



Lab No. : BHT/14-01-2023/SR7178054
 Patient Name : GHULAM SIMNANI
 Age : 35 Y 10 M 19 D
 Gender : M

Lab Add. : Newtown, Kolkata-700156
 Ref Dr. : Dr.MEDICAL OFFICER
 Collection Date: 14/Jan/2023 09:12AM
 Report Date : 14/Jan/2023 06:21PM



Test Name	Result	Unit	Bio Ref. Interval	Method
CHLORIDE, BLOOD , . CHLORIDE,BLOOD	102.00	mEq/L	99-109 mEq/L	ISE INDIRECT
POTASSIUM, BLOOD , GEL SERUM POTASSIUM,BLOOD	4.40	mEq/L	3.5-5.5 mEq/L	ISE INDIRECT
SODIUM, BLOOD , GEL SERUM SODIUM,BLOOD	137.00	mEq/L	132 - 146 mEq/L	ISE INDIRECT
CALCIUM, BLOOD CALCIUM,BLOOD	9.00	mg/dL	8.7-10.4 mg/dL	Arsenazo III

□

Dr NEEPA CHOWDHURY
 MBBS MD (Biochemistry)
 Consultant Biochemist



Lab No. : SR7178054 Name : GHULAM SIMNANI Age/G : 35 Y 10 M 19 D / M Date : 14-01-2023

ALKALINE PHOSPHATASE , GEL SERUM

ALKALINE PHOSPHATASE 74.00 U/L 46-116 U/L IFCC standardization

BILIRUBIN (DIRECT) , GEL SERUM

BILIRUBIN (DIRECT) 0.10 mg/dL <0.2 mg/dL Vanadate oxidation

BILIRUBIN (TOTAL) , GEL SERUM

BILIRUBIN (TOTAL) 0.70 mg/dL 0.3-1.2 mg/dL Vanadate oxidation

CREATININE, BLOOD , GEL SERUM

CREATININE, BLOOD 0.92 mg/dL 0.7-1.3 mg/dL Jaffe, alkaline picrate, kinetic

URIC ACID, BLOOD , GEL SERUM

URIC ACID, BLOOD 5.00 mg/dL 3.5-7.2 mg/dL Uricase/Peroxidase

SGOT/AST , GEL SERUM

SGOT/AST 22.00 U/L 13-40 U/L Modified IFCC

THYROID PANEL (T3, T4, TSH) , GEL SERUM

T3-TOTAL (TRI IODOTHYRONINE) 0.97 ng/ml 0.60-1.81 ng/ml CLIA

T4-TOTAL (THYROXINE) 5.1 µg/dL 3.2-12.6 µg/dL CLIA

TSH (THYROID STIMULATING HORMONE) 1.88 µIU/mL 0.55-4.78 µIU/mL CLIA

Serum TSH levels exhibit a diurnal variation with the peak occurring during the night and the nadir, which approximates to 50% of the peak value, occurring between 1000 and 1600 hours.[1,2]

References:

1. Bugalho MJ, Domingues RS, Pinto AC, Garrao A, Catarino AL, Ferreira T, Limbert E and Sobrinho L. Detection of thyroglobulin mRNA transcripts in peripheral blood of individuals with and without thyroid glands: evidence for thyroglobulin expression by blood cells. *Eur J Endocrinol* 2001;145:409-13.
2. Bellantone R, Lombardi CP, Bossola M, Ferrante A, Princi P, Boscherini M et al. Validity of thyroglobulin mRNA assay in peripheral blood of postoperative thyroid carcinoma patients in predicting tumor recurrence varies according to the histologic type: results of a prospective study. *Cancer* 2001;92:2273-9.

