CHRISTIAN MEDICAL COLLEGE

DEPARTMENT OF CLINICAL BIOCHEMISTRY

CMC EXTERNAL QUALITY ASSURANCE SCHEME

MONTHLY SUMMARY REPORT - SEPTEMBER 2023

PC-1024

Lab Name	**MEDITRUST DIAGNOSTIC CENTRE**	**Lab No**	**18608**
Constituent Group	**Chemistry II**	**Date of Result Entered :**	**22/09/2023**
PT item	**Lyophilized human serum based**	**Date of Report Published :**	**05/10/2023**

Sl.No	Analyte	Method / Principle Name	Analyzer Name	No of Participants	DV	Participants CV	Participants SD	Your Value	SDI	U
1	GLUCOSE II	GOD-POD II	Any Analyser (Automation / Semi Automation)	1697	333.34	11.48	38.25	291 mg/dL	-1.11	1.86
2	UREA II	Urease UV / GLDH II	Any Analyser (Automation / Semi Automation)	1143	38.62	12.79	4.94	42.48 mg/dL	0.78	0.29
3	CREATININE II	Jaffes Kinetic-Alkaline Picrate II	Any Analyser (Automation / Semi Automation)	1241	1.16	14.35	0.17	1.1 mg/dL	-0.36	0.01
4	T.BILIRUBIN II	Diazonium Salt (Colorimetric) / Jendrassik II	Any Analyser (Automation / Semi Automation)	1395	5.18	15.03	0.78	1.89 mg/dL	-4.22	0.04
5	T-PROTEIN II	Biuret - Colorimetric II	Any Analyser (Automation / Semi Automation)	1299	5.64	10.51	0.59	7.12 g/dL	2.50	0.03
6	ALBUMIN II	BCG - Colorimetric II	Any Analyser (Automation / Semi Automation)	1246	3.31	9.55	0.32	3.41 g/dL	0.32	0.02
7	URIC ACID II	Enzymatic / Uricase Colorimetric II	Any Analyser (Automation / Semi Automation)	1315	9.82	13.19	1.30	10.71 mg/dL	0.69	0.07
8	CHOLESTROL II	CHOD-PAP II	Any Analyser (Automation / Semi Automation)	1501	119.45	10.95	13.08	115.75 mg/dL	-0.28	0.67
9	TRIGLYCERIDE II	GPO-PAP / Enzymatic Colorimetric / End Point II	Any Analyser (Automation / Semi Automation)	1333	201.48	11.49	23.15	258.5 mg/dL	2.46	1.27

SDI Range	Interpretation
Within -1.00 to +1.00	Excellent.
Within ±1.01 to ±2.00	Good.
Within ±2.01 to ±2.99	Accept with caution. Warning Signal.
Beyond ±3.0	Unacceptable performance. Action Signal.

LAB ADDRESS :
MEDITRUST DIAGNOSTIC CENTRE
439, ANUKUL CHANDRA ROAD
GARIA
WEST BENGAL700084

Pamela Christudoss

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

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 ********

INV. No.	MTR-INV-J-1837/2023(20774)	Barcode No	68729
Patient Name	**Miss. ANUSREE SARDAR**	Invoice Generated	30/10/2023 11:59 AM
Age/Gen	21 Years | Female	Sample Received	30/10/2023 11:59 AM
Referred By	**Dr. Hospital**	Report Generated	30/10/2023 12:45 PM
Source	HOIP		

Report Of Biochemistry Examination

Investigation	Result	Unit(s)	Reference Range
BILIRUBIN (TOTAL AND DIRECT)			
Serum Bilirubin (Total) Method (Jendrassik & Grof Method)	0.41	mg/dL	Upto 1.0
Serum Bilirubin (Conj) Method (Jendrassik & Grof Method)	0.12	mg/dL	Upto 0.25
Serum Bilirubin (Uncon) Method (Calculated)	0.29	mg/dL	<0.75

