



# CHRISTIAN MEDICAL COLLEGE

DEPARTMENT OF CLINICAL BIOCHEMISTRY

CMC EXTERNAL QUALITY ASSURANCE SCHEME

MONTHLY SUMMARY REPORT - MAY 2023



PC-1024

Lab Name TATA 1MG Labs Dehradun

Lab No 15585

Constituent Group Chemistry I

Date of Result Entered : 10/05/2023

PT item Lyophilized human serum based

Date of Report Published : 05/06/2023

Sl.No	Analyte	Method / Principle Name	Analyzer Name	No of Participants	DV	Participants		Your Value	SDI	U
						CV	SD			
1	GLUCOSE	Hexokinase	Siemens ( Advia Series / Dimension Series )	104	244.98	3.25	7.96	233 mg/dL	-1.51	1.56
2	UREA	Urease UV / GLDH	Siemens ( Advia Series / Dimension Series )	126	78.57	4.74	3.72	79.18 mg/dL	0.16	0.66
3	CREATININE	Jaffes Kinetic - Alkaline picrate	Siemens ( Advia Series / Dimension Series )	109	1.67	6.03	0.10	1.74 mg/dL	0.69	0.02
4	T.BILIRUBIN	Others ( DPD, Vanadate Oxidation )	Any Analyser (Automation / Semi Automation)	247	4.13	11.79	0.49	4.8 mg/dL	1.38	0.06
5	T-PROTEIN	Biuret - Colorimetric	Siemens ( Advia Series / Dimension Series )	121	4.76	3.40	0.16	4.7 g/dL	-0.37	0.03
6	ALBUMIN	BCG - colorimetric	Siemens ( Advia Series / Dimension Series )	51	2.92	5.38	0.16	3 g/dL	0.51	0.04
7	CALCIUM	Arsenazo III	Any Analyser (Automation / Semi Automation)	968	9.49	6.34	0.60	9.1 mg/dL	-0.65	0.04
8	PHOSPHORUS	Molybdate UV / Phosphomolybdate complex	Siemens ( Advia Series / Dimension Series )	69	5.39	4.84	0.26	5.54 mg/dL	0.57	0.06
9	URIC ACID	Enzymatic / Uricase Colorimetric	Siemens ( Advia Series / Dimension Series )	116	8.15	3.57	0.29	8.1 mg/dL	-0.17	0.05
10	CHOLESTEROL	CHOD-PAP	Siemens ( Advia Series / Dimension Series )	124	86.14	6.23	5.36	116 mg/dL	5.57	0.96
11	TRIGLYCERIDE	GPO-PAP / Enzymatic Colorimetric / End Point	Siemens ( Advia Series / Dimension Series )	120	135.12	4.50	6.08	155 mg/dL	3.27	1.11
12	HDL	Direct method / Enzymatic colorimetric	Siemens ( Advia Series / Dimension Series )	111	24.69	8.36	2.06	22.7 mg/dL	-0.96	0.39
13	SODIUM	ISE - Direct	Transasia / Erba	232	134.64	3.05	4.10	132 mmol/L	-0.64	0.54
14	POTASSIUM	ISE - Direct	Transasia / Erba	220	3.12	5.22	0.16	2.88 mmol/L	-1.47	0.02
15	CHLORIDE	ISE - Direct	Transasia / Erba	176	98.20	3.62	3.55	97.9 mmol/L	-0.08	0.54
16	AST	UV kinetic(with & without PLP (P-5-P))	Siemens ( Advia Series / Dimension Series )	112	174.86	5.11	8.94	156 U/L	-2.11	1.69
17	ALT	UV kinetic(with & without PLP (P-5-P))	Siemens ( Advia Series / Dimension Series )	113	89.00	10.69	9.51	90 U/L	0.11	1.79
18	ALP	PNP DEA kinetic	Any Analyser (Automation / Semi Automation)	391	348.86	17.23	60.10	389 U/L	0.67	6.08
19	AMYLASE	Enzymatic Colorimetric / G7PNP Blocked	Siemens ( Advia Series / Dimension Series )	18	88.24	5.27	4.65	115 U/L	5.76	2.19

6/7/23, 12:22 PM

External Quality Assurance Scheme - Print Monthly Summary

20	IRON	Ferro Zine ( No Protein Removal )	Any Analyser (Automation / Semi Automation )	354	76.62	5.26	4.03	78 ug/dL	0.34	0.43
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SDI Range	Interpretation
Within -1.00 to +1.00	Excellent.
Within $\pm 1.01$ to $\pm 2.00$	Good.
Within $\pm 2.01$ to $\pm 2.99$	Accept with caution. Warning Signal.
Beyond $\pm 3.0$	Unacceptable performance. Action Signal.

LAB ADDRESS :

TATA 1MG Labs Dehradun

2Nd Floor ,Plot No. 1072,Ashirwad Tower,Ballupur Road,Chakrata Road, Sunder Vihar, ,Uttarakhand, Dehradun

UTTARAKHAND248001

Coordinator Contact Details:  
Email:clinqc@cmcvellore.ac.in  
Contact Number: 0416-2283102

*Pamela Christudoss*  
Dr. Pamela Christudoss  
CMC EQAS Coordinator  
Christian Medical College, Vellore

Homogeneity and Stability of the sample is passed.  
Data in CMC EQAS reports is confidential  
CMC EQAS does not sub contract any components  
\*\*\*\*\* End of Report \*\*\*\*\*



TATA 1mg Labs	
TATA 1mg Technologies Private Limited	
Form Name	Proficiency Testing - Action Needed Form
Form No.	Gen / FR / 59
Issue Date & Version No.	01-Jul-2022 V2

**Section 1 - Initiation of ANF (to be filled by the person who raising the ANF)**

PT/EQAS Agency <input type="checkbox"/> CAP <input type="checkbox"/> AIIMS <input type="checkbox"/> BIORAD <input type="checkbox"/> CMC <input type="checkbox"/> RML <input type="checkbox"/> Other				
Survey name & distribution ID: <i>CMC Clinical Chemistry</i>				
Date on agency report: 05-Jun-2023				
ANF No: DDN/JUN/23/04	Issued by: Prashant Singh	Issue Date: 09-Jun-2023	Due date: 24-Jun-2023	
Department: Biochemistry				
ANALYTE or EXAMINATION: <i>Amylase</i>				
Sample ID	Result submitted	PT targets	PT acceptable range	Problem/Performance
May	115 U/L	88.24	78.94- 97.54	2.19
Comment /Observations: (e.g. trend, previously missed within last 12 months, lab in regulatory jeopardy for this analyte?)				

