



Metropolis Healthcare Ltd., EQAS

PRIMUS PATHOLOGY & DIAGNOSTICS (1015)

Outlier And Analyte Summary Report

Outlier Details For Cycle No 230310 and Sample No 03

Report Date : 19/12/2023

Analyte	Instrument	Result Value	Standard Unit	Z-Score
No Outlier				
Legend @ : z score \leq 2.0 - Acceptable ! : 2.0 < z score < 3.0 - Warning X : z score \geq 3 - Unacceptable # : Not Evaluated ⌚ : Delayed Result Entry * : Not considered for evaluation.				

Problem Classification: _____

Corrective Action: _____

Reviewed by: _____

Dated: _____

Instrument : Mindray BS-240

Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
@ Creatinine	mg/dl	0.88	0.86	0.68	0.71
@ Albumin	g/dL	4.23	4.10	1.07	1.28
@ Uric Acid	mg/dl	4.57	4.33	0.62	0.29
@ Calcium	mg/dl	8.32	8.35	0.21	-0.12
# ALT	U/L	17.90	5.20		0.68
@ AST	U/L	16.28	13.49	0.72	0.48

Instrument : Sensa Core ST 200 plus

Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
@ Chloride	mmol/L	110.90	114.59	-0.79	-0.02
@ Sodium	mmol/L	177.80	171.26	0.01	0.14
@ Potassium	mmol/L	6.40	6.23	-0.50	-0.50

Legend @ : Acceptable

! : 2.0 < z score < 3.0 - Warning

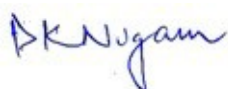
X : z score ≥ 3 - Unacceptable

: Not Evaluated

⊙ : Delayed Result Entry

* : Not considered for evaluation.

Total Parameters	9
Not Evaluated Parameters	1
Evaluated Parameters	8
Outlier Parameters (X)	0
EQAS Score Biochemistry	100.00 %



Dr Puneet Kumar Nigam
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Metropolis Healthcare Ltd., EQAS

PRIMUS PATHOLOGY & DIAGNOSTICS (1015)

Outlier And Analyte Summary Report

Outlier Details For Cycle No 230310 and Sample No 02

Report Date : 19/12/2023

Analyte	Instrument	Result Value	Standard Unit	Z-Score
X HDL	Mindray BS-240	31.44	mg/dl	3.2
X CK	Robonik Prietest Touch	80.00	U/L	5.8
X Lipase	Robonik Prietest Touch	113.00	U/L	9.12

Legend @ : z score \leq 2.0 - Acceptable
! : 2.0 < z score < 3.0 - Warning
X : z score \geq 3 - Unacceptable
: Not Evaluated
⊙ : Delayed Result Entry
* : Not considered for evaluation.

Problem Classification: _____

Corrective Action: _____

Reviewed by: _____

Dated: _____

Instrument : Mindray BS-240

Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
@ Glucose	mg/dl	81.22	75.11	1.32	1.32
@ Urea	mg/dl	21.05	20.78	0.32	0.16
@ Creatinine	mg/dl	1.92	1.63	1.11	0.71
@ Bilirubin Total	mg/dl	2.29	2.27	-0.50	-0.06
@ Bilirubin Direct	mg/dl	0.26	0.33	-0.43	-0.43
@ Total Protein	g/dL	6.47	6.03	1.15	1.25
@ Albumin	g/dL	3.71	3.51	1.86	1.28
@ Uric Acid	mg/dl	4.25	4.24	0.14	0.29
@ Calcium	mg/dl	7.52	7.65	-0.43	-0.12
@ Phosphorous Inorganic	mg/dl	2.86	3.33	-1.29	-0.88
@ Cholesterol	mg/dl	132.34	127.94	-0.15	-0.29
@ Triglycerides	mg/dl	112.03	113.44	-0.13	0.11
X HDL	mg/dl	31.44	19.09	3.20	2.87
@ ALP	U/L	36.94	43.63	-0.89	-1.01
@ GGT	U/L	29.64	25.38	1.65	1.91