BIOLOGICAL REFERENCE INTERVAL: [ONLY FOR PREGNANT MOTHERS]

Trimester specific TSH LEVELS during pregnancy:

FIRST TRIMESTER: 0.10 – 3.00 µ IU/mL

SECOND TRIMESTER: 0.20 -3.50 µ IU/mL

THIRD TRIMESTER : 0.30 -3.50 µ IU/mL

References:

1. Erik K. Alexander, Elizabeth N. Pearce, Gregory A. Brent, Rosalind S. Brown, Herbert Chen, Chrysoula Dosiou, William A. Grobman, Peter Laurberg, John H. Lazarus, Susan J. Mandel, Robin P. Peeters, and Scott Sullivan. *Thyroid*. Mar 2017.315-389. <http://doi.org/10.1089/thy.2016.0457>
2. Kalra S, Agarwal S, Aggarwal R, Ranabir S. Trimester-specific thyroid-stimulating hormone: An indian perspective. *Indian J Endocr Metab* 2018;22:1-4.



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SGPT/ALT , GEL SERUM

SGPT/ALT 20.00 U/L 7-40 U/L Modified IFCC

□

Dr NEEPA CHOWDHURY
MBBS MD (Biochemistry)
Consultant Biochemist



Lab No. : SR7178054 Name : GHULAM SIMNANI Age/G : 35 Y 10 M 19 D / M Date : 16-01-2023

PHOSPHORUS-INORGANIC, BLOOD , GEL SERUM

PHOSPHORUS-INORGANIC,BLOOD 2.0 mg/dL 2.4-5.1 mg/dL Phosphomolybdate/UV

ESTIMATED WITH FRESHLY COLLECTED SAMPLE

TO CORRELATE CLINICALLY

Dr. SUPARBA CHAKRABARTI
MBBS, MD(BIOCHEMISTRY)
Consultant Biochemist



Lab No. : SR7178054 Name : GHULAM SIMNANI Age/G : 35 Y 10 M 19 D / M Date : 14-01-2023

ESR (ERYTHROCYTE SEDIMENTATION RATE) , EDTA WHOLE BLOOD

1stHour 09 mm/hr 0.00 - 20.00 mm/hr Westergren

URINE ROUTINE ALL, ALL , URINE

PHYSICAL EXAMINATION

COLOUR PALE YELLOW
APPEARANCE HAZY

CHEMICAL EXAMINATION

pH	6.0	4.6 - 8.0	Dipstick (triple indicator method)
SPECIFIC GRAVITY	1.015	1.005 - 1.030	Dipstick (ion concentration method)
PROTEIN	NOT DETECTED	NOT DETECTED	Dipstick (protein error of pH indicators)/Manual
GLUCOSE	NOT DETECTED	NOT DETECTED	Dipstick (glucose-oxidase-peroxidase method)/Manual
KETONES (ACETOACETIC ACID, ACETONE)	NOT DETECTED	NOT DETECTED	Dipstick (Legals test)/Manual
BLOOD	NOT DETECTED	NOT DETECTED	Dipstick (pseudoperoxidase reaction)
BILIRUBIN	NEGATIVE	NEGATIVE	Dipstick (azo-diazo reaction)/Manual
UROBILINOGEN	NEGATIVE	NEGATIVE	Dipstick (diazonium ion reaction)/Manual
NITRITE	NEGATIVE	NEGATIVE	Dipstick (Griess test)
LEUCOCYTE ESTERASE	POSITIVE(+++)	NEGATIVE	Dipstick (ester hydrolysis reaction)

MICROSCOPIC EXAMINATION

LEUKOCYTES (PUS CELLS)	18-20	/hpf	0-5	Microscopy
EPITHELIAL CELLS	4-6	/hpf	0-5	Microscopy
RED BLOOD CELLS	NOT DETECTED	/hpf	0-2	Microscopy
CAST	NOT DETECTED		NOT DETECTED	Microscopy
CRYSTALS	NOT DETECTED		NOT DETECTED	Microscopy
BACTERIA	PRESENT(+++)		NOT DETECTED	Microscopy
YEAST	NOT DETECTED		NOT DETECTED	Microscopy

Note:

- All urine samples are checked for adequacy and suitability before examination.
- Analysis by urine analyzer of dipstick is based on reflectance photometry principle. Abnormal results of chemical examinations are confirmed by manual methods.
- The first voided morning clean-catch midstream urine sample is the specimen of choice for chemical and microscopic analysis.
- Negative nitrite test does not exclude urinary tract infections.
- Trace proteinuria can be seen in many physiological conditions like exercise, pregnancy, prolonged recumbency etc.
- False positive results for glucose, protein, nitrite, urobilinogen, bilirubin can occur due to use of certain drugs, therapeutic dyes, ascorbic acid, cleaning agents used in urine collection container.
- Discrepancy between results of leukocyte esterase and blood obtained by chemical methods with corresponding pus cell and red blood cell count by microscopy can occur due to cell lysis.
- Contamination from perineum and vaginal discharge should be avoided during collection, which may falsely elevate epithelial cell count and show presence of bacteria and/or yeast in the urine.

CBC WITH PLATELET & RETICULOCYTE COUNT , EDTA WHOLE BLOOD

HEMOGLOBIN	16.3	g/dL	13 - 17	PHOTOMETRIC
WBC	7.9	*10 ³ /μL	4 - 10	DC detection method
RBC	5.74	*10 ⁶ /μL	4.5 - 5.5	DC detection method
PLATELET (THROMBOCYTE) COUNT	252	*10 ³ /μL	150 - 450*10 ³ /μL	DC detection method/Microscopy

DIFFERENTIAL COUNT

NEUTROPHILS	68	%	40 - 80 %	Flowcytometry/Microscopy
LYMPHOCYTES	25	%	20 - 40 %	Flowcytometry/Microscopy
MONOCYTES	06	%	2 - 10 %	Flowcytometry/Microscopy
EOSINOPHILS	01	%	1-6%	Flowcytometry/Microscopy

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Lab No. : SR7178054 Name : GHULAM SIMNANI Age/G : 35 Y 10 M 19 D / M Date : 14-01-2023

BASOPHILS 00 % 0-0.9% Flowcytometry/Microscopy

CBC SUBGROUP 1

HEMATOCRIT / PCV 49.4 % 40 - 50 % Calculated
 MCV 86.0 fl 83 - 101 fl Calculated
 MCH 28.5 pg 27 - 32 pg Calculated
 MCHC 33.1 gm/dl 31.5-34.5 gm/dl Calculated
 RDW - RED CELL DISTRIBUTION WIDTH **14.2** % 11.6-14% Calculated
 RETICULOCYTE COUNT-AUTOMATED,BLOOD 0.8 % 0.5-2.5% Cell Counter/Microscopy

CBC WITH PLATELET (THROMBOCYTE) COUNT , EDTA WHOLE BLOOD

HEMOGLOBIN 16.3 g/dL 13 - 17 PHOTOMETRIC
 WBC 7.9 *10³/μL 4 - 10 DC detection method
 RBC **5.74** *10⁶/μL 4.5 - 5.5 DC detection method
 PLATELET (THROMBOCYTE) COUNT 252 *10³/μL 150 - 450*10³/μL DC detection method/Microscopy

DIFFERENTIAL COUNT

NEUTROPHILS 68 % 40 - 80 % Flowcytometry/Microscopy
 LYMPHOCYTES 25 % 20 - 40 % Flowcytometry/Microscopy
 MONOCYTES 06 % 2 - 10 % Flowcytometry/Microscopy
 EOSINOPHILS 01 % 1-6% Flowcytometry/Microscopy
 BASOPHILS 00 % 0-0.9% Flowcytometry/Microscopy

CBC SUBGROUP

HEMATOCRIT / PCV 49.4 % 40 - 50 % Calculated
 MCV 86.0 fl 83 - 101 fl Calculated
 MCH 28.5 pg 27 - 32 pg Calculated
 MCHC 33.1 gm/dl 31.5-34.5 gm/dl Calculated
 RDW - RED CELL DISTRIBUTION WIDTH **14.2** % 11.6-14% Calculated
 PDW-PLATELET DISTRIBUTION WIDTH 16.5 fL 8.3 - 25 fL Calculated
 MPV-MEAN PLATELET VOLUME 8 7.5 - 11.5 fl Calculated