**Section 2 - Investigation of Non Conformance- Checklist**

SI	ANF-CHECKLIST	Yes	No	N/A
1	Specimen temperature check, as per kit instructions	✓		
2	Specimen storage condition check, as per kit instructions	✓		
3	Specimen physical condition check	✓		
4	Sample integrity up to arrival in lab: any shipping, delay or other sample problems?		✓	
5	Sample integrity in-house: any problems with sample handling in the lab?		✓	
6	Were there any instrument problem?		✓	
7	Were there any method problem?		✓	
8	Were there any faulty reagent/QC and Calibrator?		✓	
9	Were there QC trends / problems at time of assay?		✓	
10	Was Peer group data checked, if required	✓		
11	Were there any Calibration (Intercept/slope) problems at time of assay?		✓	
12	Was water quality checked?	✓		
13	Did any technical errors occur due to pipetting error		✓	
14	Did any technical errors occur due to sample mix-up		✓	
15	Did any technical errors occur due to incorrect process, other than reconstitution, dilution or calculation errors,		✓	
16	Did any technical errors occur due to misinterpretations		✓	



<b>TATA 1mg Labs</b>	
<b>TATA 1mg Technologies Private Limited</b>	
<b>Form Name</b>	<b>Proficiency Testing - Action Needed Form</b>
<b>Form No.</b>	<b>Gen / FR / 59</b>
<b>Issue Date &amp; Version No.</b>	<b>01-Jul-2022 V2</b>

17	Was the instrument checked for daily. Weekly. Monthly, semiannually and Annual maintenance	✓		
18	Was there a lab clerical error? (e.g. error in unit conversion needed for survey only, transcription error onto result form, wrong method details submitted, Factor removal)		✓	
19	Was there a clerical error by the PT / EQA agency?		✓	
20	Were there Patient data trends / problems at time of assay?		✓	
21	Were there any gaps / issues in training or competency assessment?		✓	
22	Was the sample condition appropriate at time of retesting (mention temperature...)			✓
23	Has sample been re-tested / re-examined?		✓	
24	Has the lab perform Interlaboratory Comparison	✓		

**Questions 4-22 give details for any Yes answers**

The instrument has been checked for daily , weekly, monthly, semi annual and annual maintenance.No issue found.

Water quality also checked.No issue found.

ILC has been performed with Okhla Lab on ADVIA 2400 instrument.

**Question 23/24: if answer is yes, give results of repeat testing**

Sample ID	Original result	Repeat value/ Lab Result	PT Targets/ Referral Lab Result	PT/ILC Acceptable Range	Status (Acceptable/Not acceptable)

**Section 3 Root cause (Refer to Non-conformance error Reason)**

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Why do you think the non-conformance / error occurred? Use this area to explain your findings.

**The pre-analytical, analytical and post-analytical assessment has been carried out.**

**The non-conformities occurred may be due to a random error.**

Assessment of the impact of root cause on patient results (Patient results may be affected before, during or after the PT event). Describe how the conclusion of impact was made and any corrective actions made to the patient result(s); "If No" - Explain why there was no patient impact?



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There is no patient impact as the ILC was performed at the Okhla lab to rule out any patient impact. The ILC result is found satisfactory.

Describe any previous proficiency testing issues with this test in the last sample: NA

**Section 4: Department - Conclusion & Corrective / Preventive Action**

What corrective action have you carried out?

Daily QC trends will be continued to be monitored.

An ILC had also been performed with Okhla lab. The values obtained in ILC are concordant with our value.

Preventive action put into place?

The parameter is kept under observation till the next cycle result evaluation.

Due date for closure of proposed corrective and preventive action: NA

Person investigated

Department Manager

Lab Head

Signature with Date:

APM

[Signature]

[Signature]

Note: After signatures please hand over the form along with supporting documents to QA.

Date when ANF received to QA along with supporting documents: 24 Jun 2023 by: [Signature]



Name	: Mr.JAI PRAKASH ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 42 Y 0 M 0 D /Male	Registration Date	: 18-Jun-23 07:12 PM
Patient ID	: DDN33375	Collection Date	: 18/Jun/2023 07:13PM
Barcode ID/Order ID	: Z3600759 / Z3600759	Sample Receive Date	: 18/Jun/2023 07:14PM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 19/Jun/2023 03:41PM

### BIOCHEMISTRY

Test Name	Result	Unit	Bio. Ref. Interval	Method
Amylase	67	U/L	30.0 - 118.0	Ethylidene Blocked-pNPG7

#### Comment:

- Amylase is produced by Pancreas and some salivary glands.
- Amylase levels are significantly increased in patients with acute pancreatitis, pancreatic duct obstruction, carcinoma pancreas, ovaries, or lungs, cholecystitis, macroamylasemia, renal disease, pancreatic pseudocyst, procedures like Endoscopic retrograde cholangiopancreatography(ERCP) and acute alcohol poisoning.
- Low Amylase levels are seen in Chronic Pancreatitis, Congestive Heart failure, 2<sup>nd</sup> & 3<sup>rd</sup> trimester of pregnancy, Gastrointestinal cancer & bone fractures.
- Drugs causing increased amylase levels are aspirin, diuretics, oral contraceptives, corticosteroids, indomethacin, ethyl alcohol and opiate intake.
- In acute pancreatitis, elevated amylase levels usually parallel lipase concentrations, although lipase levels may take a bit longer to rise, will remain elevated longer and are more specific than amylase as a marker for pancreatitis.

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

*Anupriya*

Dr. Anupriya Nautiyal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 6189





Name	: Mr.JAI PRAKASH ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 42 Y 0 M 0 D /Male	Registration Date	: 18-Jun-23 07:11 PM
Patient ID	: DDN33374	Collection Date	: 19/Jun/2023 04:42PM
Barcode ID/Order ID	: B3600759 / B3600759	Sample Receive Date	: 20/Jun/2023 08:58AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 20/Jun/2023 01:49PM

**BIOCHEMISTRY**

Test Name	Result	Unit	Bio. Ref. Interval	Method
Amylase	70	U/L	30.0-118.0	Ethylidene Blocked-pNPG7

**Comment:**

- Amylase is produced by Pancreas and some salivary glands.
- Amylase levels are significantly increased in patients with acute pancreatitis, pancreatic duct obstruction, carcinoma pancreas, ovaries, or lungs, cholecystitis, macroamylasemia, renal disease, pancreatic pseudocyst, procedures like Endoscopic retrograde cholangiopancreatography(ERCP) and acute alcohol poisoning.
- Low Amylase levels are seen in Chronic Pancreatitis, Congestive Heart failure, 2<sup>nd</sup> & 3<sup>rd</sup> trimester of pregnancy, Gastrointestinal cancer & bone fractures.
- Drugs causing increased amylase levels are aspirin, diuretics, oral contraceptives, corticosteroids, indomethacin, ethyl alcohol and opiate intake.
- In acute pancreatitis, elevated amylase levels usually parallel lipase concentrations, although lipase levels may take a bit longer to rise, will remain elevated longer and are more specific than amylase as a marker for pancreatitis.

