Thyrocare

Tests you can trust

Name : XXXXXXXX

Date : XXXXXXXX

Test Asked : Aarogyam X Pro With Utsh

Report Status : Complete Report

First National Diagnostic Chain to have **100% of its Labs with NABL Accreditation#**

98% Reports released within 06 Hours of sample reaching the lab+

9 out of 10 Doctors Trust that Thyrocare reports are Accurate & Reliable*

1200+ Tests & Profiles

Temperature-Controlled Sample Logistics

Unique Barcode Tracking

Fully Automated Machines Inspected Daily

Abnormal Values Re-Checked Twice

Reports Verified By Expert MD Pathologists Stationed at Every Lab

Your reports are digitally verifiable

Scan the QR code inside the report to check authenticity of reported values

QR code will remain active for 30 days from report release date

Accredited by

NABL From 2005#

ISO 9001: 2015 - From 2015

CAP From 2007~

Thyrocare
Tests you can trust

Thyrocare Technologies Limited, D-37/3, TTC MIDC, Turbhe, Navi Mumbai - 400 703. 9870666333 wellness@thyrocare.com

First National Diagnostic Chain to have 100% of its Labs with NABL Accreditation#

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXX

Tests Done : **AAROGYAM X PRO WITH UTSH**

Report Availability Summary

Note: Please refer to the table below for status of your tests.

35 Ready | **0** Ready with Cancellation | **0** Processing | **0** Cancelled in Lab

TEST DETAILS	REPORT STATUS
AAROGYAM X PRO WITH UTSH	Ready
CHLORIDE	Ready
CYSTATIN C	Ready
FERRITIN	Ready
FRUCTOSAMINE	Ready
HOMOCYSTEINE	Ready
HIGH SENSITIVITY C-REACTIVE PROTEIN (HS-CRP)	Ready
INSULIN - FASTING	Ready
LIPASE	Ready
Lipoprotein (a) [Lp(a)]	Ready
MAGNESIUM	Ready
LP-PLA2	Ready
SERUM COPPER	Ready
SERUM ZINC	Ready
SODIUM	Ready
TESTOSTERONE	Ready
ALPHA-1-ANTITRYPSIN (AAT)	Ready
VITAMIN A	Ready
VITAMIN E	Ready
VITAMIN K	Ready
HBA PROFILE	Ready
HEMOGRAM - 6 PART (DIFF)	Ready
ANTI CCP (ACCP)	Ready

Thyrocare
Tests you can trust

Thyrocare Technologies Limited, D-37/3, TTC MIDC, Turbhe, Navi Mumbai - 400 703. 9870666333 wellness@thyrocare.com

First National Diagnostic Chain to have 100% of its Labs with NABL Accreditation#

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXX

Tests Done : **AAROGYAM X PRO WITH UTSH**

Report Availability Summary

Note: Please refer to the table below for status of your tests.

35 Ready | **0** Ready with Cancellation | **0** Processing | **0** Cancelled in Lab

TEST DETAILS	REPORT STATUS
LIVER FUNCTION TESTS	Ready
ELEMENTS 22 (TOXIC AND NUTRIENTS)	Ready
IRON DEFICIENCY PROFILE	Ready
KIDPRO	Ready
LIPID PROFILE	Ready
VITAMIN D PROFILE	Ready
VITAMIN B COMPLEX PROFILE	Ready
T3-T4-USTSH	Ready
APOLIPROTEIN RATIO	Ready
ALLERGY PHADIATOP ADULT	Ready
AMYLASE	Ready
ANTI NUCLEAR ANTIBODIES (ANA)	Ready
BLOOD KETONE (D3HB)	Ready

Thyrocare Technologies Limited, D-37/3, TTC MIDC, Turbhe, Navi Mumbai - 400 703. 9870666333 wellness@thyrocare.com

Patient Name : XXXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Tests Done : AAROGYAM X PRO WITH UTSH

Tests Outside Reference Range

Note: Please refer to the table below for tests outside reference range.

Test Name	Observed Value	Units	Bio. Ref. Interval.
ALLERGY			
ALLERGY PHADIATOP ADULT	**< 100**	kUA/L	< 0.35
ARTHRITIS			
ANTI NUCLEAR ANTIBODIES (ANA)	**14.87**	OD Ratio	0.001-0.90
COMPLETE HEMOGRAM			
HEMATOCRIT(PCV)	**33.6**	%	40.0-50.0
HEMOGLOBIN	**10.4**	g/dL	13.0-17.0
LYMPHOCYTE	**17.4**	%	20-40
MEAN CORP.HEMO.CONC(MCHC)	**31**	g/dL	31.5-34.5
MEAN CORPUSCULAR HEMOGLOBIN(MCH)	**26.8**	pq	27.0-32.0
RED CELL DISTRIBUTION WIDTH (RDW-CV)	**15.4**	%	11.6-14
RED CELL DISTRIBUTION WIDTH - SD(RDW-SD)	**48.9**	fL	39-46
TOTAL RBC	**3.88**	X 10^6/µL	4.5-5.5
DIABETES			
FRUCTOSAMINE	**322**	µmol/L	<=286
LIPID			
LDL / HDL RATIO	**0.9**	Ratio	1.5-3.5
TC/ HDL CHOLESTEROL RATIO	**2.2**	Ratio	3 - 5
RENAL			
CREATININE - SERUM	**0.7**	mg/dL	0.72-1.18
VITAMINS			
VITAMIN B-12	**981**	pg/mL	211-911

Disclaimer: The above listed is the summary of the parameters with values outside the BRI. For detailed report values, parameter correlation and clinical interpretation, kindly refer to the same in subsequent pages.

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN A	LC-MS/MS	< 550	ng/mL

Bio. Ref. Interval. :-

Age	Reference range
1 - 6 Years	200 - 400
7 - 12 Years	260 - 490
13 - 19 Years	260 - 720
Above 18 Years	300 - 800

Clinical Significance:

Vitamin A or Retinol plays important role in the function retinal vision, growth, reproduction, embryonic development as well as in immune function.Vitamin A is also required for adaptive immunity and plays a role in the development of both T- helper cells and B-cells. Retinol and its metabolites and synthetic retinoids provide protective effects against the development of certain types of cancer by blocking tumor promotion, by inhibiting proliferation,by inducing apoptosis, by inducing differentiation or by performing combination of these actions.

Fat malabsorption, particularly caused by celiac disease or chronic pancreatitis and protein -energy malnutrition predispose to vitamin A deficiency.Clinical features of vitamin A deficiency include degenerative changes in eyes and skin and poor dark adaptation or night blindness.Vitamin A deficiency impairs innate immunity by impeding normal regeneration of mucosal bariers damaged by infection and by diminishing the function of neutrophils,macrophages and natural killer cells.

Toxic effects of hypervitaminosis A have occurred as a result of ingestion of excess vitamin or as a side effect of inappropriate therapy.Symptoms of acute toxicity from single massive dose present as abdominal pain,nausea,vomiting,severe headache, dizziness,sluggishness and irritability.Chronic toxicity shows symptoms like bone, join pain, hair loss, dryness and fissures of the lips, anorexia, benign intracranial hypertension, weight loss an hepatomegaly.

Clinical reference:

Tietz Textbok of clinical chemistry and Molecular diagnostic, Carl A. Burtis, Edward R. Ashwood, David E. Bruns, Fifth edition., Elsevier.

Please correlate with clinical conditions.

