTRY I

Electrolytes, Serum

Investigation	Observed Value	Biological Reference Interval
Sodium Method:ISE Indirect	**135**	136-145 mmol/L
Potassium Method:ISE Indirect	5.1	3.5-5.1 mmol/L
Chloride Method:ISE Indirect	99	98-107 mmol/L
Note	Kindly correlate clinically	

Interpretation: Electrolyte profile is the determination of body fluid concentrations of the four major electrolytes (sodium, potassium, chloride and bicarbonate). Serum electrolytes have a role in water homeostasis, acid –base balance, muscle function, etc. Abnormal electrolyte concentrations may be the cause or consequence of several medical disorders and require clinical correlation.

Disclaimer:
Test results released pertain to the specimen submitted. All test result are dependent on the quality of the sample received by the laboratory. Test result may show interlaboratory variations.Laboratory investigation are only a tool to faciliate in arriving at a diagnosis and should be clinically correlated by the Referring Physician.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Ferritin

Investigation	Observed Value	Biological Reference Interval
Ferritin Method:ECLIA	**26.9**	30-400 ng/mL **Note:** Biological Reference Ranges are changed due to change in method of testing.
Note	Kindly correlate clinically	

Interpretation: Serum ferritin has been found to be more sensitive than serum iron for differentiating iron-deficiency anemia from anemia of chronic disease. For diagnostic purposes, the Ferritin values should always be assessed in conjuction with the patient's medical history, clinical examination and other laboratory findings.

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Req.No	: BIL5109258	Reported on	: 28-Dec-2024 / 17:58 PM
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DEPARTMENT OF CLINICAL CHEMISTRY I

Folate (Folic Acid)

Investigation	Observed Value	Biological Reference Interval
Folate (Folic Acid) Method:ECLIA	10.7	Normal: 3.1-17.5 ng/mL Borderline deficient: 2.2-3.0 ng/mL Deficient: <2.2 ng/mL Excessive: >17.5 ng/mL Note: Biological Reference Ranges are changed due to change in method of testing.

Interpretation: Folate is also known as folic acid and vitamin B-9. Causes of folate deficiency include decreased folate intake, alcohol use, advanced age, poor dietary intake, overcooked food , malabsorption, increased folate demand [in cases of Lactation, pregnancy, exfoliative dermatitis, hemodialysis, chronic hemolysis, leukemias, hypothyroidism] and usage of medications [Methotrexate, trimethoprim, phenytoin, antimalarials, antacids, oral contraceptives]. The causes of increased folate levels are Blind loop syndrome, vegetarian diet, Pernicious anemia, Vitamin B-12 deficiency (vitamin B-12 deficiency can cause increased plasma and decreased RBC folate levels, as it causes decreased cellular uptake).

Reference: Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics, Carl A. Burtis, David E. Bruns.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Iron with TIBC

Investigation	Observed Value	Biological Reference Interval
Iron Method:Ferrozine-no deproteinization	80	33-193 µg/dL
Total Iron Binding Capacity (TIBC) Method:Calculated	379	158-538 µg/dL
Transferrin Saturation Index Method:Calculated	21.1	20-50 %

Interpretation: Iron is a nutrient essential for several functions in the body including production of RBC's and proteins .Serum Iron concentrations are decreased in Iron deficiency Anemia and chronic inflammatory disorders. Elevated serum iron levels occur in iron-loading disorders, aplastic anemia, iron poisoning, etc.
TIBC measures the blood's capacity to bind iron with transferrin. It measures the maximum amount of Iron blood can carry. TIBC is increased in iron deficiency anemia and pregnancy .TIBC is decreased in anemia of chronic inflammation.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Lipid Profile