Instrument : Robonik Prietest Touch

Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
X CK	U/L	80.00	--	5.80	1.86
@ LDH	U/L	66.03	--	1.80	0.09
@ Amylase	U/L	56.80	--	0.13	0.76
X Lipase	U/L	113.00	--	9.12	10.92

Instrument : Sensa Core ST 200 plus

Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
@ Chloride	mmol/L	84.60	87.22	0.31	-0.02
@ Sodium	mmol/L	111.80	113.35	0.19	0.14
@ Potassium	mmol/L	3.40	3.58	-0.63	-0.50

Legend @ : Acceptable

! : 2.0 < z score < 3.0 - Warning

X : z score ≥ 3 - Unacceptable

: Not Evaluated

⌚ : Delayed Result Entry

* : Not considered for evaluation.

Total Parameters	22
Not Evaluated Parameters	0
Evaluated Parameters	22
Outlier Parameters (X)	3
EQAS Score Biochemistry	86.36 %

Dr Puneet Kumar Nigam

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Metropolis Healthcare Ltd., EQAS

PRIMUS PATHOLOGY & DIAGNOSTICS (1015)

Outlier And Analyte Summary Report

Outlier Details For Cycle No 230310 and Sample No 01

Report Date : 19/12/2023

Analyte	Instrument	Result Value	Standard Unit	Z-Score
! HDL	Mindray BS-240	41.48	mg/dl	2.53
! CK	Robonik Prietest Touch	24.00	U/L	-2.08
! GGT	Mindray BS-240	33.61	U/L	2.17
X Lipase	Robonik Prietest Touch	132.80	U/L	12.71

Legend @ : z score \leq 2.0 - Acceptable
! : 2.0 < z score < 3.0 - Warning
X : z score \geq 3 - Unacceptable
: Not Evaluated
⊖ : Delayed Result Entry
* : Not considered for evaluation.

Problem Classification: _____

Corrective Action: _____

Reviewed by: _____ **Dated:** _____

Instrument : Mindray BS-240

Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
# Urea	mg/dl	22.80	22.17		0.16
@ Creatinine	mg/dl	0.82	0.77	0.35	0.71
@ Bilirubin Total	mg/dl	0.24	0.20	0.38	-0.06
@ Total Protein	g/dL	6.38	5.98	1.35	1.25
@ Albumin	g/dL	3.57	3.44	0.91	1.28
@ Uric Acid	mg/dl	4.09	3.82	0.10	0.29
@ Calcium	mg/dl	7.48	7.61	-0.14	-0.12
@ Phosphorous Inorganic	mg/dl	3.86	3.87	-0.47	-0.88
@ Cholesterol	mg/dl	126.30	129.04	-0.43	-0.29
@ Triglycerides	mg/dl	125.72	129.16	0.35	0.11
! HDL	mg/dl	41.48	34.50	2.53	2.87
@ ALT	U/L	22.09	18.45	1.36	0.68
@ AST	U/L	26.05	23.21	0.23	0.48
@ ALP	U/L	35.92	43.30	-1.12	-1.01
! GGT	U/L	33.61	29.07	2.17	1.91

Instrument : Robonik Prietest Touch

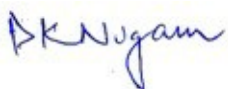
Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
! CK	U/L	24.00	--	-2.08	1.86
@ LDH	U/L	153.90	--	-1.63	0.09
@ Amylase	U/L	75.00	--	1.38	0.76
X Lipase	U/L	132.80	--	12.71	10.92

Instrument : Sensa Core ST 200 plus

Analyte	Standard Unit	Result Value	Mean	Z-Score	RMZ
@ Chloride	mmol/L	82.30	86.36	0.41	-0.02
@ Sodium	mmol/L	110.70	112.00	0.22	0.14
@ Potassium	mmol/L	3.40	3.55	-0.36	-0.50

- Legend @ : Acceptable
 ! : 2.0 < z score < 3.0 - Warning
 X : z score ≥ 3 - Unacceptable
 # : Not Evaluated
 ⌚ : Delayed Result Entry
 * : Not considered for evaluation.