Method:- LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN E	LC-MS/MS	15000	ng/mL

Bio. Ref. Interval. :-

Age < 1 Month	1000 - 3500
2 - 5 Months	2000 - 6000
6 M - 1 year	3500 - 8000
2 - 12 years	5500 - 9000
Above 13 years	5500 - 18000

Clinical Significance: Vitamin E or Alpha-tocopherol (body's main form of vitamin) function as antioxidant which protects vitamin A, C and red blood cells from oxidative damage caused by free radicals. It has been recognized as necessary for neurologic and reproductive functions, for prevention of retinopathy in premature infants. Alpha-tocopherol also induces inhibition of cell proliferation, platelete aggregation, and monocyte adhesion, which are thought to be the results of direct interaction of alpha-tocopherol with cell components. Alpha-tocopherol reduces inflammatory mediator production.

Premature and low birth weight infants are particularly susceptible to development of vitamin E deficiency, because placental transfer is poor and infants have such limited adipose tissue where much of the vitamins is normally stored. Signs of deficiency include irritability, edema and hemolytic anemia. Although symptoms of vitamin E deficiency are rare in children and adults, deficiency can occur in some conditions.

Excess vitamin E intake usually is achieved only by dietary supplementation. A comprehensive review of tolerance and safety of vitamin E suggested that intakes upto 3000mg/d were safe and reversible side effects of gastrointestinal symptoms, increased creatinuria, and impairment of blood coagulation are seen at intakes of 1000-3000 mg/d. However as noted earlier, long term use of intakes greater than 400mg/d may cause increased mortality.

Clinical reference: Tietz Textbok of clinical chemistry and Molecular diagnostic, Carl A. Burtis, Edward R. Ashwood, David E. Bruns, Fifth edition., Elsevier.

Please correlate with clinical conditions.

Method:- LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN K	LC-MS/MS	< 0.66	ng/mL

Bio. Ref. Interval. :-

0.13 - 1.19

Clinical significance:

Vitamin K assay measures the principal form of vitamin K i.e. K1 :Phylloquinone which found predominantly in green leafy vegetables, margarines and plant oils.

Vitamin K promotes clotting of the blood, is required for the conversion of several clotting factors and prothombin, and is of growing interest in bone metabolism. Vitamin K plays important role in the deposition of ionic calcium needed for proper blood coagulation and bone formation.

Although vitamin K deficiency in the adults is uncommon, the risk is increased for fat malabsorption states such as bile duct obstruction,cystic fibrosis, chronic pancreatitis and liver disease. Risk also increased by the use of drugs that interfere with vitamin K metabolism, such as warfarin, cepahlosporin. Defective blood coagulation and demonstration of abnormal noncarboxylated prothrombin are at present the only well-established signs of vitamin K deficiency.

The use of high doses of naturally occurring vitamin K (K1 and K2) appears to have no untoward effect; however menadione(K3) treatment can lead to formation of erythrocyte cytoplasmic inclusions known as Heinz bodies and hemolytic anemia. With severe hemolysis, increase bilirubin formation and undeveloped capacity for its conjugation may produce kernicterus in the newborn.

Clinical reference:

Tietz Textbok of clinical chemistry and Molecular diagnostic, Carl A. Burtis, Edward R. Ashwood, David E. Bruns, Fifth edition., Elsevier.

Please correlate with clinical conditions.

Method:- LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
VITAMIN B1/THIAMIN	LC-MS/MS	< 2.25	ng/mL	0.5-4.0
VITAMIN B2/RIBOFLAVIN	LC-MS/MS	< 34.9	ng/mL	1.6-68.2
VITAMIN B3/NICOTINIC ACID	LC-MS/MS	< 2.5	ng/mL	< 5
VITAMIN B5/PANTOTHENIC	LC-MS/MS	< 80.5	ng/mL	11-150
VITAMIN B6/P5P	LC-MS/MS	< 27.5	ng/mL	5 - 50
VITAMIN B7/BIOTIN	LC-MS/MS	< 1.6	ng/mL	0.2-3
VITAMIN B9/FOLIC ACID	LC-MS/MS	< 10.1	ng/mL	0.2-20
VITAMIN B-12	**C.L.I.A**	**981**	**pg/mL**	**211-911**

Please correlate with clinical conditions.

Method :

VITB1 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB2 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB3 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB5 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB6 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB7 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB9 - LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
VITB - COMPETITIVE CHEMI LUMINESCENT IMMUNO ASSAY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign

Doctor 2 Sign

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
ALPHA-1-ANTITRYPSIN (AAT)	IMMUNOTURBIDIMETRY	< 145	mg/dL

Bio. Ref. Interval. :-

90 - 200 mg/dL

Clinical Significance ;
Alpha-1-antitrypsin (AAT) is a serine protease inhibitor and the third most abundant protein in circulation. AAT levels can increase 3 to 5 folds in states of systemic inflammation or infection. Increased levels are also seen in Covid-19 patients. Usually, the increase in AAT is directly proportional to the increase in IL6, supporting an anti inflammatory function. It is also considered that patients with Alpha-1-antitrypsin deficiency (AATD) might be at increased risk of SARS-CoV-2 infection and development of severe COVID-19.

Alpha-1 antitrypsin (AAT) deficiency can cause various medical complications of the lungs, liver, and skin, including COPD, emphysema, chronic bronchitis, cirrhosis of the liver and other side effects of the excess enzyme.

Specifications;
Precision (%CV) : Intra-assay %CV: 1.4 %, Inter-assay %CV: 1.36%

Kit Validation reference ;
1.Janciauskiene SM, Bals R, Koczulla R, et al. The discovery of Alpha1-antitrypsin and its role in health and disease. Respir Med, 2011, 105(8) : 1129-1139
2.Sun Z, Yang P. Role of imbalance between neutrophil elastase and alpha1-antitrypsin in cancer development and progression. Lancet Oncol, 2004, 5(3) : 182-190

Please correlate with clinical conditions.
Method:- Polyethylene glycol(PEG)-enhanced immunoturbidimetric

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
ANTI CCP (ACCP)	C.M.I.A	3.33	U/mL

Reference Range :-

BRI	Interpretation
Negative < 5	Absence of IgG autoantibodies to cyclic citrullinated peptides (CCP)
Positive ≥ 5	Presence of IgG autoantibodies to cyclic citrullinated peptides (CCP)

Clinical Significance :
1. Anti-Cyclic-Citrullinated-Peptide (Anti-CCP) titre is used for diagnosis and monitoring of Rheumatoid Arthritis (RA).
2. RA is one of the most common systemic autoimmune diseases characterised by chronic inflammation of the synovial joints and progressive joint degeneration eventually leading to disability of affected individuals.
3. The diagnosis of RA often relies on clinical manifestations and certain non-specific laboratory tests such as rheumatoid factor (RF) and C-reactive protein (CRP), which may be present in healthy elderly persons or in patients with other autoimmune and infectious diseases.
4. Whereas, Anti-Cyclic-Citrullinated-Peptide (Anti-CCP) Antibodies hold promise for early and more accurate detection of Rheumatoid Arthritis before the disease proceeds into irreversible damage.
5. Interference with pathologic levels of nonspecific IgG can not be excluded.
6. The anti-CCP test results can be false negative in patients with hypergammaglobulinemia. Results from patients suffering from this disorder should not be used for diagnostic purposes.
7. Heterophile antibodies may interfere with the test results.
8. If results are inconsistent with clinical history additional testing is suggested to confirm the results.
9. Some specimens may not dilute linearly because of heterogeneity of autoantibodies with respect to physicochemical properties.
10. HAMA (Human Anti mouse antibodies) may also interfere with the results.
11. For diagnostic purposes, the results should always be assessed in conjunction with the patient's medical history, clinical examination and other findings.