1. In newborns with CB levels ≥0.5 mg/dL and <2 mg/dL, the infection must be ruled out, and the newborn should be observed. In newborns with levels ≥2 mg/dL, a more in-depth assessment of the hepatobiliary system is indicated. (interpreting conjugated bilirubin level in newborns,[Epub 2010 Nov 12])

~~~~~~ *End of report* ~~~~~~

Dr. Aniruddha Saha
MBBS, MD
Consultant Pathologist
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CDSA DIAGNOSTICS

AN ISO & NABL ACCRIDETED LABORATORY

NAME:	Ms. ANUSREE SARDAR	UHID No.:	464075
Patient ID:	012310300734	Collection DATE:	30/Oct/2023 07:26 PM
Referred BY:	Dr. HOSPITAL	Received DATE/TIME:	30/Oct/2023 07:32 PM
Age/Gender:	21 Y/Female	Approved DATE/TIME:	30/Oct/2023 09:11 PM
LabID:	1347244	CLIENT Grp.:	MEDITRUST DIAGNOSTICS
SpecimenType:	Serum	Report STATUS:	Final Report

DEPARTMENT OF BIOCHEMISTRY

Test Description	Observed Value	Unit	Method	Biological Ref. Interval
BILIRUBIN (DIRECT And INDIRECT)*				
Bilirubin Total	0.35	mg/dL	Diazo	0.20 - 1.20
Bilirubin, Direct	0.09	mg/dL	Diazo	0.00-0.30
Bilirubin, Indirect	0.26	mg/dL	Calculated	0.20-0.70

*** End Of Report ***

Amrita Ghosh

Dr. Amrita Ghosh
MBBS,MD(Biochem)
Consultant Biochemist
Reg.No. 55704

Soumick Sarkar

Dr. Soumick Sarkar
MBBS,MD(PAth)
Consultant pathologist
Reg.No. 60092

Entered By:SOUMICK SARKAR

* This is an ectronically authenticated report.*

7/85/1, Sahid Nagar, Ashutosh Colony, Dhakuria, Haltu, Kolkata - 700078 | Help Line : 9903895383

Meditrust Diagnostic

MEDITRUST DIAGNOSTIC CENTRE

(Department of Pathology)

Root cause analysis of outlier parameter for EQAS performance

Format No: MDC/FM/92

SL No	Check Points	Observations
Name of Parameter (s): T. BIL		**Month:** September
Cycle No / Sample No/ Distribution No: September, 2023		**Year:** 2023
CLERICAL ERRORS Date of testing – 18/09/2023		
1.	Transcription error (may be pre- or post-analytical factors)	– NIL –
2.	Wrong method has been registered for analysis or method change not updated	– NIL –
METHODOLOGICAL PROBLEM		
3.	Instrument function checks (e.g., temperatures, blank readings, pressures) not performed as necessary, or results not within acceptable range.	– NIL –
4.	Scheduled instrument maintenance not performed appropriately.	– NA –
5.	Incorrect instrument calibration.	– NA –
6.	Standards or reagents improperly reconstituted and stored, or inadvertently used beyond expiration date.	– NA –
7.	Instrument probes misaligned.	– NIL –
8.	Problem with instrument data processing functions. The laboratory may need to contact the manufacturer to evaluate such problems.	– NIL –
9.	Problem in manufacture of reagents / standards, or with instrument settings specified by manufacturer	– NIL –
10.	Carry-over from previous specimen.	– NIL –
11.	Automatic pipettor not calibrated to acceptable precision and accuracy.	– NA –
12.	Imprecision from result being close to detection limit of method.	– NIL –
13.	QC material not run within expiration date, or improperly stored	– NIL –
14.	QC material not run at relevant analyte concentration	– NIL –
15.	Result not within reportable range (linearity) for instrument / reagent system.	– NIL –

Meditrust Diagnostic

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Root cause analysis of outlier parameter for EQAS performance

Format No: MDC/FM/92

SL No	Check Points	Observations