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



Dr. Reema Agrawal  
 MBBS, MD (Pathology)  
 Consultant Pathologist  
 Reg No: 56096



PO No :FT080755



Name	: Mr.MUKESH PANT	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 34/Male	Registration Date	: 25-Jun-23 12:51 PM
Patient ID	: DDN34156	Collection Date	: 25/Jun/2023 07:16AM
Barcode ID/Order ID	: D4818600 / 7488050	Sample Receive Date	: 25/Jun/2023 01:18PM
Referred By	: Dr.	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 25/Jun/2023 02:05PM

**BIOCHEMISTRY**

**IHO - FREEDOM PACKAGE**

Test Name	Result	Unit	Bio. Ref. Interval	Method
Amylase	165	U/L	30.0 - 118.0	Ethylidene Blocked-pNPG7

**Comment:**

- Amylase is produced by Pancreas and some salivary glands.
- Amylase levels are significantly increased in patients with acute pancreatitis, pancreatic duct obstruction, carcinoma pancreas, ovaries, or lungs, cholecystitis, macroamylasemia, renal disease, pancreatic pseudocyst, procedures like Endoscopic retrograde cholangiopancreatography(ERCP) and acute alcohol poisoning.
- Low Amylase levels are seen in Chronic Pancreatitis, Congestive Heart failure, 2<sup>nd</sup> & 3<sup>rd</sup> trimester of pregnancy, Gastrointestinal cancer & bone fractures.
- Drugs causing increased amylase levels are aspirin, diuretics, oral contraceptives, corticosteroids, indomethacin, ethyl alcohol and opiate intake.
- In acute pancreatitis, elevated amylase levels usually parallel lipase concentrations, although lipase levels may take a bit longer to rise, will remain elevated longer and are more specific than amylase as a marker for pancreatitis.

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

Dr. Anupriya Nautiyal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 6189







Name	: Mr.MUKESH PANT ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 34 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 06:16 PM
Patient ID	: DDN34336	Collection Date	: 26/Jun/2023 06:20PM
Barcode ID/Order ID	: Z4818600 /	Sample Receive Date	: 27/Jun/2023 09:59AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 27/Jun/2023 03:19PM

### BIOCHEMISTRY

Test Name	Result	Unit	Bio. Ref. Interval	Method
Amylase	160	U/L	30.0-118.0	Ethylidene Blocked-pNPG7

#### Comment:

- Amylase is produced by Pancreas and some salivary glands.
- Amylase levels are significantly increased in patients with acute pancreatitis, pancreatic duct obstruction, carcinoma pancreas, ovaries, or lungs, cholecystitis, macroamylasemia, renal disease, pancreatic pseudocyst, procedures like Endoscopic retrograde cholangiopancreatography(ERCP) and acute alcohol poisoning.
- Low Amylase levels are seen in Chronic Pancreatitis, Congestive Heart failure, 2<sup>nd</sup> & 3<sup>rd</sup> trimester of pregnancy, Gastrointestinal cancer & bone fractures.
- Drugs causing increased amylase levels are aspirin, diuretics, oral contraceptives, corticosteroids, indomethacin, ethyl alcohol and opiate intake.
- In acute pancreatitis, elevated amylase levels usually parallel lipase concentrations, although lipase levels may take a bit longer to rise, will remain elevated longer and are more specific than amylase as a marker for pancreatitis.

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

*Reema*

Dr. Reema Agrawal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 56096





TATA 1mg Labs	
TATA 1mg Technologies Private Limited	
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Form No.	Gen / FR / 59
Issue Date & Version No.	01-Jul-2022 V2

**Section 1 - Initiation of ANF (to be filled by the person who raising the ANF)**

PT/EQAS Agency <input type="checkbox"/> CAP <input type="checkbox"/> AIIMS <input type="checkbox"/> BIORAD <input type="checkbox"/> CMC <input type="checkbox"/> RML <input type="checkbox"/> Other				
Survey name & distribution ID: CMC Clinical Chemistry				
Date on agency report: 05-Jun-2023				
ANF No: DDN/JUN/23/03	Issued by: Prashant Singh	Issue Date: 09-Jun-2023	Due date: 24-Jun-2023	
Department: Biochemistry				
ANALYTE or EXAMINATION: AST				
Sample ID	Result submitted	PT targets	PT acceptable range	Problem/Performance
May	156 U/L	174.86	156.98-192.74	-2.11
Comment /Observations: (e.g. trend, previously missed within last 12 months, lab in regulatory jeopardy for this analyte?)				

**Section 2 - Investigation of Non Conformance- Checklist**

Sl	ANF-CHECKLIST	Yes	No	N/A
1	Specimen temperature check, as per kit instructions	✓		
2	Specimen storage condition check, as per kit instructions	✓		
3	Specimen physical condition check	✓		
4	Sample integrity up to arrival in lab: any shipping, delay or other sample problems?		✓	
5	Sample integrity in-house: any problems with sample handling in the lab?		✓	
6	Were there any instrument problem?		✓	
7	Were there any method problem?		✓	
8	Were there any faulty reagent/QC and Calibrator?		✓	
9	Were there QC trends / problems at time of assay?		✓	
10	Was Peer group data checked, if required	✓		
11	Were there any Calibration (Intercept/slope) problems at time of assay?		✓	
12	Was water quality checked?	✓		
13	Did any technical errors occur due to pipetting error		✓	
14	Did any technical errors occur due to sample mix-up		✓	
15	Did any technical errors occur due to incorrect process, other than reconstitution, dilution or calculation errors,		✓	
16	Did any technical errors occur due to misinterpretations		✓	



<b>TATA 1mg Labs</b>	
<b>TATA 1mg Technologies Private Limited</b>	
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<b>Form No.</b>	<b>Gen / FR / 59</b>
<b>Issue Date &amp; Version No.</b>	<b>01-Jul-2022 V2</b>

17	Was the instrument checked for daily. Weekly. Monthly, semiannually and Annual maintenance	✓		
18	Was there a lab clerical error? (e.g. error in unit conversion needed for survey only, transcription error onto result form, wrong method details submitted, Factor removal)		✓	
19	Was there a clerical error by the PT / EQA agency?		✓	
20	Were there Patient data trends / problems at time of assay?		✓	
21	Were there any gaps / issues in training or competency assessment?		✓	
22	Was the sample condition appropriate at time of retesting (mention temperature...)			✓
23	Has sample been re-tested / re-examined?		✓	
24	Has the lab perform Interlaboratory Comparison	✓		

**Questions 4-22 give details for any Yes answers**

The instrument has been checked for daily , weekly, monthly, semi annual and annual maintenance.No issue found.

Water quality also checked.No issue found.

ILC has been performed with Okhla Lab on ADVIA 2400 instrument.

**Question 23/24: if answer is yes, give results of repeat testing**

Sample ID	Original result	Repeat value/ Lab Result	PT Targets/ Referral Lab Result	PT/ILC Acceptable Range	Status (Acceptable/Not acceptable)

**Section 3 Root cause (Refer to Non-conformance error Reason)**

--	--

Why do you think the non-conformance / error occurred? Use this area to explain your findings.

**The complete pre-analytical, analytical and post-analytical assessment has been carried out.No issue found.**

**The non-conformities occurred probably due to a random error.**

Assessment of the impact of root cause on patient results (Patient results may be affected before, during or after the PT event). Describe how the conclusion of impact was made and any corrective actions made to the patient result(s); "If No" - Explain why there was no patient impact?



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There is no patient impact as the ILC was performed at the Okhla lab to rule out any patient impact. The ILC result is found satisfactory.

Describe any previous proficiency testing issues with this test in the last sample: NA

**Section 4: Department - Conclusion & Corrective / Preventive Action**

What corrective action have you carried out?

The daily QC trends will be closely monitored .