References:
- Anti-CCP Reagent Kit Insert
- Feldmann M, Brennan FM, Maini RN. Rheumatoid arthritis.Cell 1996;85:307-3102.
- Landewé RB. The benefits of early treatment in rheumatoid arthritis:confounding by indication, and the issue of timing. Arthritis Rheum 2003;48(1):1-5.

Please correlate with clinical conditions.

Method:- Fully Automated ChemiLuminescent Microparticle Immunoassay (C.M.I.A)

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign

Doctor 2 Sign

Patient Name	: XXXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
HOMOCYSTEINE	PHOTOMETRY	< 15	µmol/L

Bio. Ref. Interval. :-

Normal Levels : <15 µmol/L
Mild Hyperhomocysteinemia : 15-30 µmol/L
Moderate Hyperhomocysteinemia : 30-100 µmol/L
Severe Hyperhomocysteinemia : >100 µmol/L

Clinical Significance:
Homocysteine is linked to increased risk of premature coronary artery disease, stroke and thromboembolism. Moreover, alzheimers disease, osteoporosis, venous thrombosis, schizophrenia, cognitive deficiency and pregnancy complications also elevates Homocysteine levels. The results should be interpreted in conjunction with clinical history and other findings.

High Values:
Elevated homocysteine levels might be due to increasing age, genetic traits, drugs, renal dysfunction and dietary deficiency of vitamins or smoking. To lower your homocysteine, eat more green vegetables, stop smoking, alcohol. Folic acid helps lowering elevated levels.

Specifications:
Kit Validation Reference:
Eikelboom JW, et al Ann Intern Med 131 : 363-75 (1999)
https://www.healthline.com/health/homocysteine-levels

Please correlate with clinical conditions.
Method:- SMALL MOLECULE CAPTURE TECHNOLOGY (SMT)

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	**Sample Collected on (SCT)**	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	**Sample Received on (SRT)**	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	**Report Released on (RRT)**	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
CYSTATIN C	IMMUNOTURBIDIMETRY	< 0.52	mg/L

Bio. Ref. Interval. :-

<= 60 years: <= 1.03 mg/L
> 60 years : < 1.50 mg/L

Clinical significance

Cystatin c, is a small 13-kda protein and is a member of the cysteine proteinase inhibitor family, it is produced at a constant rate by all nucleated cells. Due to its small size it is freely filtered by the glomerulus and is not secreted but is fully reabsorbed and broken down by the renal tubules. This means that the primary determinate of blood Cystatin c levels is the rate at which it is filtered at the glomerulus making it an excellent gfr marker. Cystatin c is also a marker of inflammation and like many other markers of inflammation; its serum concentration may be higher in patients with decreased renal clearance. There is mounting evidence, however, that Cystatin c may be a predictor of adverse outcomes independent of renal function with its higher sensitivity to detect a reduced GFR than Creatinine determination, also in the so-called "Creatinine-blind" range. Thus, Cystatin c is suggested to be a better marker for GFR than the ubiquitous serum Creatinine.

Reference

1. Barrett aj, Davies me, Grubb a. the place of human gamma-trace (Cystatin c) among the cysteine proteinase inhibitors. Biochem biophys res common 1984; 120: 631-6.

2. Grubb a. diagnostic value of analysis of Cystatin c and protein HC in biological fluids. Clin Nephrol 1992; 38: S20-7.

Please correlate with clinical conditions.
Method:- LATEX ENHANCED IMMUNOTURBIDIMETRY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
APOLIPOPROTEIN - A1 (APO-A1)	IMMUNOTURBIDIMETRY	< 119	mg/dL

Bio. Ref. Interval. :
Male : 86 - 152
Female : 94 - 162

Method : FULLY AUTOMATED RATE IMMUNOTURBIDIMETRY – BECKMAN COULTER

APOLIPOPROTEIN - B (APO-B)	IMMUNOTURBIDIMETRY	< 101	mg/dL

Bio. Ref. Interval. :
Male : 56 - 145
Female : 53 - 138

Method : FULLY AUTOMATED RATE IMMUNOTURBIDIMETRY – BECKMAN COULTER

APO B / APO A1 RATIO (APO B/A1)	CALCULATED	0.8	Ratio

Bio. Ref. Interval. :

Male : 0.40 - 1.26
Female : 0.38 - 1.14

Clinical Significance :

- Apolipoprotein B is a more potent and independent predictor of Coronary artery disease (CAD) than LDL Cholesterol.
- Apolipoprotein A1 is one of the apoproteins of HDL and is inversely related to risk of CAD.
- The Apolipoprotein studies help in monitoring risk of restenosis in patients with myocardial infarction, Coronary bypass surgery etc.
- An increased ratio of Apo B to A1 beyond the defined normal range is indicative of CAD risk.
- All results have to be interpreted in Conjunction with clinical history and other findings.

Method : Derived from serum Apo A1 and Apo B values

Please correlate with clinical conditions.

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
ANTI NUCLEAR ANTIBODIES (ANA)	**E.L.I.S.A**	**14.87**	**OD Ratio**

Bio. Ref. Interval. :

Negative: <0.90
Equivocal : 0.90 - 1.10
Positive: >1.11

Clinical Significance:
Anti-nuclear antibodies (ANA) are autoantibodies directed against nuclear components and are commonly associated with autoimmune diseases such as systemic lupus erythematosus (SLE), mixed connective tissue disease (MCTD), systemic sclerosis, Sjögren's syndrome, and rheumatoid arthritis.

However, ANA positivity is not specific to any one condition and may also be seen in healthy individuals, especially the elderly, or in cases of infections, malignancies, or drug-induced autoimmunity.

Equivocal results may require repeat testing or additional evaluation with specific antibody panels (e.g., anti-Sm, anti-RNP, anti-Ro, anti-La) for diagnostic clarification. A negative ANA test does not completely rule out autoimmune disease, particularly in early stages or when non-ANA-specific autoantibodies are involved. The final diagnosis should be made by the physician based on the overall clinical picture and appropriate correlation with additional investigations.

Note: Hemolysis, lipemia, icterus, microbial contamination, high-dose biotin, or heterophile antibodies may interfere with test accuracy and may lead to false-positive or false-negative results.

Method : INDIRECT SOLID PHASE IMMUNOASSAY

Please correlate with clinical conditions.

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
FERRITIN	C.L.I.A	< 215	ng/mL

Bio. Ref. Interval. :-

Men: 22-322 ng/ml
Women: 10-291 ng/ml

Please correlate with clinical conditions.

Method:- Fully Automated Bidirectionally Interfaced Chemi Luminescent Immuno Assay

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
INSULIN - FASTING	E.C.L.I.A	< 12.45	µU/mL

Bio. Ref. Interval. :-

Normal: 2.6 - 24.9 µU/mL

Clinical Significance

Type I (Insulin dependent: "Juvenile") diabetes is due to a destruction of the beta cells, with a consequence of absolute lack of insulin. In type II (Non insulin-dependent: "Maturity onset") diabetes, insulin resistance may play an important role; However after several years of evolution, beta-cells failure may occur, leading to a relative insulinopenia requiring, in some cases, insulin administration. Insulin resistance is associated with high circulation levels of the hormone. For diagnostic purpose, results should always be assessed in conjunction with the patient's medical history, clinical examination and other findings.

