



Lab No.	: MRD/09-03-2024/SR8845483	Lab Add.	: Newtown,Kolkata-700156
Patient Name	: ARNAB SUR	Ref Dr.	: Dr.MEDICAL OFFICER
Age	: 48 Y 10 M 19 D	Collection Date	: 09/Mar/2024 09:47AM
Gender	: M	Report Date	: 09/Mar/2024 01:58PM



DEPARTMENT OF BIOCHEMISTRY

Test Name	Result	Bio Ref. Interval	Unit
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GLYCATED HAEMOGLOBIN (HBA1C) , EDTA WHOLE BLOOD			
GLYCATED HEMOGLOBIN (HBA1C)	5.7	***FOR BIOLOGICAL REFERENCE INTERVAL DETAILS , PLEASE REFER TO THE BELOW MENTIONED REMARKS/NOTE WITH ADDITIONAL CLINICAL INFORMATION ***	%
HbA1c (IFCC) (Method:HPLC)	39.0		mmol/mol

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 glycemic targets

- Ø Patients should use self-monitoring of blood glucose (SMBG) and HbA1c levels to assess glycemic 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 glycemic control.
- Ø If a patient changes treatment plans or does not meet his or her glycemic 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.

[PDF Attached](#)

*** End Of Report ***


Dr NEEPA CHOWDHURY
 MBBS MD (Biochemistry)
 Consultant Biochemist
 Reg No. WBMC 62456



Lab No.	: MRD/09-03-2024/SR8845483	Lab Add.	: Newtown,Kolkata-700156
Patient Name	: ARNAB SUR	Ref Dr.	: Dr.MEDICAL OFFICER
Age	: 48 Y 10 M 19 D	Collection Date	: 09/Mar/2024 09:47AM
Gender	: M	Report Date	: 09/Mar/2024 01:49PM

**DEPARTMENT OF BIOCHEMISTRY**

Test Name	Result	Bio Ref. Interval	Unit
BILIRUBIN (DIRECT) , GEL SERUM (Method:Vanadate oxidation)	0.10	<0.2	mg/dL
SGPT/ALT (Method:Modified IFCC)	23	7-40	U/L
SGOT/AST (Method:Modified IFCC)	24	13-40	U/L
CHLORIDE,BLOOD (Method:ISE INDIRECT)	105	99-109	mEq/L
CREATININE, BLOOD (Method:Jaffe, alkaline picrate, kinetic)	0.89	0.7-1.3	mg/dL
CALCIUM,BLOOD (Method:Arsenazo III)	10.00	8.7-10.4	mg/dL
URIC ACID,BLOOD (Method:Uricase/Peroxidase)	6.20	3.5-7.2	mg/dL
THYROID PANEL (T3, T4, TSH) , GEL SERUM			
T3-TOTAL (TRI IODOTHYRONINE) (Method:CLIA)	1.17	0.60-1.81 ng/ml	ng/ml
T4-TOTAL (THYROXINE) (Method:CLIA)	8.2	3.2-12.6	µg/dL
TSH (THYROID STIMULATING HORMONE) (Method:CLIA)	3.073	0.55-4.78	µIU/mL

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:

- 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.
- 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:

- 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>
- 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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Gender	: M	Report Date	: 09/Mar/2024 01:49PM



DEPARTMENT OF BIOCHEMISTRY

Test Name	Result	Bio Ref. Interval	Unit
ALKALINE PHOSPHATASE (Method:IFCC standardization)	69	46-116	U/L
BILIRUBIN (TOTAL) , GEL SERUM BILIRUBIN (TOTAL) (Method:Vanadate oxidation)	0.60	0.3-1.2	mg/dL
UREA,BLOOD (Method:Urease with GLDH)	34.2	19-49	mg/dL
GLUCOSE,FASTING (Method:Gluc Oxidase Trinder)	94	Impaired Fasting-100-125 ~Diabetes- >= 126.~Fasting is defined as no caloric intake for at least 8 hours.	mg/dL

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.