Investigation	Observed Value	Biological Reference Interval
Total Cholesterol Method:Cholesterol Oxidase	185	Desirable: <200 mg/dL Borderline: 200-239 mg/dL High: >/=240 mg/dL
HDL Cholesterol Method:Direct Measurement	54	Low: <40 mg/dL High: >/=60 mg/dL
VLDL Cholesterol Method:Calculated	17.00	6.0-38.0 mg/dL
LDL Cholesterol Method:Calculated	114	Optimum: <100 mg/dL Near/above optimum: 100-129 mg/dL Borderline: 130-159 mg/dL High: 160-189 mg/dL Very high: >/=190 mg/dL
Triglycerides Method:Glycerol LPL/GK	85	Normal:<150 mg/dL Borderline: 150-199 mg/dL High: 200-499 mg/dL Very high: >/=500 mg/dL
Chol/HDL Ratio Method:Calculated	3.43	Low Risk: 3.3-4.4 Average Risk: 4.5-7.1 Moderate Risk: 7.2-11.0
LDL Cholesterol/HDL Ratio Method:Calculated	2.11	Desirable: 0.5-3.0 Borderline Risk: 3.0-6.0 High Risk: >6.0
Non HDL Cholesterol Method:Calculated	**131**	<130 mg/dL
Note	Kindly correlate clinically	

Interpretation: Lipids are fats and fat-like substances which are important constituents of cells and are rich sources of energy. A lipid profile typically includes total cholesterol, high density lipoproteins (HDL), low density lipoprotein (LDL), chylomicrons, triglycerides, very low density lipoproteins (VLDL), Cholesterol/HDL ratio .The lipid profile is used to assess the risk of developing a heart disease and to monitor its treatment. The results of the lipid profile are evaluated along with other known risk factors associated with heart disease to plan and monitor treatment. Treatment options require clinical correlation.

Reference: Third Report of the National Cholesterol Education program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III), JAMA 2001.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Liver Function Test (LFT)

Investigation	Observed Value	Biological Reference Interval
Total Bilirubin. Method:Diazo Method	0.39	<1.2 mg/dL
Direct Bilirubin. Method:Diazo Method	0.16	<0.30 mg/dL
Indirect Bilirubin. Method:Calculated	0.23	<0.9 mg/dL
Alanine Aminotransferase ,(ALT/SGPT) Method:UV wtihout P5P	22	<45 U/L
Aspartate Aminotransferase,(AST/SGOT) Method:UV wtihout P5P	18	<35 U/L
ALP (Alkaline Phosphatase). Method:PNPP-AMP Buffer	79	40-129 U/L
Gamma GT. Method:GCNA	31	10-71 U/L
Total Protein. Method:Biuret & Bromocresol Green (BCG)	**6.3**	6.6-8.7 g/dL
Albumin. Method:Bromocresol Green (BCG)	3.9	3.5-5.2 g/dL
Globulin. Method:Calculated	2.40	1.8-3.8 g/dL
A/GRatio. Method:Calculated	1.63	0.8-2.0
AST/ALT Ratio Method:Calculated	0.82	<1.00
Note	Kindly correlate clinically	

Interpretation: Liver functions tests help to identify liver disease, its severity, and its type. Generally these tests are performed in combination, are abnormal in liver disease, and the pattern of abnormality is indicative of the nature of liver disease. An isolated abnormality of a single liver function test usually means a non-hepatic cause. If several liver function tests are simultaneously abnormal, then hepatic etiology is likely.

* Sample processed at National Reference Laboratory,
Tenet Diagnostics,Hyderabad

--- End Of Report ---

PLEASE SCAN QR CODE
TO VERIFY THE REPORT ONLINE

Name	: **MR.NAGENDRA RAO K**	TID/SID	: UMR2331753/
Age / Gender	: 65 Years / Male	Registered on	: 28-Dec-2024 / 14:32 PM
Ref.By	: DR KALYAN	Collected on	:
Req.No	: BIL5109258	Reported on	:
		Reference	: Uppaluri K&H Personalized

TEST REPORT

Dr.Abdur Rehman Asif
Consultant Biochemist
Reg.No - APMC/FMR/78102

Name	: **MR.NAGENDRA RAO K**	TID/SID	: UMR2331753/ 28799012
Age / Gender	: 65 Years / Male	Registered on	: 28-Dec-2024 / 14:32 PM
Ref.By	: DR KALYAN	Collected on	: 28-Dec-2024 / 14:38 PM
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	TEST REPORT	Reference	: Uppaluri K&H Personalized

DEPARTMENT OF CLINICAL CHEMISTRY I

Phosphorus, Serum

Investigation	Observed Value	Biological Reference Interval
Phosphorus Method:Phosphomolybdate	3.7	2.5-4.5 mg/dL