Specifications:

Precision: Intra Assay (%CV): 4.3 %, Inter Assay (%CV): 5.3%; Sensitivity: 0.4 µU/mL.

Kit validation references:

Lang DA, Matthews DR, Peto J, et al.Cyclic oscillations of basal plasma glucose and insulin concentrations in human beings. N Engl J Med 1979;301:1023-1027.

Please correlate with clinical conditions.

Method:- FULLY AUTOMATED ELECTROCHEMILUMINESCENCE IMMUNOASSAY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
BLOOD KETONE (D3HB)	PHOTOMETRY	< 1.51	mg/dL

Bio. Ref. Interval. :-

0.21-2.81 mg/dL

Clinical Significance:
Three types of ketones can be produced in body D-3- Hydroxybutyrate, Acetoacetate and Acetone. D-3- Hydroxybutyrate accounts for approximately 75% of the ketone bodies. During periods of ketosis, D-3- Hydroxybutyrate increases more than the other two. It has been shown to be a better index of ketoacidosis. In diabetics, D-3- Hydroxybutyrate is needed for the assessment of the severity of diabetic coma and to calculate insulin requirements.

Speficcation:
Precision: Intra assay (%CV): 4.53, Inter assay (%CV): 2.9, Sensitivity: 10.41 mg/dL.

Kit validation references:
Mcmurray, C.H., Blanchflower, W.J., Rice, D.A., ClinChem., 1984;30:No.3.

Please correlate with clinical conditions.
Method:- ENZYMATIC (KINETIC)

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Thyrocare Technologies Limited, D-37/3, TTC MIDC, Turbhe, Navi Mumbai - 400 703. 9870666333 wellness@thyrocare.com

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
FRUCTOSAMINE	**PHOTOMETRY**	**322**	**µmol/L**

Bio. Ref. Interval. :-

Normal < 286 µmol/L

Clinical Significance:

Fructosamine assay is useful in monitoring the degree of glycemia over short-to-intermediate time frames (1-3 weeks) concentration greater than the established normal range is an indication of prolonged hyperglycemia of 1-3 weeks or longer. The higher fructosamine value, poorer is the degree of glycemia control.

Specifications:

Precision %CV : Intra assay %CV- 3.2% , Inter assay %CV-4.0%, Sensitivity:- 290 umol/L

Kit Validation Reference:

Howey JEA, Browning MCK, Fraser CG. Assay of serum fructosamine that minimizes standardization and matrix problems: Use to assess components of biological va-riation. Clin Chem 1987; 33: 269- 272.

Please correlate with clinical conditions.

Method:- NITROBLUE TETRAZOLIUM ASSAY (NBT)

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Thyrocare Technologies Limited, D-37/3, TTC MIDC, Turbhe, Navi Mumbai - 400 703. 9870666333 wellness@thyrocare.com

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
LIPOPROTEIN (A) [LP(A)]	IMMUNOTURBIDIMETRY	< 14.95	mg/dL

Bio. Ref. Interval. :-

Adults : < 30.0 mg/dl

Clinical Significance:
Determination of LPA may be useful to guide management of individuals with a family history of CHD or with existing disease. The levels of LPA in the blood depends on genetic factors; The range of variation in a population is relatively large and hence for diagnostic purpose, results should always be assessed in conjunction with the patient's medical history, clinical examination and other findings.

Specifications:
Precision %CV :- Intra assay %CV- 4.55% , Inter assay %CV-0.86 %

Kit Validation Reference:
Tietz NW,Clinical Guide to Laboratory Tests Philadelphia WB. Saunders 1995 : 442-444

Please correlate with clinical conditions.

Method:- LATEX ENHANCED IMMUNOTURBIDIMETRY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
LP-PLA2	PHOTOMETRY	< 113	nmol/min/mL

Bio. Ref. Interval. :-

Low Risk : < 225 nmol/min/mL
High Risk : >= 225 nmol/min/mL

Clinical Significance:

Lp-PLA2, is an enzyme produced by inflammatory cells. It is predominantly associated with low-density lipoprotein (LDL) and high-density lipoprotein (HDL). Lp-PLA2 is a specific marker of vascular inflammation and found to be upregulated in atherosclerotic lesions especially in complex plaque prone to rupture. A meta-analysis found that Lp-PLA2 levels are positively correlated with increased risk of developing coronary heart disease and stroke. Lp-PLA2 is not an acute phase reactant and thus is unaffected by systemic inflammatory processes. Lp-PLA2 activity should be interpreted in conjunction with clinical evaluation and other risk factor assessment.

Specification:

Precision %CV : Intra assay %CV- 1.50% , Inter assay %CV-3.80%

Kit Validation Reference:

Alexander Thompson etal., The Lp-PLA2 Studies Collaboration (2010). "Lipoprotein-associated phospholipase A2 and risk of coronary disease, stroke, and mortality: collaborative analysis of 32 prospective studies". The Lancet 375 (9725): 1536-1544

Please correlate with clinical conditions.
Method:- ENZYMATIC ASSAY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
SERUM COPPER	PHOTOMETRY	< 106.75	µg/dL

Bio. Ref. Interval. :-

Male : 63.5 - 150
Female : 80 - 155

Clinical significance:
Copper is an important trace element and a component of numerous enzymes and proteins involved in energy production, connective tissue formation, melanin synthesis, iron metabolism, development of central nervous system, angiogenesis as well as an antioxidant. Deficiency can cause- Malnourishment, cardiovascular disease, anemia & neuropathy, toxicity may be manifested as acute renal failure, gastroenteritis & chronic liver disease.

Specifications:
Precision: Intra assay (%CV): 1.17, Inter assay (%CV): 2.32.

Kit validation references:
Thomas L. Clinical Laboratory Diagnostics. 1st ed. Frankfurt: TH-Books Verlagsgesellschaft; 1998. p. 337-8

Please correlate with clinical conditions.
Method:- 3,5-DIBR-PAESA

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
SERUM ZINC	PHOTOMETRY	88.5	µg/dL

Bio. Ref. Interval. :-

52 - 286

Clinical Significance:
Zinc is one of the essential trace elements in the body. Its metalloenzymes play a key rple in protein and nucleic acid synthesis, gene expression, wound healing, as an antioxidant, etc. Deficiency can cause- Poor wound healing, gastroenteritis, impaired spermatogenesis, Alzheimer's disease, etc. Toxicity may be manifested as pancreatitis, gastric ulcer, anemia, pulmonary fibrosis.

Specifications:
Precision: Intra assay (%CV): 2.02, Inter assay (%CV): 2.22.

Kit Validation References:
Thomas L. Clinical Laboratory Diagnostics. 1st ed. Frankfurt: TH-Books Verlagsgesellschaft; 1998. p. 347-9

Please correlate with clinical conditions.