An ILC had also been performed with Okhla Lab. The value obtained in ILC are concordant with our value.

Preventive action put into place?

The parameter will be kept under observation till the next cycle result evaluation.

Due date for closure of proposed corrective and preventive action: NA

Person Investigated

Department Manager

Lab Head

Signature with Date:

Agun

for

Anant Singh

Note: After signatures please hand over the form along with supporting documents to QA.

Date when ANF received to QA along with supporting documents: 24 Jun 2023 by: for

PO No :PO3542069209-619



Name	: Mr.ATUL KALA	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 58/Male	Registration Date	: 18-Jun-23 01:20 PM
Patient ID	: DDN33350	Collection Date	: 18/Jun/2023 11:55AM
Barcode ID/Order ID	: D3327035 / 7463071	Sample Receive Date	: 18/Jun/2023 01:38PM
Referred By	: Dr.	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 18/Jun/2023 02:39PM

**BIOCHEMISTRY**

**KIDNEY FUNCTION TEST & LIVER FUNCTION TEST**

Test Name	Result	Unit	Bio. Ref. Interval	Method
<b>Liver Function Test</b>				
Bilirubin-Total	0.64	mg/dL	0.3 - 1.2	Vanadate oxidation
Bilirubin-Direct	0.18	mg/dL	0.0-0.3	Vanadate oxidation
Bilirubin-Indirect	0.46	mg/dL	0.2-0.8	Calculated
Protein, Total	7.70	g/dL	5.7-8.2	Biuret
Albumin	4.97	g/dL	3.2-4.8	BCG Dye Binding
Globulin	2.7	g/dl	2.1 - 3.9	Calculated
A/G Ratio	1.82	Ratio	0.8 - 2.1	Calculated
Aspartate Transaminase (SGOT)	<b>82</b>	U/L	<34 U/L	Modified IFCC
Alanine Transaminase (SGPT)	<b>83</b>	U/L	10-49	Modified IFCC
SGOT/SGPT	0.99	Ratio		Calculated
Alkaline Phosphatase	<b>124</b>	U/L	46-116	IFCC Standardization
Gamma Glutamyltransferase (GGT)	<b>236</b>	U/L	<73	Modified IFCC

**Comment:**

- LFTS are based upon measurements of substances released from damaged hepatic cells into the blood that gives idea of the Existence, Extent and Type of Liver damage. - Acute Hepatocellular damage: ALT & AST levels are sensitive index of hepatocellular damage - Obstruction to the biliary tract,Cholestasis and blockage of bile flow:1) Serum Total Bilirubin concentration 2) Serum Alkaline Phosphatase (ALP) activity 3) Gamma Glutamyl Transpeptidase (GGTP) 4) 5'-Nucleotidase - Chronic liver disease: Serum Albumin concentration
- Bilirubin results from the enzymatic breakdown of heme. Jaundice is a yellowish discoloration of the skin and mucous membranes caused by hyperbilirubinemia.
- Pre-hepatic or hemolytic jaundice - Abnormal red cells, antibodies,drugs and toxins,Hemoglobinopathies, Gilbert's syndrome, Crigler-Najjar syndrome
- Hepatic or Hepatocellular jaundice-Viral hepatitis,toxic hepatitis, intrahepatic cholestasis
- Post-hepatic jaundice -Extrahepatic cholestasis, gallstones, tumors of the bile duct, carcinoma of pancreas
- In viral hepatitis and other forms of liver disease associated with acute hepatic necrosis, serum AST and ALT concentrations are elevated even before the clinical signs and symptoms of disease appear.
- ALT is the more liver-specific enzyme and elevations of ALT activity persist longer than AST activity.
- Peak values of aminotransferase activity occur between the seventh and twelfth days. Activities then gradually decrease, reaching normal activities by the third to fifth week. Peak activities bear no relationship to prognosis and may fall with worsening of the patient's condition.
- Aminotransferase activities observed in cirrhosis vary with the status of the cirrhotic process and range from the upper reference limit to four to five times higher, with an AST/ALT ratio greater than 1. The ratio's elevation can reflect the grade of fibrosis in these patients. Slight or moderate elevations of both AST and ALT activities have been observed after administration of various medications and chronic hepatic injury such as (1) hemochromatosis, (2) Wilson disease, (3) autoimmune hepatitis, (4) primary biliary cirrhosis, (5) sclerosing cholangitis, and (6) a1-antitrypsin deficiency.
- AST activity also is increased in acute myocardial infarction, progressive muscular dystrophy and dermatomyositis, reaching concentrations up to eight times the upper reference limit.Slight to moderate AST elevations are noted in hemolytic disease.
- GGT is a sensitive indicator of the presence of hepatobiliary disease, being elevated in most subjects with liver disease

*Anupriya Nautiyal*

Dr. Anupriya Nautiyal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 6189





Name	: Mr.ATUL KALA ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 58 Y 0 M 0 D /Male	Registration Date	: 18-Jun-23 07:10 PM
Patient ID	: DDN33373	Collection Date	: 19/Jun/2023 04:42PM
Barcode ID/Order ID	: B3327035 / B3327035	Sample Receive Date	: 20/Jun/2023 08:58AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 20/Jun/2023 01:49PM

**BIOCHEMISTRY**

Test Name	Result	Unit	Bio. Ref. Interval	Method
Aspartate Transaminase (SGOT)	82	U/L	<34	Modified IFCC


**Comment:**  
**SGOT/AST :**

- Present in large concentrations in liver, skeletal muscle, brain, red cells, and heart.
- Released into the bloodstream when tissue is damaged, especially in liver injury.
- Test is not indicated for diagnosis of myocardial infarction.
- AST/ALT ratio >1 suggests cirrhosis in patients with hepatitis C.

**Increased in:** Acute viral hepatitis (ALT > AST),  
: Biliary tract obstruction (cholangitis, choledocholithiasis),  
: Alcoholic hepatitis and cirrhosis (AST > ALT)  
: Other conditions - liver abscess, metastatic or primary liver cancer; right heart failure, ischemia or hypoxia, injury to liver ("shock liver"), extensive trauma. Drugs that cause cholestasis or hepatotoxicity.