SODIUM,BLOOD (Method:ISE INDIRECT)	140	132 - 146	mEq/L
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*** End Of Report ***

Dr NEEPA CHOWDHURY
MBBS MD (Biochemistry)
Consultant Biochemist
Reg No. WBMC 62456




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Gender	: M	Report Date	: 09/Mar/2024 05:47PM



DEPARTMENT OF BIOCHEMISTRY

Test Name	Result	Bio Ref. Interval	Unit
URIC ACID, URINE, SPOT URINE			
URIC ACID, SPOT URINE (Method:URICASE)	61.00	37-92 mg/dL	mg/dL

*** End Of Report ***


Dr. SANCHAYAN SINHA
 MBBS, MD, DNB (BIOCHEMISTRY)
 CONSULTANT BIOCHEMIST
 Reg No. WBMC 63214



Lab No.	: MRD/09-03-2024/SR8845483	Lab Add.	: Newtown,Kolkata-700156
Patient Name	: ARNAB SUR	Ref Dr.	: Dr.MEDICAL OFFICER
Age	: 48 Y 10 M 19 D	Collection Date	: 09/Mar/2024 09:47AM
Gender	: M	Report Date	: 09/Mar/2024 02:54PM

**DEPARTMENT OF BIOCHEMISTRY**

Test Name	Result	Bio Ref. Interval	Unit
PHOSPHORUS-INORGANIC,BLOOD (Method:Phosphomolybdate/UV) <i>ESTIMATED TWICE</i>	2.3	2.4-5.1 mg/dL	mg/dL

Correlate clinically.**Suggested follow up.**

TOTAL PROTEIN [BLOOD] ALB:GLO RATIO , .			
TOTAL PROTEIN (Method:BIURET METHOD)	7.60	5.7-8.2 g/dL	g/dL
ALBUMIN (Method:BCG Dye Binding)	4.5	3.2-4.8 g/dL	g/dL
GLOBULIN (Method:Calculated)	3.10	1.8-3.2	g/dl
AG Ratio (Method:Calculated)	1.45	1.0-2.5	

LIPID PROFILE , GEL SERUM			
CHOLESTEROL-TOTAL (Method:Enzymatic)	234	Desirable: < 200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	mg/dL
TRIGLYCERIDES (Method:GPO-Trinder)	119	Normal: < 150, BorderlineHigh::150-199, High:: 200-499, VeryHigh::>500	mg/dL
HDL CHOLESTEROL (Method:Elimination/catalase)	41	< 40 - Low 40-59- Optimum 60 - High	mg/dl
LDL CHOLESTEROL DIRECT (Method:Elimination / Catalase)	183	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	mg/dL
VLDL (Method:Calculated)	10	< 40 mg/dl	mg/dl
CHOL HDL Ratio (Method:Calculated)	5.7	LOW RISK 3.3-4.4 AVERAGE RISK 4.47-7.1 MODERATE RISK 7.1-11.0 HIGH RISK >11.0	

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.

POTASSIUM,BLOOD (Method:ISE INDIRECT)	5.30	3.5-5.5	mEq/L
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***** End Of Report *******Lab No.** : MRD/09-03-2024/SR8845483

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Suraksha Diagnostic Private Limited

E-mail: info@surakshanet.com | Website: www.surakshanet.com

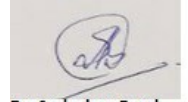


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Gender	: M	Report Date	: 09/Mar/2024 02:54PM



DEPARTMENT OF BIOCHEMISTRY

Test Name	Result	Bio Ref. Interval	Unit
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Dr. Sudeshna Baral
M.B.B.S MD.
(Biochemistry)
(Consultant Biochemist)
Reg No. WBMC 64124



Lab No.	: MRD/09-03-2024/SR8845483	Lab Add.	: Newtown,Kolkata-700156
Patient Name	: ARNAB SUR	Ref Dr.	: Dr.MEDICAL OFFICER
Age	: 48 Y 10 M 19 D	Collection Date	: 09/Mar/2024 09:47AM
Gender	: M	Report Date	: 09/Mar/2024 03:02PM