Method:- NITRO - PAPS

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
TESTOSTERONE	C.L.I.A	594.27	ng/dL

Bio. Ref. Interval. :-

Adult Male
21 - 49 Yrs : 164.94 - 753.38 || 50 - 89 Yrs : 86.49 - 788.22
Adult Female
Pre-Menopause : 12.09 - 59.46 || Post-Menopause: < 7.00 - 48.93
Boys
2-10 Years : < 7.00 - 25.91
11 Years : < 7.00 - 341.53
12 Years : < 7.00 - 562.59
13 Years : 9.34 - 562.93
14 Years : 23.28 - 742.46
15 Years : 144.15 - 841.44
16-21 Years : 118.22 - 948.56
Girls
2-10 Years : < 7.00 - 108.30
11-15 Years : < 7.00 - 48.40
16-21 Years : 17.55 - 50.41

Clinical Significance: Clinical evaluation of serum testosterone, along with serum LH, assists in evaluation of Hypogonadal males. Major causes of lowered testosterone in males include Hypogonadotropic hypogonadism, testicular failure Hyperprolactinema, Hypopituitarism some types of liver and kidney diseases and critical illness.

Specifications: Precision: Intra assay (%CV): 8.5 %, Inter assay (%CV): 12.6%; Sensitivity: 7 ng/dL.

Kit Validation Reference: Kicklighter EJ, Norman RJ. The gonads. In: Kaplan LA, Pesce AJ, eds. Clinical Chemistry: Theory, Analysis, Correlation. 2nd ed. St. Louis: CV Mosby; 1989:657–662.

Please correlate with clinical conditions.
Method:- COMPETITIVE CHEMI LUMINESCENT IMMUNO ASSAY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
HIGH SENSITIVITY C-REACTIVE PROTEIN (HS-CRP)	IMMUNOTURBIDIMETRY	1.1	mg/L

Bio. Ref. Interval. :-

< 1.00 - Low Risk
1.00 - 3.00 - Average Risk
>3.00 - 10.00 - High Risk
> 10.00 - Possibly due to Non-Cardiac Inflammation

Disclaimer: Persistent unexplained elevation of HSCRP >10 should be evaluated for non-cardiovascular etiologies such as infection , active arthritis or concurrent illness.

Clinical significance:
High sensitivity C- reactive Protein (HSCRP) can be used as an independent risk marker for the identification of Individuals at risk for future cardiovascular Disease. A coronary artery disease risk assessment should be based on the average of two hs-CRP tests, ideally taken two weeks apart.

Kit Validation Reference:
1.Clinical management of laboratory date in medical practice 2003-3004, 207(2003).
2.Tietz : Textbook of Clinical Chemistry and Molecular diagnostics :Second edition :Chapter 47:Page no.1507- 1508.

Please correlate with clinical conditions.
Method:- FULLY AUTOMATED LATEX AGGLUTINATION – BECKMAN COULTER

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
AMYLASE	PHOTOMETRY	69.34	U/L

Bio. Ref. Interval. :-

Adults : 28-100 U/L

Interpretation:
Lipemic Sera (Hypertriglyceridemia) may contain inhibitors, Which falsely depress results. About 20% of patients with Acute Pancreatitis have abnormal lipids. Normal serum amylase may occur in Pancreatitis, Especially relapsing and chronic pancreatitis. Moderate increases may be reported in normal pregnancy.

Clinical Significance:
Causes of high Serum Amylase include Acute Pancreatitis, Pancreatic Pseudocyst, Pancreatic Ascites, Pancreatic Abscess, Neoplasm in or adjacent to Pancreas, Trauma to Pancreas, and common Duct Stones. Nonpancreatic Causes include inflammatory salivary lesions (Eg, Mumps), Perforated Peptic Ulcer, Intestinal Obstruction, Biliary Tract Disease, Peritonitis, Acute Appendicitis, Diabetic Ketoacidosis, and Extrapancreatic Carcinomas. Amylase levels more than 25-fold the upper limit of normal are often found when metastatic tumors produce Ectopic Amylase.

Specifications:
Precision: Intra assay (%CV): 2.82, Inter assay (%CV): 2.49, Sensitivity: 10.9 U/L.

Kit Validation References:
Rauscher, E., et coll., Fresenius Z. Analyt. Chem. 324 (1986) 304-305.

Please correlate with clinical conditions.
Method:- ENZYMATIC COLORIMETRIC TEST

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
IRON	PHOTOMETRY	98.2	µg/dL
Bio. Ref. Interval. : Male : 65 - 175 Female : 50 - 170 **Method :** Ferrozine method without deproteinization			
TOTAL IRON BINDING CAPACITY (TIBC)	PHOTOMETRY	334.36	µg/dL
Bio. Ref. Interval. : Male: 225 - 535 µg/dl Female: 215 - 535 µg/dl **Method :** Spectrophotometric Assay			
% TRANSFERRIN SATURATION	CALCULATED	29.37	%
Bio. Ref. Interval. : 13 - 45 **Method :** Derived from IRON and TIBC values			
UNSAT.IRON-BINDING CAPACITY(UIBC)	PHOTOMETRY	236.16	µg/dL
Bio. Ref. Interval. : 162 - 368 **Method :** SPECTROPHOTOMETRIC ASSAY			

Please correlate with clinical conditions.

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign

Doctor 2 Sign

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
LIPASE	PHOTOMETRY	40.09	U/L

Bio. Ref. Interval. :-

Adults : 5.6 - 51.3 U/L

Interpretation:

For diagnostic purposes, the results should always be assessed in conjunction with the patient's medical history, clinical examination and other findings like serum amylase. Serum Lipase is usually normal in patients with elevated serum amylase, having peptic ulcer, salivary adenitis, inflammatory bowel disease, intestinal obstruction, and macroamylasemia. Lipemic sera may interfere with results.

Clinical Significance:
High serum Lipase is a specific marker for pancreatitis; after acute pancreatitis the Lipase activity increases within 4-8 hours, reaches a peak after 24 hours and decreases after 8 to 14 days. However, there is no correlation between the Lipase activity determined in serum and the extent of damage to the pancreas.

Specifications:
Precision: Intra assay (%CV): 3.35, Inter assay (%CV): 2.46, Sensitivity: 3.5 U/L.

Kit Validation References:
Tietz Nw Et Al. Lipase In Serum - The Elusive Enzyme: An Overview. Clin Chem 1993; 39:746-756.

Please correlate with clinical conditions.
Method:- ENZYMATIC COLORIMETRIC ASSAY

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
TOTAL CHOLESTEROL	PHOTOMETRY	123	mg/dL	< 200
HDL CHOLESTEROL - DIRECT	PHOTOMETRY	56	mg/dL	40-60
LDL CHOLESTEROL - DIRECT	PHOTOMETRY	54	mg/dL	< 100
TRIGLYCERIDES	PHOTOMETRY	120	mg/dL	< 150
TC/ HDL CHOLESTEROL RATIO	**CALCULATED**	**2.2**	**Ratio**	**3 - 5**
TRIG / HDL RATIO	CALCULATED	2.12	Ratio	< 3.12
LDL / HDL RATIO	**CALCULATED**	**0.9**	**Ratio**	**1.5-3.5**
HDL / LDL RATIO	CALCULATED	1.05	Ratio	> 0.40
NON-HDL CHOLESTEROL	CALCULATED	66.2	mg/dL	< 160
VLDL CHOLESTEROL	CALCULATED	23.94	mg/dL	5 - 40

Please correlate with clinical conditions.