Intepretation: Phosphorus is a vital component of bones & teeth, several lipoproteins and nucleoproteins. Phosphorus levels are important to diagnose and monitor treatment of various conditions that cause calcium and phosphorus imbalances. Phosphorus levels in urine samples are vital to monitor its elimination by the kidneys.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Thyroid Profile (T3,T4,TSH)

Investigation	Observed Value	Biological Reference Interval
Triiodothyronine Total (T3) Method:ECLIA	1.09	0.80-2.00 ng/mL
Thyroxine Total (T4) Method:ECLIA	8.7	5.1-14.1 µg/dL
Thyroid Stimulating Hormone (TSH) Method:ECLIA	0.91	0.27-4.20 µIU/mL

Interpretation:

A thyroid profile is used to evaluate thyroid function and/or help diagnose hypothyroidism and hyperthyroidism due to various thyroid disorders. T4 and T3 are hormones produced by the thyroid gland. They help control the rate at which the body uses energy, and are regulated by a feedback system. TSH from the pituitary gland stimulates the production and release of T4 (primarily) and T3 by the thyroid. Most of the T4 and T3 circulate in the blood bound to protein. A small percentage is free (not bound) and is the biologically active form of the hormones.
Reference: Tietz textbook of Clinial Chemistry and Molecular Diagnostics, Nader Rifia, Andrea Ritas Horvath, Carl T. Wittwer.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Thyroxine-Free(FT4)

Investigation	Observed value	Biological Reference Interval
Thyroxine-Free(FT4). Method:ECLIA	1.49	0.93-1.70 ng/dL Note: Biological Reference Ranges are changed due to change in method of testing.

Interpretation: Free thyroxine (free T4) is used to evaluate thyroid function and diagnose thyroid diseases, including hyperthyroidism and hypothyroidism, usually after the thyroid stimulating hormone (TSH) level is abnormal. T4 and another hormone called triiodothyronine (T3) are produced by the thyroid gland. They help control the rate at which the body uses energy and are regulated by a feedback system. TSH stimulates the production and release of T4 (primarily) and T3 from the thyroid gland. Most of the T4 and T3 circulates in the blood bound to protein, while a small percentage is free (not bound). Free T4 is not affected by protein levels and is the active form of thyroxine. The free T4 test is a more accurate reflection of thyroid hormone function .free T4 levels help to detect and diagnose the cause of hyperthyroidism and hypothyroidism, Diagnose and monitor pituitary disorders, Aid in the diagnosis of female infertility, Monitor the treatment of a thyroid disorder, Monitor individuals with thyroid cancer.

Reference: Siemens kit literature & Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics, Seventh Edition, Carl A. Burtis, David E. Bruns.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Uric Acid, Serum

Investigation	Observed Value	Biological Reference Interval
Uric Acid. Method:Uricase	4.4	3.4-7.0 mg/dL

Interpretation

It is the major product of purine catabolism. Hyperuricemia can result due to increased formation or decreased excretion of uric acid which can be due to several causes like metabolic disorders, psoriasis, tissue hypoxia, pre-eclampsia, alcohol, lead poisoning, acute or chronic kidney disease, etc. Hypouricemia may be seen in severe hepato cellular disease and defective renal tubular reabsorption of uric acid.

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DEPARTMENT OF CLINICAL CHEMISTRY I

Magnesium, Serum

Investigation	Observed value	Biological Reference value
Magnesium Method:Xylidyl Blue	2.1	1.6-2.4 mg/dL

Interpretation:

- This assay is used for diagnosing and monitoring Hypomagnesemia and Hypermagnesemia.
- Hypomagnesemia have shown correlation with changes in calcium-, potassium-, and phosphate-homeostasis which are associated with cardiac disorders such as ventricular arrhythmias that cannot be treated by conventional therapy, increased sensitivity to digoxin, coronary artery spasms, and sudden death.
- Additional concurrent symptoms include neuromuscular and neuropsychiatric disorders.
- Hypermagnesemia is found in acute and chronic renal failure, magnesium excess, and magnesium release from the intracellular space.

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