Total Parameters	22
Not Evaluated Parameters	1
Evaluated Parameters	21
Outlier Parameters (X)	1
EQAS Score Biochemistry	95.24 %



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 Mumbai - 400070

CORRECTIVE & PREVENTIVE ACTIONS

ROOT CAUSE ANALYSIS, CORRECTIVE AND PREVENTIVE ACTION (CAPA)

Date : 20/12/2023

Non Compliance Reference
No. _____ dated _____
Dept: _____

Incident	EQAS Biochemistry HDL of samples No.1 & No.2 were found to be under warning level rather under unacceptable level.
Root cause analysis/Investigation	- checked the parameter for Internal QC which was found acceptable. - Recalibrated the parameter after which internal QC was also performed to ensure correct machine functioning Done By: _____ Date & Sign _____
Tool Used/ Risk Assessment	Brainstorming
Immediate Correction	Recalibrated the Parameter
Corrective Action	As all parameters were found acceptable we decided to re-run HDL of one patient and recheck the same next day same time to compare readings. Done By: _____ Date & Sign: _____
Preventive Action	The parameter is kept under observation till next EQAS sample. Re-run of HDL parameter will be done three times to ensure proper sample storage, stability and Machine Function.
Verification of CAPA Done	Done By: _____ Date & Sign <u>20/12/23</u>

Kiran

Prepared By

[Signature]

Immediate Incharge

[Signature]

HOD

Current

History

Statistics

Reac Carousel

By Sample

By Chemistry

Internal QC sheet
HDL

Type	Sample ID	Bar Code	Status	Completion Time	Print	Revi
C	LEVEL-2RD X	1549UN	Complete	04-12-2023 09:08	Y	
C	LEVEL-2RD X	1549UN	Complete	04-12-2023 09:30	N	
C	LEVEL-2RD X	1549UN	Complete	04-12-2023 11:05	N	
C	LEVEL-2RD X	1549UN	Complete	04-12-2023 12:09	N	
C	LEVEL-2RD X	1549UN	Complete	05-12-2023 08:48	N	
C	LEVEL-2RD X	1549UN	Complete	05-12-2023 11:48	N	
C	LEVEL-2RD X	1549UN	Complete	06-12-2023 08:54	N	
C	LEVEL-2RD X	1549UN	Complete	06-12-2023 11:44	N	
R	1	VICTORIA- F	Complete	04-12-2023 13:18	N	N
R	1	106903	Complete	05-12-2023 01:54	N	N
R	1	107013	Complete	06-12-2023 01:46	N	N
R	2	GUDDU-F	Complete	04-12-2023 13:19	N	N
R	2	JASINTHA DSOUZA F	Complete	05-12-2023 09:30	N	N
R	2	107015	Complete	06-12-2023 08:13	N	N

Chemistry	Result	Flag
TC	153.8	
TG	96.5	
Ca	9.45	
P	4.21	
Mg II	2.05	RGTE,EXT
T-bil-D II	1.97	2.7s
D-bil-D II	1.26	
ALB II	4.3	
HDL RAN	52.03	

Search
F1Options
F2Demog
F3Reac Curve
F4Rerun
F5Review
F6Print
F7

Levey-Jennings

Cumulative Sum

Twin-Plot

Results

Summary

QC Setup

Chem

HDL RAN



Show Deleted

QC Date

01-12-2023



07-12-2023



Control 1

LEVEL-2RDX 1549UN



Control 2

LEVEL-3RDX 1195UE



Control 3

Final Result

Conc:

Sum Mean:

Unit:

Sum SD:

Run Date:

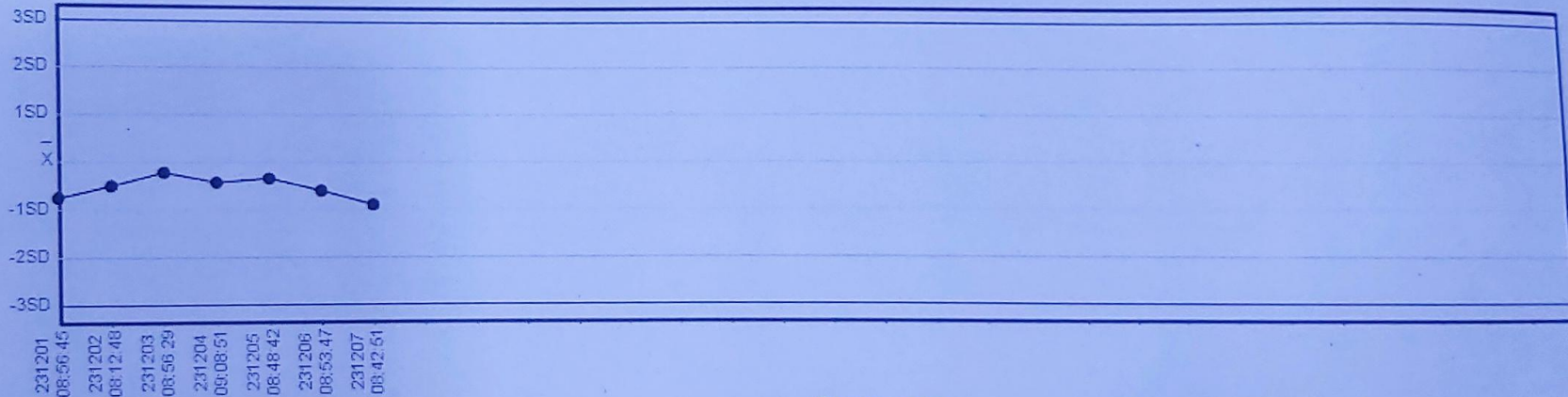
Sum CV%:

Comment:

Sum N:

Lot No.:

Internal QC graph
HDL



● LEVEL-2RDX

Search
F1

Chems
F2

Chart
F3

Prev
F4

Next
F5

Delete
F6

Print
F7

Com

CORRECTIVE & PREVENTIVE ACTIONS

ROOT CAUSE ANALYSIS, CORRECTIVE AND PREVENTIVE ACTION (CAPA)

Date : _____

<p align="center"><u>Non Compliance Reference</u></p> <p>No. _____ dated _____</p> <p>Dept: _____</p>
--

Incident	EQAS - Clinical Pathology - Urine Blood was unacceptable.
Root cause analysis/Investigation	Urine blood finding by strip showed 3+ but slide interpretation done by the staff was 4+.
Tool Used/ Risk Assessment	
Immediate Correction	-
Corrective Action	Retraining of all senior staff on slide interpretation for urine was done. spot sample analysis was done by Dr. Nerraj for all senior staff & reporting was compared.
Preventive Action	Slide interpretation will be crosschecked in such cases.
Verification of CAPA Done	

Done By:

Date & Sign

Done By:

Date & Sign:

Date & Sign

CORRECTIVE & PREVENTIVE ACTIONS

ROOT CAUSE ANALYSIS, CORRECTIVE AND PREVENTIVE ACTION (CAPA)

Date: 20/12/2023

Non Compliance Reference
No. _____ dated _____
Dept: _____

Incident	EQAS Biochemistry Lipase - EQAS for lipase in Biochemistry Sample NO1. & NO2 were found to be unacceptable.
Root cause analysis/Investigation	The internal controls on Robonik Prietar were outside acceptable limits. The frequency of running controls were done before running the tests as this parameter is infrequently requested. Done By: _____ Date & Sign _____
Tool Used/ Risk Assessment	Brainstorming & Process analysis
Immediate Correction	Stopped reporting samples and all tests outsourced
Corrective Action	Did calibration of the Robonik Prietar Machine and Internal controls were run Daily to set machine within acceptable limits. Done By: _____ Date & Sign: _____
Preventive Action	Frequency of Internal controls changed to Daily, from running it with the samples received. The parameter is kept under observation till next EQAS samples.
Verification of CAPA Done	Done By: _____ Date & Sign <u>20/12/23</u>

Handwritten signature

Prepared By

Handwritten signature

Immediate Incharge

Handwritten signature

HOD

OST **ServiceUser** 31-01 10:34

▶ || ◻ 🚑 ?