Method :

CHOL - Cholesterol Oxidase, Esterase, Peroxidase
HCHO - Direct Enzymatic Colorimetric
LDL - Direct Measure
TRIG - Enzymatic, End Point
TC/H - Derived from serum Cholesterol and Hdl values
TRI/H - Derived from TRIG and HDL Values
LDL/ - Derived from serum HDL and LDL Values
HD/LD - Derived from HDL and LDL values.
NHDL - Derived from serum Cholesterol and HDL values
VLDL - Derived from serum Triglyceride values

***REFERENCE RANGES AS PER NCEP ATP III GUIDELINES:**

TOTAL CHOLESTEROL	(mg/dl)	HDL	(mg/dl)	LDL	(mg/dl)	TRIGLYCERIDES	(mg/dl)
DESIRABLE	<200	LOW	<40	OPTIMAL	<100	NORMAL	<150
BORDERLINE HIGH	200-239	HIGH	>60	NEAR OPTIMAL	100-129	BORDERLINE HIGH	150-199
HIGH	>240			BORDERLINE HIGH	130-159	HIGH	200-499
				HIGH	160-189	VERY HIGH	>500
				VERY HIGH	>190		

Alert !!! 10-12 hours fasting is mandatory for lipid parameters. If not, values might fluctuate.

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
ALKALINE PHOSPHATASE	PHOTOMETRY	105.1	U/L	45-129
BILIRUBIN - TOTAL	PHOTOMETRY	0.45	mg/dL	0.3-1.2
BILIRUBIN -DIRECT	PHOTOMETRY	0.1	mg/dL	0 - 0.20
BILIRUBIN (INDIRECT)	CALCULATED	0.35	mg/dL	0-0.9
GAMMA GLUTAMYL TRANSFERASE (GGT)	PHOTOMETRY	13.4	U/L	< 55
ASPARTATE AMINOTRANSFERASE (SGOT)	PHOTOMETRY	24.3	U/L	< 35
ALANINE TRANSAMINASE (SGPT)	PHOTOMETRY	32.9	U/L	< 45
SGOT / SGPT RATIO	CALCULATED	0.74	Ratio	< 2
PROTEIN - TOTAL	PHOTOMETRY	6.98	gm/dL	5.7-8.2
ALBUMIN - SERUM	PHOTOMETRY	4.14	gm/dL	3.2-4.8
SERUM GLOBULIN	CALCULATED	2.84	gm/dL	2.5-3.4
SERUM ALB/GLOBULIN RATIO	CALCULATED	1.46	Ratio	0.9 - 2

Please correlate with clinical conditions.

Method :

ALKP - Modified IFCC method
BILT - Diazonium salt DPD method
BILD - Diazonium salt DPD method
BILI - Derived from serum Total and Direct Bilirubin values
GGT - Modified IFCC method
SGOT - IFCC* Without Pyridoxal Phosphate Activation
SGPT - IFCC* Without Pyridoxal Phosphate Activation
OT/PT - Derived from SGOT and SGPT values.
PROT - Biuret Method
SALB - Albumin Bcg[1]method (Colorimetric Assay Endpoint)
SEGB - DERIVED FROM SERUM ALBUMIN AND PROTEIN VALUES
A/GR - Derived from serum Albumin and Protein values

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign

Doctor 2 Sign

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
MAGNESIUM	PHOTOMETRY	< 2.5	mg/dL

Bio. Ref. Interval. :-

1.90 - 3.10 mg/dL

Clinical significance:

Magnesium is the fourth most abundant cation in the body and second most prevalent intracellular cation. The total body magnesium content is about 25 g or approximately 1 mol, of which 55% reside in the skeleton. About 45% of the magnesium is intracellular. In general higher the metabolic activity of cell, the greater is its magnesium content. Magnesium is a cofactor for more than 300 enzymes in the body.

Disorders of magnesium metabolism are separated into those causing hypomagnesaemia/magnesium deficiencies and hypermagnesemia. Hypomagnesaemia is common in patient in hospitals. Moderate to severe deficiency of magnesium is usually due to loss of magnesium from the gastrointestinal (gi) tract or kidneys. One of the more serious complications of magnesium deficiency is cardiac arrhythmia. Symptomatic hypermagnsemia is almost always caused by excessive intake, resulting from administration of antacids, enemas, and parenteral fluids containing magnesium. Depression of neuromuscular system is the most common manifestation of magnesium intoxication.

External quality control program participation:

College Of American Pathologists: Chemistry survey; CAP Number: 7193855-01

Please correlate with clinical conditions.

Method:- MODIFIED XYLIDYL BLUE REACTION METHOD

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
BLOOD UREA NITROGEN (BUN)	PHOTOMETRY	12.6	mg/dL	7.94 - 20.07
CREATININE - SERUM	**PHOTOMETRY**	**0.7**	**mg/dL**	**0.72-1.18**
BUN / SR.CREATININE RATIO	CALCULATED	18	Ratio	9:1-23:1
UREA (CALCULATED)	CALCULATED	26.96	mg/dL	Adult : 17-43
UREA / SR.CREATININE RATIO	CALCULATED	38.52	Ratio	< 52
CALCIUM	PHOTOMETRY	9.62	mg/dL	8.8-10.6
URIC ACID	PHOTOMETRY	6.78	mg/dL	4.2 - 7.3
SODIUM	I.S.E - INDIRECT	137	mmol/L	136 - 145
CHLORIDE	I.S.E - INDIRECT	101	mmol/L	98 - 107

Please correlate with clinical conditions.

Method :

BUN - Kinetic UV Assay.
SCRE - Creatinine Enzymatic Method
B/CR - Derived from serum Bun and Creatinine values
UREAC - Derived from BUN Value.
UR/CR - Derived from UREA and Sr.Creatinine values.
CALC - Arsenazo III Method, End Point.
URIC - Uricase / Peroxidase Method
SOD - ION SELECTIVE ELECTRODE - INDIRECT
CHL - ION SELECTIVE ELECTRODE - INDIRECT

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
TOTAL TRIIODOTHYRONINE (T3)	C.L.I.A	79	ng/dL	60-200
TOTAL THYROXINE (T4)	C.L.I.A	6.4	µg/dL	4.5-12
TSH - ULTRASENSITIVE	C.M.I.A	<2.92	µIU/mL	0.35-4.94

The Biological Reference Ranges is specific to the age group. Kindly correlate clinically.

Method :

T3 - Competitive Chemi Luminescent Immuno Assay
T4 - Competitive Chemi Luminescent Immuno Assay
USTSH - Fully Automated Chemi Luminescent Microparticle Immunoassay

Disclaimer : Results should always be interpreted using the reference range provided by the laboratory that performed the test. Different laboratories do tests using different technologies, methods and using different reagents which may cause difference. In reference ranges and hence it is recommended to interpret result with assay specific reference ranges provided in the reports. To diagnose and monitor therapy doses, it is recommended to get tested every time at the same Laboratory.

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign

Doctor 2 Sign

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
EST. GLOMERULAR FILTRATION RATE (eGFR)	CALCULATED	134	mL/min/1.73 m2

Bio. Ref. Interval. :-

> = 90 : Normal
60 - 89 : Mild Decrease
45 - 59 : Mild to Moderate Decrease
30 - 44 : Moderate to Severe Decrease
15 - 29 : Severe Decrease
<15 : Kidney Failure

Clinical Significance

The normal serum creatinine reference interval does not necessarily reflect a normal GFR for a patient. Because mild and moderate kidney injury is poorly inferred from serum creatinine alone. Thus, it is recommended for clinical laboratories to routinely estimate glomerular filtration rate (eGFR), a "gold standard" measurement for assessment of renal function, and report the value when serum creatinine is measured for patients 18 and older, when appropriate and feasible. It cannot be measured easily in clinical practice, instead, GFR is estimated from equations using serum creatinine, age, race and sex. This provides easy to interpret information for the doctor and patient on the degree of renal impairment since it approximately equates to the percentage of kidney function remaining. Application of CKD-EPI equation together with the other diagnostic tools in renal medicine will further improve the detection and management of patients with CKD.