BLOOD GROUP ABO+RH [GEL METHOD] , EDTA WHOLE BLOOD

ABO B Gel Card
 RH POSITIVE Gel Card

TECHNOLOGY USED: GEL METHOD

ADVANTAGES :

- Gel card allows simultaneous forward and reverse grouping.
- Card is scanned and record is preserved for future reference.
- Allows identification of Bombay blood group.
- Daily quality controls are run allowing accurate monitoring.

Historical records check not performed.

Dr. PANKTI PATEL
MBBS , MD (PATHOLOGY)
CONSULTANT PATHOLOGIST



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URIC ACID, URINE, SPOT URINE

URIC ACID, SPOT URINE 30.00 mg/dL 37-92 mg/dL URICASE

ESTIMATED TWICE

[PDF Attached](#)

GLYCATED HAEMOGLOBIN (HBA1C) , EDTA WHOLE BLOOD

GLYCATED HEMOGLOBIN (HBA1C) 5.3 % ***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***

HbA1c (IFCC) 34.0 mmol/mol HPLC

Clinical Information and Laboratory clinical interpretation on Biological Reference Interval:

Low risk / Normal / non-diabetic : <5.7% (NGSP) / < 39 mmol/mol (IFCC)
 Pre-diabetes/High risk of Diabetes : 5.7%- 6.4% (NGSP) / 39 - < 48 mmol/mol (IFCC)
 Diabetics-HbA1c level : >/= 6.5% (NGSP) / > 48 mmol/mol (IFCC)

Analyzer used : Bio-Rad-VARIANT TURBO 2.0
 Method : HPLC Cation Exchange

Recommendations for glycemc targets

- Ø Patients should use self-monitoring of blood glucose (SMBG) and HbA1c levels to assess glycemc control.
- Ø The timing and frequency of SMBG should be tailored based on patients' individual treatment, needs, and goals.
- Ø Patients should undergo HbA1c testing at least twice a year if they are meeting treatment goals and have stable glycemc control.
- Ø If a patient changes treatment plans or does not meet his or her glycemc goals, HbA1c testing should be done quarterly.
- Ø For most adults who are not pregnant, HbA1c levels should be <7% to help reduce microvascular complications and macrovascular disease . Action suggested >8% as it indicates poor control.
- Ø Some patients may benefit from HbA1c goals that are stringent.

Result alterations in the estimation has been established in many circumstances, such as after acute/ chronic blood loss, for example, after surgery, blood transfusions, hemolytic anemia, or high erythrocyte turnover; vitamin B₁₂/ folate deficiency, presence of chronic renal or liver disease; after administration of high-dose vitamin E / C; or erythropoietin treatment.

Reference: Glycated hemoglobin monitoring BMJ 2006; 333:586-8

References:

1. Chamberlain JJ, Rhinehart AS, Shaefer CF, et al. Diagnosis and management of diabetes: synopsis of the 2016 American Diabetes Association Standards of Medical Care in Diabetes. Ann Intern Med. Published online 1 March 2016. doi:10.7326/M15-3016.
2. Mosca A, Goodall I, Hoshino T, Jeppsson JO, John WG, Little RR, Miedema K, Myers GL, Reinauer H, Sacks DB, Weykamp CW. International Federation of Clinical Chemistry and Laboratory Medicine, IFCC Scientific Division. Global standardization of glycated hemoglobin measurement: the position of the IFCC Working Group. Clin Chem Lab Med. 2007;45(8):1077-1080.