**Decreased in:** Pyridoxine (vitamin B6) deficiency.

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

  
Dr. Reema Agrawal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 56096





Name	: Mr.VIJAY	Client Name	: DC - CITY HEART CENTRE PUP212
Age/Gender	: 45 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 09:09 AM
Patient ID	: DDN34223	Collection Date	: 26/Jun/2023 09:12AM
Barcode ID/Order ID	: d4597109 / 7514531	Sample Receive Date	: 26/Jun/2023 09:50AM
Referred By	: Dr.ASHWANI SHARMA	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 26/Jun/2023 12:56PM

### BIOCHEMISTRY

Test Name	Result	Unit	Bio. Ref. Interval	Method
<b>Liver Function Test</b>				
Bilirubin-Total	1.50	mg/dL	0.3 - 1.2	Vanadate oxidation
Bilirubin-Direct	0.89	mg/dL	0.0-0.3	Vanadate oxidation
Bilirubin-Indirect	0.61	mg/dL	0.2-0.8	Calculated
Protein, Total	7.04	g/dL	5.7-8.2	Biuret
Albumin	4.04	g/dL	3.2-4.8	BCG Dye Binding
Globulin	3.0	g/dl	2.1 - 3.9	Calculated
A/G Ratio	1.35	Ratio	0.8 - 2.1	Calculated
Aspartate Transaminase (SGOT)	179	U/L	<34 U/L	Modified IFCC
Alanine Transaminase (SGPT)	55	U/L	10-49	Modified IFCC
SGOT/SGPT	3.25	Ratio		Calculated
Alkaline Phosphatase	191	U/L	46-116	IFCC Standardization
Gamma Glutamyltransferase (GGT)	1,212	U/L	<73	Modified IFCC

#### Comment:

- LFTS are based upon measurements of substances released from damaged hepatic cells into the blood that gives idea of the Existence, Extent and Type of Liver damage. - Acute Hepatocellular damage: ALT & AST levels are sensitive index of hepatocellular damage - Obstruction to the biliary tract,Cholestasis and blockage of bile flow:1) Serum Total Bilirubin concentration 2) Serum Alkaline Phosphatase (ALP) activity 3) Gamma Glutamyl Transpeptidase (GGTP) 4) 5'-Nucleotidase - Chronic liver disease: Serum Albumin concentration
- Bilirubin results from the enzymatic breakdown of heme. Jaundice is a yellowish discoloration of the skin and mucous membranes caused by hyperbilirubinemia.
- Pre-hepatic or hemolytic jaundice - Abnormal red cells, antibodies,drugs and toxins,Hemoglobinopathies, Gilbert's syndrome, Crigler-Najjar syndrome
- Hepatic or Hepatocellular jaundice-Viral hepatitis,toxic hepatitis, Intrahepatic cholestasis
- Post-hepatic jaundice -Extrahepatic cholestasis, gallstones, tumors of the bile duct, carcinoma of pancreas
- In viral hepatitis and other forms of liver disease associated with acute hepatic necrosis, serum AST and ALT concentrations are elevated even before the clinical signs and symptoms of disease appear.
- ALT is the more liver-specific enzyme and elevations of ALT activity persist longer than AST activity.
- Peak values of aminotransferase activity occur between the seventh and twelfth days. Activities then gradually decrease, reaching normal activities by the third to fifth week. Peak activities bear no relationship to prognosis and may fall with worsening of the patient's condition.
- Aminotransferase activities observed in cirrhosis vary with the status of the cirrhotic process and range from the upper reference limit to four to five times higher, with an AST/ALT ratio greater than 1. The ratio's elevation can reflect the grade of fibrosis in these patients. Slight or moderate elevations of both AST and ALT activities have been observed after administration of various medications and chronic hepatic injury such as (1) hemochromatosis, (2) Wilson disease, (3) autoimmune hepatitis, (4) primary biliary cirrhosis, (5) sclerosing cholangitis, and (6) a1-antitrypsin deficiency.
- AST activity also is increased in acute myocardial infarction, progressive muscular dystrophy and dermatomyositis, reaching concentrations up to eight times the upper reference limit.Slight to moderate AST elevations are noted in hemolytic disease.
- GGT is a sensitive indicator of the presence of hepatobiliary disease, being elevated in most subjects with liver disease regardless of cause. Increased concentrations of the enzyme are also found in serum of subjects receiving anticonvulsant drugs,

*Anupriya Nautiyal*

Dr. Anupriya Nautiyal  
 MBBS, MD (Pathology)  
 Consultant Pathologist  
 Reg No: 6189





Name	: Mr.VIJAY ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 45 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 06:17 PM
Patient ID	: DDN34338	Collection Date	: 26/Jun/2023 06:20PM
Barcode ID/Order ID	: Z4597109 /	Sample Receive Date	: 27/Jun/2023 10:01AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 27/Jun/2023 02:58PM

**BIOCHEMISTRY**

Test Name	Result	Unit	Bio. Ref. Interval	Method
Aspartate Transaminase (SGOT)	166	U/L	5-34	NADH w/o P-5'-P

**Comment:**  
**SGOT/AST :**

- Present in large concentrations in liver, skeletal muscle, brain, red cells, and heart.
- Released into the bloodstream when tissue is damaged, especially in liver injury.
- Test is not indicated for diagnosis of myocardial infarction.
- AST/ALT ratio > 1 suggests cirrhosis in patients with hepatitis C.

**Increased in:** Acute viral hepatitis (ALT > AST),  
 : Biliary tract obstruction (cholangitis, choledocholithiasis),  
 : Alcoholic hepatitis and cirrhosis (AST > ALT)  
 : Other conditions - liver abscess, metastatic or primary liver cancer; right heart failure, ischemia or hypoxia, injury to liver ("shock liver"), extensive trauma. Drugs that cause cholestasis or hepatotoxicity.

**Decreased in:** Pyridoxine (vitamin B6) deficiency.

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



Dr. Reema Agrawal  
 MBBS, MD (Pathology)  
 Consultant Pathologist  
 Reg No: 56096







TATA 1mg Labs	
TATA 1mg Technologies Private Limited	
Form Name	Proficiency Testing - Action Needed Form
Form No.	Gen / FR / 59
Issue Date & Version No.	01-Jul-2022 V2

**Section 1 - Initiation of ANF (to be filled by the person who raising the ANF)**

PT/EQAS Agency <input type="checkbox"/> CAP <input type="checkbox"/> AIIMS <input type="checkbox"/> BIORAD <input type="checkbox"/> CMC <input type="checkbox"/> RML <input type="checkbox"/> Other				
Survey name & distribution ID: <i>CMC Clinical Chemistry</i>				
Date on agency report: 05-Jun-2023				
ANF No: DDN/JUN/23/01	Issued by: Prashant Singh	Issue Date: 09-Jun-2023	Due date: 24-Jun-2023	
Department: Biochemistry				
ANALYTE or EXAMINATION: Cholesterol				
Sample ID	Result submitted	PT targets	PT acceptable range	Problem/Performance
May	116 mg/dL	86.14	75.42- 96.86	5.57
Comment /Observations: (e.g. trend, previously missed within last 12 months, lab in regulatory jeopardy for this analyte?)				