Reference

Levey AS, Stevens LA, Schmid CH, Zhang YL, Castro AF, 3rd, Feldman HI, et al. A new equation to estimate glomerular filtration rate. Ann Intern Med. 2009;150(9):604-12.

Please correlate with clinical conditions.

Method:- 2021 CKD EPI Creatinine Equation

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
VITAMIN D2	LC-MS/MS	< 100	ng/mL

Method : LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

VITAMIN D3	LC-MS/MS	< 100	ng/mL

Method : LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY

VITAMIN D TOTAL	CALCULATED	< 65	ng/mL

Bio. Ref. Interval. :
Deficiency : <20 ng/mL
Insufficiency : 20-30 ng/mL
Sufficiency : 30-100 ng/mL
Toxicity : >100 ng/mL

Method : Derived from VD2 and VD3 values

Please correlate with clinical conditions.

Tests Done : AAROGYAM X PRO WITH UTSH

Report Remarks : Labcode:0501003501/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
ALLERGY PHADIATOP ADULT	**FEIA**	**< 100**	**kUA/L**
Bio. Ref. Interval. :-			

Interpretation
- Results are expressed as positive or negative, using the 0.35 kAU/L level as cut-off.
- >0.35 kAU/L - A positive result indicates that the patient is atopic
- <0.35 kAU/L - A negative result indicates that the patient is non-atopic, i.e. not sensitized to common inhalant allergens.

Clinical Significance
- ImmunoCAP Phadiatop is an in vitro qualitative and semiquantitative assay for graded determination of IgE antibodies specific to inhalant allergens in human serum.
- It is intended for use as an aid in the clinical diagnosis of IgE mediated allergic disorders in conjunction with other clinical findings.
- Measurement of allergen specific IgE antibodies using ImmunoCAP Phadiatop provides an indication about atopy and the risk for clinical reactions to common inhalant allergens.

Limitations of the Procedure: A definitive clinical diagnosis should only be made by the physician after all clinical and laboratory findings have been evaluated. It should not be based on the results of any single diagnostic method.

Follow-up test recommendation:
- In case of a Positive test, clinical correlation & further testing is recommended with individual allergy Phadiatop ImmunoCAP panels to identify the causative allergen

Please reach out to your Service Provider for booking:
- ALLERGY COMPREHENSIVE PROFILE (BY PHADIA)
- ALLERGY ASTHMA / RHINITIS SCREENING (BY PHADIA)
- ALLERGY DUST PANEL (BY PHADIA)
- ALLERGY CEREAL/VEG FOOD PANEL (BY PHADIA)
- ALLERGY VEGETABLE PANEL 1 (BY PHADIA)
- ALLERGY VEGETABLE PANEL 2 (BY PHADIA)
- ALLERGY VEGETABLE PANEL 3 (BY PHADIA)
- ALLERGY NON-VEGETARIAN PANEL 2 (BY PHADIA)
- ALLERGY NON-VEGETARIAN PANEL 1 (BY PHADIA)
- ALLERGY FOOD PANEL 1 (B PHADIA)
- ALLERGY FRUIT PANEL 1 (BY PHADIA)
- ALLERGY FRUIT PANEL 2 (BY PHADIA)
- ALLERGY NUT PANEL (BY PHADIA)
- ALLERGY ECZEMA SCREENING PANEL (BY PHADIA)
- ALLERGY ANIMAL PANEL (BY PHADIA)

Please correlate with clinical conditions.

Method:- IMMUNOCAP, FLUORESCENT ENZYME IMMUNOASSAY (FEIA) METHOD

Tests Done : APPHA

Report Remarks : Labcode:0501003502/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS	Bio. Ref. Interval.
ARSENIC	ICP-MS	< 2.46	µg/L	< 5
CADMIUM	ICP-MS	< 0.75	µg/L	< 1.5
MERCURY	ICP-MS	< 2.46	µg/L	< 5
LEAD	ICP-MS	< 74.95	µg/L	< 150
CHROMIUM	ICP-MS	< 15	µg/L	< 30
BARIUM	ICP-MS	< 14.96	µg/L	< 30
COBALT	ICP-MS	< 0.8	µg/L	0.10 - 1.50
CAESIUM	ICP-MS	< 2.46	µg/L	< 5
THALLIUM	ICP-MS	< 0.5	µg/L	< 1
URANIUM	ICP-MS	< 0.5	µg/L	< 1
STRONTIUM	ICP-MS	< 23	µg/L	8 - 38
ANTIMONY	ICP-MS	< 9.05	µg/L	0.10 - 18
TIN	ICP-MS	< 1	µg/L	< 2
MOLYBDENUM	ICP-MS	< 2.35	µg/L	0.70 - 4.0
SILVER	ICP-MS	< 2	µg/L	< 4
VANADIUM	ICP-MS	< 0.4	µg/L	< 0.8
BERYLLIUM	ICP-MS	< 0.05	µg/L	<0.10
BISMUTH	ICP-MS	< 0.45	µg/L	0.10 - 0.80
SELENIUM	ICP-MS	< 200	µg/L	60 - 340
ALUMINIUM	ICP-MS	< 15	µg/L	< 30
NICKEL	ICP-MS	< 7.5	µg/L	< 15
MANGANESE	ICP-MS	< 13.55	µg/L	7.10 - 20

Please correlate with clinical conditions.

Method :

ICP - MASS SPECTROMETRY
Note:Reference range has been obtained after considering 95% population as cutoff.

Tests Done : ELEMENTS 22 (TOXIC AND NUTRIENTS),HBA PROFILE,HEMOGRAM

Report Remarks : Labcode:0501114292/IT001

Doctor 1 Sign

Doctor 2 Sign

Thyrocare Technologies Limited, D-37/3, TTC MIDC, Turbhe, Navi Mumbai - 400 703. 9870666333 wellness@thyrocare.com

Patient Name : XXXXXXXXXXXXXXX
Referred By : XXXXXXXXXXXXXXX
Sample Collected At : XXXXXXXXXXXXXXXX

Sample Collected on (SCT) : XXXXXXXXXXXXXXX
Sample Received on (SRT) : XXXXXXXXXXXXXXX
Report Released on (RRT) : XXXXXXXXXXXXXXX
Sample Type | Barcode : XXXXXXXXXXXXXXX

TEST NAME	TECHNOLOGY	VALUE	UNITS
HbA1c	H.P.L.C	5.1	%

Bio. Ref. Interval. :

As per ADA Guidelines	Guidance For Known Diabetics
Below 5.7% : Normal	Below 6.5% : Good Control
5.7% - 6.4% : Prediabetic	6.5% - 7% : Fair Control
>=6.5% : Diabetic	7.0% - 8% : Unsatisfactory Control
	>8% : Poor Control

Method : Fully Automated H.P.L.C method

AVERAGE BLOOD GLUCOSE (ABG)	CALCULATED	100	mg/dL

Bio. Ref. Interval. :

90 - 120 mg/dl : Good Control
121 - 150 mg/dl : Fair Control
151 - 180 mg/dl : Unsatisfactory Control
> 180 mg/dl : Poor Control

Method : Derived from HBA1c values

Please correlate with clinical conditions.