DEPARTMENT OF HAEMATOLOGY

Test Name	Result	Bio Ref. Interval	Unit
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CBC WITH PLATELET & RETICULOCYTE COUNT , EDTA WHOLE BLOOD			
HEMOGLOBIN (Method:PHOTOMETRIC)	14.4	13 - 17	g/dL
WBC (Method:DC detection method)	7.4	4 - 10	*10 ³ /μL
RBC (Method:DC detection method)	4.69	4.5 - 5.5	*10 ⁶ /μL
PLATELET (THROMBOCYTE) COUNT (Method:DC detection method/Microscopy)	180	150 - 450*10 ³ /μL	*10 ³ /μL
<u>DIFFERENTIAL COUNT</u>			
NEUTROPHILS (Method:Flowcytometry/Microscopy)	47	40 - 80 %	%
LYMPHOCYTES (Method:Flowcytometry/Microscopy)	43	20 - 40 %	%
MONOCYTES (Method:Flowcytometry/Microscopy)	05	2 - 10 %	%
EOSINOPHILS (Method:Flowcytometry/Microscopy)	04	1-6%	%
BASOPHILS (Method:Flowcytometry/Microscopy)	01	0-0.9%	%
<u>CBC SUBGROUP 1</u>			
HEMATOCRIT / PCV (Method:Calculated)	44.5	40 - 50 %	%
MCV (Method:Calculated)	94.9	83 - 101 fl	fl
MCH (Method:Calculated)	30.7	27 - 32 pg	pg
MCHC (Method:Calculated)	32.3	31.5-34.5 gm/dl	gm/dl
RDW - RED CELL DISTRIBUTION WIDTH (Method:Calculated)	14.4	11.6-14%	%
RETICULOCYTE COUNT-AUTOMATED,BLOOD (Method:Cell Counter/Microscopy)	1.4	0.5-2.5%	%

ESR (ERYTHROCYTE SEDIMENTATION RATE) , EDTA WHOLE BLOOD			
1stHour (Method:Westergren)	05	0.00 - 20.00 mm/hr	mm/hr

BLOOD GROUP ABO+RH [GEL METHOD] , EDTA WHOLE BLOOD	
ABO (Method:Gel Card)	A
RH (Method:Gel Card)	POSITIVE

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.

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Gender	: M	Report Date	: 09/Mar/2024 03:02PM



DEPARTMENT OF HAEMATOLOGY

Test Name	Result	Bio Ref. Interval	Unit
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*** End Of Report ***

Kaushik Dey

MD (PATHOLOGY)
CONSULTANT PATHOLOGIST
Reg No. WBMC 66405

Lab No. : MRD/09-03-2024/SR8845483
Patient Name : ARNAB SUR
Age : 48 Y 10 M 19 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date :
Report Date : 09/Mar/2024 12:29PM



DEPARTMENT OF X-RAY

X-RAY REPORT OF CHEST (PA)

FINDINGS:

No significant lung parenchymal lesion is seen at the visualised lung fields.

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.

Please correlate clinically.

Kindly note

Please Intimate us for any typing mistakes and send the report for correction within 7 days.

*** End Of Report ***

DR. SUBHADRO GHOSE
MD, CONSULTANT RADIOLOGIST



Lab No. : MRD/09-03-2024/SR8845483	Lab Add. : Newtown,Kolkata-700156
Patient Name : ARNAB SUR	Ref Dr. : Dr.MEDICAL OFFICER
Age : 48 Y 10 M 19 D	Collection Date : 10/Mar/2024 07:09AM
Gender : M	Report Date : 10/Mar/2024 12:10PM



DEPARTMENT OF CLINICAL PATHOLOGY

Test Name	Result	Bio Ref. Interval	Unit
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URINE ROUTINE ALL, ALL , URINE