LIPID PROFILE , GEL SERUM

CHOLESTEROL-TOTAL	183.00	mg/dL	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	Enzymatic
TRIGLYCERIDES	76.00	mg/dL	Normal:: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	GPO-Trinder
HDL CHOLESTEROL	42.00	mg/dl	< 40 - Low 40-59- Optimum 60 - High	Elimination/catalase
LDL CHOLESTEROL DIRECT	126.0	mg/dL	OPTIMAL : <100 mg/dL, Near optimal/ above optimal : 100-129 mg/dL, Borderline high : 130-159 mg/dL, High : 160-189 mg/dL, Very high : >=190 mg/dL	Calculated

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Lab No. : SR7178054	Name : GHULAM SIMNANI	Age/G : 35 Y 10 M 19 D / M	Date : 14-01-2023
VLDL	15	mg/dl	< 40 mg/dl Calculated
CHOL HDL Ratio	4.4		LOW RISK 3.3-4.4 AVERAGE RISK 4.47-7.1 MODERATE RISK 7.1-11.0 HIGH RISK >11.0 Calculated

Reference: National Cholesterol Education Program. Executive summary of the 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. May 16 2001;285(19):2486-97.

TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .

TOTAL PROTEIN	7.30	g/dL	5.7-8.2 g/dL BIURET METHOD
ALBUMIN	4.6	g/dL	3.2-4.8 g/dL BCG Dye Binding
GLOBULIN	2.70	g/dl	1.8-3.2 g/dl Calculated
AG Ratio	1.70		1.0 - 2.5 Calculated

UREA,BLOOD	17.1	mg/dL	19-49 mg/dL Urease with GLDH
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GLUCOSE, PP , BLOOD, NAF PLASMA

GLUCOSE,PP	116	mg/dL	Impaired Glucose Tolerance-140 to 199. Diabetes >= 200. Gluc Oxidase Trinder
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The test should be performed as described by the WHO, using a glucose load containing the equivalent of 75-g anhydrous glucose dissolved in water. In the absence of unequivocal hyperglycemia, diagnosis requires two abnormal test results from the same sample or in two separate test samples.

Reference :
ADA Standards of Medical Care in Diabetes – 2020. Diabetes Care Volume 43, Supplement 1.

GLUCOSE, FASTING , BLOOD, NAF PLASMA

GLUCOSE,FASTING	82	mg/dL	Impaired Fasting-100-125 . Diabetes- >= 126. Fasting is defined as no caloric intake for at least 8 hours. Gluc Oxidase Trinder
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In the absence of unequivocal hyperglycemia, diagnosis requires two abnormal test results from the same sample or in two separate test samples.

Reference :
ADA Standards of Medical Care in Diabetes – 2020. Diabetes Care Volume 43, Supplement 1.

DR. ANANNYA GHOSH
MBBS, MD (Biochemistry)
Consultant Biochemist

Lab No. : BHT/14-01-2023/SR7178054
Patient Name : GHULAM SIMNANI
Age : 35 Y 10 M 19 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 14/Jan/2023 11:18AM



DEPARTMENT OF CARDIOLOGY

REPORT OF E.C.G.

DATA		
HEART RATE	96	Bpm
PR INTERVAL	118	Ms
QRS DURATION	86	Ms
QT INTERVAL	312	Ms
QTC INTERVAL	400	Ms
AXIS		
P WAVE	64	Degree
QRS WAVE	74	Degree
T WAVE	51	Degree
IMPRESSION	:	Sinus rhythm, Normal ECG.

ACR

Dr. A C RAY
Department of Non-invasive
Cardiology

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Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 14/Jan/2023 02:29PM



X-RAY REPORT OF CHEST (PA)

FINDINGS :

No active lung parenchymal lesion is seen.
Both the hila are normal in size, density and position.
Mediastinum is in central position. Trachea is in midline.
Domes of diaphragm are smoothly outlined. Position is within normal limits.
Lateral costo-phrenic angles are clear.
The cardio-thoracic ratio is normal.
Bony thorax reveals no definite abnormality.

IMPRESSION :

Normal study.