Tests Done : ELEMENTS 22 (TOXIC AND NUTRIENTS),HBA PROFILE,HEMOGRAM

Report Remarks : Labcode:0501114292/IT001

Doctor 1 Sign **Doctor 2 Sign**

Patient Name	: XXXXXXXXXXXXXXX	Sample Collected on (SCT)	: XXXXXXXXXXXXXXX
Referred By	: XXXXXXXXXXXXXXX	Sample Received on (SRT)	: XXXXXXXXXXXXXXX
Sample Collected At	: XXXXXXXXXXXXXXXX	Report Released on (RRT)	: XXXXXXXXXXXXXXX
		Sample Type | Barcode	: XXXXXXXXXXXXXXX

TEST NAME	METHODOLOGY	VALUE	UNITS	Bio. Ref. Interval.
HEMOGLOBIN	**SLS-Hemoglobin Method**	**10.4**	**g/dL**	**13.0-17.0**
Hematocrit (PCV)	**CPH Detection**	**33.6**	**%**	**40.0-50.0**
Total RBC	**HF & EI**	**3.88**	**X 10^6/µL**	**4.5-5.5**
Mean Corpuscular Volume (MCV)	Calculated	86.6	fL	83.0-101.0
Mean Corpuscular Hemoglobin (MCH)	**Calculated**	**26.8**	**pq**	**27.0-32.0**
Mean Corp.Hemo. Conc (MCHC)	**Calculated**	**31**	**g/dL**	**31.5-34.5**
Red Cell Distribution Width - SD (RDW-SD)	**Calculated**	**48.9**	**fL**	**39-46**
Red Cell Distribution Width (RDW - CV)	**Calculated**	**15.4**	**%**	**11.6-14**
RED CELL DISTRIBUTION WIDTH INDEX (RDWI)	Calculated	343.7	-	*Refer Note below
MENTZER INDEX	Calculated	22.3	-	*Refer Note below
TOTAL LEUCOCYTE COUNT (WBC)	HF & FC	7.77	X 10^3 / µL	4.0 - 10.0
DIFFERENTIAL LEUCOCYTE COUNT				
Neutrophils Percentage	Flow Cytometry	75.2	%	40-80
Lymphocytes Percentage	**Flow Cytometry**	**17.4**	**%**	**20-40**
Monocytes Percentage	Flow Cytometry	2.7	%	2-10
Eosinophils Percentage	Flow Cytometry	3.9	%	1-6
Basophils Percentage	Flow Cytometry	0.5	%	0-2
Immature Granulocyte Percentage (IG%)	Flow Cytometry	0.3	%	0-0.5
Nucleated Red Blood Cells %	Flow Cytometry	0.1	%	0.0-5.0
ABSOLUTE LEUCOCYTE COUNT				
Neutrophils - Absolute Count	Calculated	5.84	X 10^3 / µL	2.0-7.0
Lymphocytes - Absolute Count	Calculated	1.35	X 10^3 / µL	1.0-3.0
Monocytes - Absolute Count	Calculated	0.21	X 10^3 / µL	0.2 - 1.0
Basophils - Absolute Count	Calculated	0.04	X 10^3 / µL	0.02 - 0.1
Eosinophils - Absolute Count	Calculated	0.3	X 10^3 / µL	0.02 - 0.5
Immature Granulocytes (IG)	Calculated	0.02	X 10^3 / µL	0-0.3
Nucleated Red Blood Cells	Calculated	0.01	X 10^3 / µL	0.0-0.5
PLATELET COUNT	HF & EI	260	X 10^3 / µL	150-410
Mean Platelet Volume (MPV)	Calculated	10.3	fL	6.5-12
Platelet Distribution Width (PDW)	Calculated	11.2	fL	9.6-15.2
Platelet to Large Cell Ratio (PLCR)	Calculated	26.6	%	19.7-42.4
Plateletcrit (PCT)	Calculated	0.27	%	0.19-0.39

Remarks : Alert!!! RBCs:Mild anisopoikilocytosis. Predominantly normocytic normochromic with ovalocytes. Platelets:Appear adequate in smear.

***Note - Mentzer index (MI), RDW-CV and RDWI are hematological indices to differentiate between Iron Deficiency Anemia(IDA) and Beta Thalassemia Trait (BTT). MI >13, RDWI >220 and RDW-CV >14 more likely to be IDA. MI <13, RDWI <220, and RDW-CV <14 more likely to be BTT. Suggested Clinical correlation. BTT to be confirmed with HB electrophoresis if clinically indicated.**

Method : Fully automated bidirectional analyser (6 Part Differential SYSMEX XN-1000)

(Reference : *FC- flowcytometry, *HF- hydrodynamic focussing, *EI- Electric Impedence, *Hb- hemoglobin, *CPH- Cumulative pulse height)

~~ End of report ~~

Tests Done : ELEMENTS 22 (TOXIC AND NUTRIENTS),HBA PROFILE,HEMOGRAM

Report Remarks : Labcode:0501114292/IT001

Doctor 1 Sign **Doctor 2 Sign**

CONDITIONS OF REPORTING

- The reported results are for information and interpretation of the referring doctor only.
- It is presumed that the tests performed on the specimen belong to the patient; named or identified.
- Results of tests may vary from laboratory to laboratory and also in some parameters from time to time for the same patient.
- Should the results indicate an unexpected abnormality, the same should be reconfirmed.
- Only such medical professionals who understand reporting units, reference ranges and limitations of technologies should interpret results.
- This report is not valid for medico-legal purpose.
- Neither Thyrocare, nor its employees/representatives assume: (a) any liability, responsibility for any loss or damage that may be incurred by any person as a result of presuming the meaning or contents of the report, (b) any claims of any nature whatsoever arising from or relating to the performance of the requested tests as well as any claim for indirect, incidental or consequential damages. The total liability, in any case, of Thyrocare shall not exceed the total amount of invoice for the services provided and paid for.
- Thyrocare Discovery video link :- https://youtu.be/nbdYeRgYyQc

EXPLANATIONS

- Majority of the specimen processed in the laboratory are collected by Pathologists and Hospitals we call them as "Clients".
- **Name** - The name is as declared by the client and recored by the personnel who collected the specimen.
- **Ref.Dr** - The name of the doctor who has recommended testing as declared by the client.
- **Labcode** - This is the accession number in our laboratory and it helps us in archiving and retrieving the data.
- **Barcode** - This is the specimen identity number and it states that the results are for the specimen bearing the barcode (irrespective of the name).
- **SCP** - Specimen Collection Point - This is the location where the blood or specimen was collected as declared by the client.
- **SCT** - Specimen Collection Time - The time when specimen was collected as declared by the client.
- **SRT** - Specimen Receiving Time - This time when the specimen reached our laboratory.
- **RRT** - Report Releasing Time - The time when our pathologist has released the values for Reporting.
- **Reference Range** - Means the range of values in which 95% of the normal population would fall.

SUGGESTIONS

- Values out of reference range requires reconfirmation before starting any medical treatment.
- Retesting is needed if you suspect any quality shortcomings.
- Testing or retesting should be done in accredited laboratories.
- For suggestions, complaints, clinical support or feedback, write to us at **customersupport@thyrocare.com** or call us on **022-3090 0000**

+ *T&C Apply, #As on 5th December 2024 (Applicable for all company owned labs except Bhagalpur & Vijayawada),*

⋆ *As per survey on doctors' perception of laboratory diagnostics (IJARIIT, 2023), -Mumbai Reference Lab is CAP Accredited*