**Section 2 - Investigation of Non Conformance- Checklist**

Sl	ANF-CHECKLIST	Yes	No	N/A
1	Specimen temperature check, as per kit instructions	✓		
2	Specimen storage condition check, as per kit instructions	✓		
3	Specimen physical condition check	✓		
4	Sample integrity up to arrival in lab: any shipping, delay or other sample problems?		✓	
5	Sample integrity in-house: any problems with sample handling in the lab?		✓	
6	Were there any instrument problem?		✓	
7	Were there any method problem?		✓	
8	Were there any faulty reagent/QC and Calibrator?		✓	
9	Were there QC trends / problems at time of assay?		✓	
10	Was Peer group data checked, if required	✓		
11	Were there any Calibration (Intercept/slope) problems at time of assay?		✓	
12	Was water quality checked?	✓		
13	Did any technical errors occur due to pipetting error		✓	
14	Did any technical errors occur due to sample mix-up		✓	
15	Did any technical errors occur due to incorrect process, other than reconstitution, dilution or calculation errors,		✓	
16	Did any technical errors occur due to misinterpretations		✓	



TATA 1mg Labs	
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17	Was the instrument checked for daily, Weekly, Monthly, semiannually and Annual maintenance	✓		
18	Was there a lab clerical error? (e.g. error in unit conversion needed for survey only, transcription error onto result form, wrong method details submitted, Factor removal)		✓	
19	Was there a clerical error by the PT / EQA agency?		✓	
20	Were there Patient data trends / problems at time of assay?		✓	
21	Were there any gaps / issues in training or competency assessment?		✓	
22	Was the sample condition appropriate at time of retesting (mention temperature...)			✓
23	Has sample been re-tested / re-examined?		✓	
24	Has the lab perform Interlaboratory Comparison	✓		

**Questions 4-22 give details for any Yes answers**

The instrument has been checked for daily, weekly, monthly, semi annual and annual maintenance. No issue found.

Water quality also checked. No issue found.

ILC has been performed with Okhla Lab on ADVIA 2400 instrument.

**Question 23/24: if answer is yes, give results of repeat testing**

Sample ID	Original result	Repeat value/ Lab Result	PT Targets/ Referral Lab Result	PT/ILC Acceptable Range	Status (Acceptable/Not acceptable)

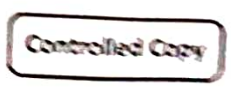
**Section 3 Root cause (Refer to Non-conformance error Reason)**

Why do you think the non-conformance / error occurred? Use this area to explain your findings.

The pre-analytical, analytical and post-analytical assessment has been carried out.

The non-conformities probably occurred may be due to a random error.

Assessment of the impact of root cause on patient results (Patient results may be affected before, during or after the PT event). Describe how the conclusion of impact was made and any corrective actions made to the patient result(s); "if No" - Explain why there was no patient impact?





TATA 1mg Labs	
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There is no patient impact as the ILC was performed at the Okhla lab to rule out any patient impact. The ILC result is found satisfactory.

Describe any previous proficiency testing issues with this test in the last sample: NA

**Section 4: Department - Conclusion & Corrective / Preventive Action**

What corrective action have you carried out?

We will continue to monitor daily QC trends.

We had carried out ILC with Okhla lab and the values obtained are concordant with our value.

Preventive action put into place?

The analyte will be under observation till the next cycle result evaluation.

Due date for closure of proposed corrective and preventive action: NA

Person investigated

Department Manager

Lab Head

Signature with Date:

Asim

[Signature]

[Signature]

Note: After signatures please hand over the form along with supporting documents to QA.

Date when ANF received to QA along with supporting documents: 24 Jun 2022 by: [Signature]

Name	: Mrs.RITIKA	Client Name	: DC - GARGI DIAGNOSTIC - PUP244
Age/Gender	: 20 Y 0 M 0 D /Female	Registration Date	: 18-Jun-23 12:19 PM
Patient ID	: DDN33342	Collection Date	: 18/Jun/2023 12:28PM
Barcode ID/Order ID	: D2004268 / 7468968	Sample Receive Date	: 18/Jun/2023 03:43PM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 18/Jun/2023 04:40PM

### BIOCHEMISTRY

#### Women Wellness Basic Package

Test Name	Result	Unit	Bio. Ref. Interval	Method
<b>Lipid Profile</b>				
Cholesterol - Total	98	mg/dL	Desirable <200, Borderline High 200-239, High $\geq$ 240	Enzymatic
Triglycerides	52	mg/dL	Normal: < 150, Borderline: 150 - 199, High:200 - 499, Very High $\geq$ 500	GPO, Trinder without serum blank
Cholesterol - HDL	37	mg/dL	Undesirable/high risk $\leq$ 40mg/dL Desirable/low risk $\geq$ 60mg/dl	Elimination/catalase
Cholesterol - LDL	50	mg/dL	Desirable: <100 Above desirable: 100 - 129 Borderline high : 130 - 159 High : 160 - 189 Very high : $\geq$ 190	Calculated
Cholesterol- VLDL	10	mg/dL	<30	Calculated
Cholesterol : HDL Cholesterol	2.6	Ratio	Desirable : 3.5-4.5 High Risk : >5	Calculated
LDL : HDL Cholesterol	1.35	Ratio	Desirable : 2.5-3.0 High risk : >3.5	Calculated
Non HDL Cholesterol	61	mg/dL	Desirable:< 130, Above Desirable 130- 159 Borderline High:160-189, High:190-219, Very High: $\geq$ 220	Calculated

Comment:

*Anupriya*

Dr. Anupriya Nautiyal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 6189





Name	: Miss.RITIKA ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 20 Y 0 M 0 D /Female	Registration Date	: 18-Jun-23 07:07 PM
Patient ID	: DDN33371	Collection Date	: 19/Jun/2023 04:42PM
Barcode ID/Order ID	: B2004268 / B2004268	Sample Receive Date	: 20/Jun/2023 08:58AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 20/Jun/2023 01:49PM


### BIOCHEMISTRY

Test Name	Result	Unit	Bio. Ref. Interval	Method
Cholesterol - Total	101	mg/dL	Desirable <200, Borderline High 200-239, High $\geq$ 240	Enzymatic

#### Comment:

- Measurements in the same patient can show physiological & analytical variations. Three serial samples 1 week apart are recommended for Total Cholesterol, Triglycerides, HDL & LDL Cholesterol.
- As per NCEP guidelines, all adults above the age of 20 years should be screened for lipid status. Selective screening of children above the age of 2 years with a family history of premature cardiovascular disease or those with at least one parent with high total cholesterol is recommended.

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

  
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Consultant Pathologist  
Reg No: 56096





Name	: Mr.SAGAR	Client Name	: DC - CITY HEART CENTRE PUP212
Age/Gender	: 32 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 02:06 PM
Patient ID	: DDN34319	Collection Date	: 26/Jun/2023 02:42PM
Barcode ID/Order ID	: d3327377 /	Sample Receive Date	: 26/Jun/2023 03:04PM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 26/Jun/2023 04:16PM

### BIOCHEMISTRY

#### Comprehensive Health Check Silver

Test Name	Result	Unit	Bio. Ref. Interval	Method
<b>Lipid Profile</b>				
Cholesterol - Total	207	mg/dL	Desirable <200, Borderline High 200-239, High >=240	Enzymatic
Triglycerides	272	mg/dL	Normal: < 150, Borderline: 150 - 199, High:200 - 499, Very High >=500	GPO, Trinder without serum blank
Cholesterol - HDL	43	mg/dL	Undesirable/high risk <=40mg/dL Desirable/low risk>=60mg/dl	Elimination/catalase
Cholesterol - LDL	109	mg/dL	Desirable: <100 Above desirable: 100 - 129 Borderline high : 130 - 159 High : 160 - 189 Very high : >=190	Calculated
Cholesterol- VLDL	54	mg/dL	<30	Calculated
Cholesterol : HDL Cholesterol	4.8	Ratio	Desirable : 3.5-4.5 High Risk : >5	Calculated
LDL : HDL Cholesterol	2.52	Ratio	Desirable : 2.5-3.0 High risk : >3.5	Calculated
Non HDL Cholesterol	164	mg/dl	Desirable:< 130, Above Desirable:130 - 159, Borderline High:160 - 189, High:190 - 219, Very High: >= 220	Calculated