□

DR. SUBRATA SANYAL
MBBS (CAL), DMRD (CAL).
CONSULTANT SONOLOGIST AND RADIOLOGIST.

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Patient Name : GHULAM SIMNANI
Age : 35 Y 10 M 19 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date:
Report Date : 14/Jan/2023 01:51PM



DEPARTMENT OF ULTRASONOGRAPHY
REPORT ON EXAMINATION OF WHOLE ABDOMEN

LIVER

Liver is normal in size, shape, echogenicity and echo texture. No focal parenchymal lesion is evident. Intrahepatic biliary radicles are not dilated. Branches of portal vein are normal.

PORTA

The appearance of porta is normal. Common Bile duct is not dilated (0.58 cm.) with no intraluminal pathology (Calculi /mass) could be detected at its visualized part. Portal vein is normal (1.09 cm.) at porta.

GALL BLADDER

Gallbladder is physiologically distended. Wall thickness appears normal. No intraluminal pathology (Calculi/mass) could be detected.

PANCREAS

Echogenicity appears within limits, without any focal lesion. Shape, size & position appears normal. No calculus disease noted. Pancreatic duct is not dilated. No peri-pancreatic collection of fluid noted.

SPLEEN

Spleen is normal in size (9.81 cm). Homogenous and smooth echotexture without any focal lesion. Splenic vein at hilum appears normal. No definite collaterals could be detected.

KIDNEYS

Both the kidneys are normal in shape, size (Rt. Kidney 10.00 cm. & Lt. Kidney 9.93 cm.) axes & position. Cortical echogenicity appears normal maintaining cortico-medullary & cortico-hepatic differentiation. Margin is regular and cortical thickness is uniform. No calculus disease noted. No hydronephrosis changes detected. Visualized part of upper ureters are not dilated.

URINARY BLADDER

Urinary bladder is distended, wall thickness appeared normal. No intraluminal pathology (calculi/mass) could be detected.

PROSTATE

Prostate is enlarged in size. Echotexture appears within normal limits. No focal alteration of its echogenicity could be detectable.

It measures : 4.14 cm x 4.05 cm x 3.4 cm.

Approximate weight could be around = 26.76 gms.

RETROPERITONEUM & PERITONEUM

No ascites noted. No definite evidence of any mass lesion detected. No detectable evidence of enlarged lymph nodes noted. Visualized part of aorta & IVC are within normal limit.

IMPRESSION :

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Report Date : 14/Jan/2023 01:51PM



Grade-I prostatomegaly.

Kindly note

- **Ultrasound is not the modality of choice to rule out subtle bowel lesion.**
- **Please Intimate us for any typing mistakes and send the report for correction within 7 days.**
- The science of Radiological diagnosis is based on the interpretation of various shadows produced by both the normal and abnormal tissues and are not always conclusive. Further biochemical and radiological investigation & clinical correlation is required to enable the clinician to reach the final diagnosis.

The report and films are not valid for medico-legal purpose.

Patient Identity not verified

Nishan Ghosh

Dr. NISHAN GHOSH
MBBS, CBET Reg. NO : 67862

Patient Data

Sample ID: C02135847749
 Patient ID: SR7178054
 Name:
 Physician:
 Sex:
 DOB:

Analysis Data

Analysis Performed: 14/JAN/2023 18:10:09
 Injection Number: 5891U
 Run Number: 155
 Rack ID:
 Tube Number: 8
 Report Generated: 14/JAN/2023 18:17:46
 Operator ID: ASIT

Comments:

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
Unknown	---	0.2	0.113	3131
A1a	---	0.8	0.160	13752
A1b	---	1.0	0.222	16612
F	---	0.6	0.275	10709
LA1c	---	1.6	0.402	25780
A1c	5.3	---	0.509	70332
P3	---	3.3	0.786	54154
P4	---	1.2	0.869	20554
Ao	---	87.0	0.998	1442930

Total Area: 1,657,954

HbA1c (NGSP) = 5.3 % HbA1c (IFCC) = 34 mmol/mol