16.	Obstruction of instrument tubing / orifice by clot or protein.	- NIL -
17.	Incorrect incubation times.	- NIL -
TECHNICAL PROBLEM		
18.	EQA material improperly reconstituted.	- NIL -
19.	Testing delayed after reconstitution of EQA material (with problem from evaporation or deterioration).	- NIL -
20.	Sample not placed in proper order on instrument.	- NIL -
21.	Result released despite unacceptable QC data.	- NIL -
22.	QC data within acceptable limits but showed trend suggestive of problem with the assay.	It shows some trend on that date.
23.	Inappropriate quality control limits / rules. If the acceptable QC range is too wide, the probability increases that a result will fall within the acceptable QC range yet exceed acceptable limits for EQA.	- NIL -
24.	Manual pipetting / diluting performed inaccurately, at an incorrect temperature or with incorrect diluent.	- NIL -
25.	Calculation error or result reported using too few significant digits.	- NIL -
26.	Secondary specimen tubes incorrectly labeled.	- NIL -
PROBLEM WITH PROFICIENCY TESTING MATERIALS		
27.	PT sample with appropriate matrix to that as prescribed by the equipment manufacturer for testing of samples.	- NIL -
28.	Non-homogenous test material	- NIL -
29.	Haemolysis on an immune-haemtology program samples.	- NIL -
PROBLEM WITH EVALUATION OF RESULTS BY THE PT PROVIDER		
30.	Peer group not appropriate.	- NA -
31.	Inappropriate target value	- NA -

Meditrust Diagnostic

MEDITRUST DIAGNOSTIC CENTRE

(Department of Pathology)

Root cause analysis of outlier parameter for EQAS performance

Format No: MDC/FM/92

SL No	Check Points	Observations
32.	Incorrect data entry by PT provider	– NA –

Meditrust Diagnostic

MEDITRUST DIAGNOSTIC CENTRE

(Department of Pathology)

Root cause analysis of outlier parameter for EQAS performance

Format No: MDC/FM/92

SL No	Check Points	Observations

CONCLUSION:
RCA done after checking all points and it has been observed but the outlier of T.Bil may be due to random error. The parameter shall be sent for ILC to NABL accredited lab and parameter shall be strictly monitored in the next eqas cycle.

Root Cause Analysis done by: Sny.

Remarks: Parameter monitored in next eqas.

Reviewed By: Sny.

Meditrust Diagnostic

MEDITRUST DIAGNOSTIC CENTRE

(Department of Pathology)

EQAS Corrective Action Details

Format No: MDC/FM/93

Sl. No	EQAS Agency	Sample Testing Date	Cycle No/ Sample No	Parameter Outlier	Remarks & Corrective Action Taken	Reviewed By
1.	cmc vellore	18/09/2023	September 2023	T. Bilirubin	ILC has been done, After corrective action Z-score found .0.70 and the Parameter will be monitored in next cycle.	
2.	cmc vellore	18/09/23	September 2023	T. Protein (warning)	RCA done and it has been observed as random error. Parameter will be monitored next cycle. Sample has been rerun.	
3.	cmc vellore	18/09/23	September, 2023	Triglyceride (warning)	RCA done and it has been observed as random error. Parameter will be monitored next cycle. Sample has been rerun.	

MEDITRUST DIAGNOSTIC CENTRE
(Department of Pathology)

Laboratory 1 : DISA
Laboratory 2 :
Laboratory` 3 :

Sl. No	Date of Testing	ID No	Parameter	MDC	Lab 1	Lab 2	Lab 3	Mean	SD	Z-Score
1	30.10.2023		T.BILIRUBIN	0.41	0.35			0.38	0.042426	0.707107

Z- Score = (Lab 1 - Mean)/SD

Corrective action (≥ 2 Z-score)	Reviewed By
NA