Comment:

Dr. Anupriya Nautiyal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 6189





Name	: Mr.SAGAR ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 32 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 06:15 PM
Patient ID	: DDN34335	Collection Date	: 26/Jun/2023 06:20PM
Barcode ID/Order ID	: Z3327377 /	Sample Receive Date	: 27/Jun/2023 10:01AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 27/Jun/2023 02:58PM

**BIOCHEMISTRY**

Test Name	Result	Unit	Bio. Ref. Interval	Method
Cholesterol - Total	<b>209</b>	mg/dL	Desirable <200, Borderline High 200-239, High >=240	Enzymatic

**Comment:**

- Measurements in the same patient can show physiological & analytical variations. Three serial samples 1 week apart are recommended for Total Cholesterol, Triglycerides, HDL & LDL Cholesterol.
- As per NCEP guidelines, all adults above the age of 20 years should be screened for lipid status. Selective screening of children above the age of 2 years with a family history of premature cardiovascular disease or those with at least one parent with high total cholesterol is recommended.



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 MBBS, MD (Pathology)  
 Consultant Pathologist  
 Reg No: 56096





Name	: Mr.SAGAR ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 32 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 06:15 PM
Patient ID	: DDN34335	Collection Date	: 26/Jun/2023 06:20PM
Barcode ID/Order ID	: Z3327377 /	Sample Receive Date	: 27/Jun/2023 10:01AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 27/Jun/2023 02:58PM

**BIOCHEMISTRY**

Test Name	Result	Unit	Bio. Ref. Interval	Method
Triglycerides	268	mg/dL	Normal: <150, Borderline: 150 - 199, High:200-499, Very High>=500	GPO


**Comment:**

**Increased in:** Secondary causes such as obesity, diabetes, hypothyroidism, pregnancy and medications such as diuretics, beta blockers, oral estrogens, steroids, immunosuppressants.

**Note:**

- The base of the diagnosis is made on the fasting triglyceride levels.
- Measurements in the same patient can show physiological variations. Three serial samples 1 week apart are recommended to establish basal triglyceride levels.
- Certain conditions such as acute illness, stress, pregnancy, dietary changes especially changes in intake of saturated fatty acids, lipid lowering drugs, alcohol or, prednisone may cause variation in lipid levels.

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

  
 Dr. Reema Agrawal  
 MBBS, MD (Pathology)  
 Consultant Pathologist  
 Reg No: 56096







TATA 1mg Labs	
TATA 1mg Technologies Private Limited	
Form Name	Proficiency Testing - Action Needed Form
Form No.	Gen / FR / 59
Issue Date & Version No.	01-Jul-2022 V2

### Section 1 - Initiation of ANF (to be filled by the person who raising the ANF)

PT/EQAS Agency <input type="checkbox"/> CAP <input type="checkbox"/> AIIMS <input type="checkbox"/> BIORAD <input type="checkbox"/> CMC <input type="checkbox"/> RML <input type="checkbox"/> Other				
Survey name & distribution ID: <i>CMC Clinical Chemistry</i>				
Date on agency report: 05-Jun-2023				
ANF No: DDN/JUN/23/02	Issued by: Prashant Singh	Issue Date: 09-Jun-2023	Due date: 24-Jun-2023	
Department: Biochemistry				
ANALYTE or EXAMINATION: <i>TRIGLYCERIDE</i>				
Sample ID	Result submitted	PT targets	PT acceptable range	Problem/Performance
May	155 mg/dL	135.12	122.96- 147.28	3.27
Comment /Observations: (e.g. trend, previously missed within last 12 months; lab in regulatory jeopardy for this analyte?)				

### Section 2 - Investigation of Non Conformance- Checklist

Sl	ANF-CHECKLIST	Yes	No	N/A
1	Specimen temperature check, as per kit instructions	✓		
2	Specimen storage condition check, as per kit instructions	✓		
3	Specimen physical condition check	✓		
4	Sample integrity up to arrival in lab: any shipping, delay or other sample problems?		✓	
5	Sample integrity in-house: any problems with sample handling in the lab?		✓	
6	Were there any instrument problem?		✓	
7	Were there any method problem?		✓	
8	Were there any faulty reagent/QC and Calibrator?		✓	
9	Were there QC trends / problems at time of assay?		✓	
10	Was Peer group data checked, if required	✓		
11	Were there any Calibration (Intercept/slope) problems at time of assay?		✓	
12	Was water quality checked?	✓		
13	Did any technical errors occur due to pipetting error		✓	
14	Did any technical errors occur due to sample mix-up		✓	
15	Did any technical errors occur due to incorrect process, other than reconstitution, dilution or calculation errors,		✓	
16	Did any technical errors occur due to misinterpretations		✓	



<b>TATA 1mg Labs</b>	
<b>TATA 1mg Technologies Private Limited</b>	
<b>Form Name</b>	<b>Proficiency Testing - Action Needed Form</b>
<b>Form No.</b>	<b>Gen / FR / 59</b>
<b>Issue Date &amp; Version No.</b>	<b>01-Jul-2022 V2</b>

17	Was the instrument checked for daily. Weekly. Monthly, semiannually and Annual maintenance	✓		
18	Was there a lab clerical error? (e.g. error in unit conversion needed for survey only, transcription error onto result form, wrong method details submitted, Factor removal)		✓	
19	Was there a clerical error by the PT / EQA agency?		✓	
20	Were there Patient data trends / problems at time of assay?		✓	
21	Were there any gaps / issues in training or competency assessment?		✓	
22	Was the sample condition appropriate at time of retesting (mention temperature...)			✓
23	Has sample been re-tested / re-examined?		✓	
24	Has the lab perform Interlaboratory Comparison	✓		

**Questions 4-22 give details for any Yes answers**

The instrument has been checked for daily , weekly, monthly, semi annual and annual maintenance.No issue found.

Water quality also checked.No issue found.

ILC has been performed with Okhla Lab on ADVIA 2400 instrument.

**Question 23/24: if answer is yes, give results of repeat testing**

Sample ID	Original result	Repeat value/ Lab Result	PT Targets/ Referral Lab Result	PT/ILC Acceptable Range	Status (Acceptable/Not acceptable)

**Section 3 Root cause (Refer to Non-conformance error Reason)**

--	--

Why do you think the non-conformance / error occurred? Use this area to explain your findings.

**The pre-analytical, analytical and post-analytical assessment has been carried out.**

**The non-conformities occurred probably due to a random error.**

Assessment of the impact of root cause on patient results (Patient results may be affected before, during or after the PT event). Describe how the conclusion of impact was made and any corrective actions made to the patient result(s); "If No" - Explain why there was no patient impact?



TATA 1mg Labs	
TATA 1mg Technologies Private Limited	
Form Name	Proficiency Testing - Action Needed Form
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There is no patient impact as the ILC was performed at the Okhla lab to rule out any patient impact. The ILC result is found satisfactory.