PHYSICAL EXAMINATION

COLOUR PALE YELLOW
 APPEARANCE SLIGHTLY HAZY

CHEMICAL EXAMINATION

pH (Method:Dipstick (triple indicator method))	6.0	4.6 - 8.0	
SPECIFIC GRAVITY (Method:Dipstick (ion concentration method))	1.020	1.005 - 1.030	
PROTEIN (Method:Dipstick (protein error of pH indicators)/Manual)	NOT DETECTED	NOT DETECTED	
GLUCOSE (Method:Dipstick(glucose-oxidase-peroxidase method)/Manual)	NOT DETECTED	NOT DETECTED	
KETONES (ACETOACETIC ACID, ACETONE) (Method:Dipstick (Legals test)/Manual)	NOT DETECTED	NOT DETECTED	
BLOOD (Method:Dipstick (pseudoperoxidase reaction))	NOT DETECTED	NOT DETECTED	
BILIRUBIN (Method:Dipstick (azo-diazo reaction)/Manual)	NEGATIVE	NEGATIVE	
UROBILINOGEN (Method:Dipstick (diazonium ion reaction)/Manual)	NEGATIVE	NEGATIVE	
NITRITE (Method:Dipstick (Griess test))	NEGATIVE	NEGATIVE	
LEUCOCYTE ESTERASE (Method:Dipstick (ester hydrolysis reaction))	NEGATIVE	NEGATIVE	

MICROSCOPIC EXAMINATION

LEUKOCYTES (PUS CELLS) (Method:Microscopy)	0-1	0-5	/hpf
EPITHELIAL CELLS (Method:Microscopy)	1-2	0-5	/hpf
RED BLOOD CELLS (Method:Microscopy)	NOT DETECTED	0-2	/hpf
CAST (Method:Microscopy)	NOT DETECTED	NOT DETECTED	
CRYSTALS (Method:Microscopy)	NOT DETECTED	NOT DETECTED	
BACTERIA (Method:Microscopy)	NOT DETECTED	NOT DETECTED	
YEAST (Method:Microscopy)	NOT DETECTED	NOT DETECTED	

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

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Gender	: M	Report Date	: 10/Mar/2024 12:10PM



DEPARTMENT OF CLINICAL PATHOLOGY

Test Name	Result	Bio Ref. Interval	Unit
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and/or yeast in the urine.

*** End Of Report ***

Bidisha Chakraborty
Dr. Bidisha Chakraborty
 Consultant Pathologist
 MD, DNB (Pathology)
 Dip RC Path(UK)
 Reg No. WBMC 73067

Lab No. : MRD/09-03-2024/SR8845483
Patient Name : ARNAB SUR
Age : 48 Y 10 M 19 D
Gender : M

Lab Add. :
Ref Dr. : Dr.MEDICAL OFFICER
Collection Date :
Report Date : 09/Mar/2024 12:40PM



DEPARTMENT OF CARDIOLOGY

DEPARTMENT OF CARDIOLOGY
REPORT OF E.C.G.

DATA

HEART RATE : 62 bpm

PR INTERVAL : 150 ms

QRS DURATION : 96 ms

QT INTERVAL : 370 ms

QTC INTERVAL : 375 ms

AXIS

P WAVE : 14 degree

QRS WAVE : 41 degree

T WAVE : -5 degree

IMPRESSION : Normal sinus rhythm.

Old inferior infarct.

ACR

Dr. A C RAY

Department of Non-invasive
Cardiology

Patient Data

Sample ID: D02135595499
 Patient ID: SR8845483
 Name: ARNAB SUR
 Physician:
 Sex: M
 DOB:

Analysis Data

Analysis Performed: 09/MAR/2024 13:37:08
 Injection Number: 8101
 Run Number: 103
 Rack ID:
 Tube Number: 7
 Report Generated: 09/MAR/2024 13:48:21
 Operator ID: ASIT

Comments:

Peak Name	NGSP %	Area %	Retention Time (min)	Peak Area
A1a	---	1.1	0.162	23142
A1b	---	1.1	0.231	23177
F	---	0.8	0.274	16655
LA1c	---	2.0	0.407	43048
A1c	5.7	---	0.514	101756
P3	---	3.6	0.792	79214
P4	---	1.2	0.868	26399
Ao	---	85.7	0.984	1872981

Total Area: 2,186,373

HbA1c (NGSP) = 5.7 % HbA1c (IFCC) = 39 mmol/mol