Describe any previous proficiency testing issues with this test in the last sample: NA

**Section 4: Department - Conclusion & Corrective / Preventive Action**

What corrective action have you carried out?

An ILC has been performed with Okhla lab. The values obtained in ILC are concordant with our values. Also we are closely monitoring the daily QC trend.

Preventive action put into place?

The parameter will be kept under observation till the next cycle result evaluation.

Due date for closure of proposed corrective and preventive action: NA

Person Investigated

Department Manager

Lab Head

Signature with Date: AMM

[Signature]

[Signature]

Note: After signatures please hand over the form along with supporting documents to QA.

Date when ANF received to QA along with supporting documents: 24 Jun 2022 by: [Signature]

Controlled Copy

PO No :PO3341319747-715



Name	: Mr.MR. RAJEEV RANJAN	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 38/Male	Registration Date	: 18-Jun-23 10:30 AM
Patient ID	: DDN33307	Collection Date	: 18/Jun/2023 09:44AM
Barcode ID/Order ID	: D3326463 / 7459876	Sample Receive Date	: 18/Jun/2023 11:03AM
Referred By	: Dr.	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 18/Jun/2023 12:52PM

**BIOCHEMISTRY**

Test Name	Result	Unit	Bio. Ref. Interval	Method
<b>Lipid Profile</b>				
Cholesterol - Total	127	mg/dL	Desirable <200, Borderline High 200-239, High >=240	Enzymatic
Triglycerides	131	mg/dL	Normal: < 150, Borderline: 150 - 199, High:200 - 499, Very High >=500	GPO, Trinder without serum blank
Cholesterol - HDL	37	mg/dL	Undesirable/high risk <=40mg/dL Desirable/low risk >=60mg/dl	Elimination/catalase
Cholesterol - LDL	64	mg/dL	Desirable: <100 Above desirable: 100 - 129 Borderline high : 130 - 159 High : 160 - 189 Very high : >=190	Calculated
Cholesterol- VLDL	26	mg/dL	<30	Calculated
Cholesterol : HDL Cholesterol	3.4	Ratio	Desirable : 3.5-4.5 High Risk : >5	Calculated
LDL : HDL Cholesterol	1.74	Ratio	Desirable : 2.5-3.0 High risk : >3.5	Calculated
Non HDL Cholesterol	90	mg/dl	Desirable:< 130, Above Desirable:130 - 159, Borderline High:160 - 189, High:190 - 219, Very High: >= 220	Calculated

**Comment:**

*Anupriya Nautiyal*

Dr. Anupriya Nautiyal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 6189





Name	: Mr.RAJEEV RANJAN ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 38 Y 0 M 0 D /Male	Registration Date	: 18-Jun-23 07:09 PM
Patient ID	: DDN33372	Collection Date	: 19/Jun/2023 04:42PM
Barcode ID/Order ID	: B3326463 / B3326463	Sample Receive Date	: 20/Jun/2023 08:57AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 20/Jun/2023 01:49PM

### BIOCHEMISTRY

Test Name	Result	Unit	Bio. Ref. Interval	Method
Triglycerides	131	mg/dL	Normal: <150, Borderline: 150 - 199, High:200-499, Very High>=500	GPO

#### Comment:

**Increased in:** Secondary causes such as obesity, diabetes, hypothyroidism, pregnancy and medications such as diuretics, beta blockers, oral estrogens, steroids, immunosuppressants.

#### Note:

- The base of the diagnosis is made on the fasting triglyceride levels.
- Measurements in the same patient can show physiological variations. Three serial samples 1 week apart are recommended to establish basal triglyceride levels.
- Certain conditions such as acute illness, stress, pregnancy, dietary changes especially changes in intake of saturated fatty acids, lipid lowering drugs, alcohol or, prednisone may cause variation in lipid levels.

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

*Reema*

Dr. Reema Agrawal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 56096





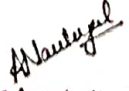
Name	: Mr.SAGAR	Client Name	: DC - CITY HEART CENTRE PUP212
Age/Gender	: 32 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 02:06 PM
Patient ID	: DDN34319	Collection Date	: 26/Jun/2023 02:42PM
Barcode ID/Order ID	: d3327377 /	Sample Receive Date	: 26/Jun/2023 03:04PM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Scrum	Report Date	: 26/Jun/2023 04:16PM

### BIOCHEMISTRY

#### Comprehensive Health Check Silver

Test Name	Result	Unit	Bio. Ref. Interval	Method
<b>Lipid Profile</b>				
Cholesterol - Total	207	mg/dL	Desirable <200, Borderline High 200-239, High >=240	Enzymatic
Triglycerides	272	mg/dL	Normal: < 150, Borderline: 150 - 199, High:200 - 499, Very High >=500	GPO, Trinder without serum blank
Cholesterol - HDL	43	mg/dL	Undesirable/high risk <=40mg/dL Desirable/low risk>=60mg/dl	Elimination/catalase
Cholesterol - LDL	109	mg/dL	Desirable: <100 Above desirable: 100 - 129 Borderline high : 130 - 159 High : 160 - 189 Very high : >=190	Calculated
Cholesterol- VLDL	54	mg/dL	<30	Calculated
Cholesterol : HDL Cholesterol	4.8	Ratio	Desirable : 3.5-4.5 High Risk : >5	Calculated
LDL : HDL Cholesterol	2.52	Ratio	Desirable : 2.5-3.0 High risk : >3.5	Calculated
Non HDL Cholesterol	164	mg/dl	Desirable:< 130, Above Desirable:130 - 159, Borderline High:160 - 189, High:190 - 219, Very High: >= 220	Calculated

Comment:

  
Dr. Anupriya Nautiyal  
MBBS, MD (Pathology)  
Consultant Pathologist  
Reg No: 6189





Name	: Mr.SAGAR ILC	Client Name	: TATA IMG DEHRADUN
Age/Gender	: 32 Y 0 M 0 D /Male	Registration Date	: 26-Jun-23 06:15 PM
Patient ID	: DDN34335	Collection Date	: 26/Jun/2023 06:20PM
Barcode ID/Order ID	: Z3327377 /	Sample Receive Date	: 27/Jun/2023 10:01AM
Referred By	: SELF	Report Status	: Final Report
Sample Type	: Serum	Report Date	: 27/Jun/2023 02:58PM

**BIOCHEMISTRY**

Test Name	Result	Unit	Bio. Ref. Interval	Method
Triglycerides	268	mg/dL	Normal: <150, Borderline: 150 - 199, High:200-499, Very High>=500	GPO

**Comment:**

**Increased in:** Secondary causes such as obesity, diabetes, hypothyroidism, pregnancy and medications such as diuretics, beta blockers, oral estrogens, steroids, immunosuppressants.

**Note:**

- The base of the diagnosis is made on the fasting triglyceride levels.
- Measurements in the same patient can show physiological variations. Three serial samples 1 week apart are recommended to establish basal triglyceride levels.
- Certain conditions such as acute illness, stress, pregnancy, dietary changes especially changes in intake of saturated fatty acids, lipid lowering drugs, alcohol or, prednisone may cause variation in lipid levels.

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



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