- Program
- Result
- Reagent
- QC
- Utility
- Alarm
- Exit

Levey-Jennings Cumulative Sum Twin-Plot Results Summary QC Setup

Chem: LTP Show Deleted

QC Date: 29-01-2024 31-01-2024

Control: LEVEL-1 059323006

Final Result

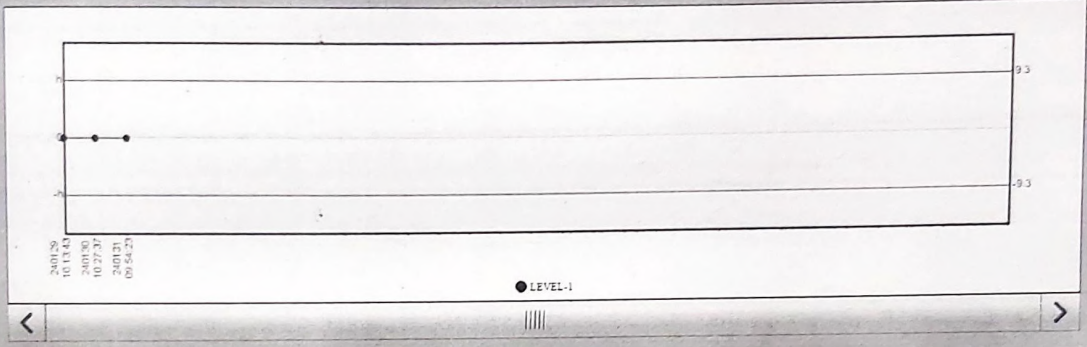
Conc: Sum Mean:

Unit: Sum SD:

Run Date: Sum CV%:

Comment: Sum N:

Lot No.:



◀ ||||| ▶

Search F1 Chems F2 Prev F4 Next F5 Delete F6 Print F7 Comment F8

230067503995781

Miss. RASIKA SHIRKE

PID NO: P19223517768266
Age: 25 Year(s) Sex: Female



Reference: DR.DILIP PATEL

Sample Collected At:

Primus Pathology And Diagnostics
Rashmi Pride, ' C ' Wing, Kanakia, Mira
Road, Thane - 401107
Processing Location:- Metropolis
Healthcare Ltd,Unit No409-416,4th
Floor,Commercial Building-1,Kohinoor
Mall,Mumbai-70

VID: 230067503995781

Registered On:
29/01/2024 12:43 PM
Collected On:
29/01/2024 12:42PM
Reported On:
29/01/2024 07:33 PM

Investigation



Lipase
(Serum,Enzymatic colorimetric assay)

Observed Value

95.00

Unit

U/L

Biological Reference Interval

13-60

-- End of Report --



Tests marked with NABL symbol are accredited by NABL vide Certificate no MC-2139; Validity till 01-06-2024

Lyndarodrigues

Dr. LYNDA.RODRIGUES
M.D. Pathology,
Reg No.2014/02/0456



Program

Result

Reagent

QC

Utility

Alarm

Exit

Current

History

Statistics

Reac Carousel

By Sample

By Chemistry

Type	Sample ID	Bar Code	Status	Completion Time	Print	Revi
R	2	RAFIQUE...R BS	Complete	28-01-2024 02:18	N	N
R	3	112005	Complete	28-01-2024 02:02	N	N
R	4	112006	Complete	28-01-2024 02:40	N	N
R	5	GYZEL CARVALH...	Complete	28-01-2024 10:25	N	N
R	6	RACHEAL PINTO-F	Complete	28-01-2024 10:25	N	N
R	7	FAREDA DSOUZA-F	Complete	28-01-2024 10:26	N	N
R	8	112011	Complete	28-01-2024 10:26	N	N
R	9	112008	Complete	28-01-2024 10:33	N	N
R	10	112009	Complete	28-01-2024 10:57	N	N
R	11	112012	Complete	28-01-2024 10:58	N	N
R	12	112018	Complete	28-01-2024 11:00	N	N
R	13	SHIVAM CHOURAS...	Complete	28-01-2024 11:01	N	N
R	14	MADHURI MOHITE-F	Complete	28-01-2024 11:01	N	N
R	15	112020	Complete	28-01-2024 11:07	N	N

Chemistry	Result	Flag
ALT	37.5	EXT
TC	162.4	EXT
TG	127.8	EXT
HDL-C	49.21	
LIP	89.2	
Ca	9.73	EXT
T-bil-D II	0.85	
D-bil-D II	0.23	

Search F1 Options F2 Demog F3 Reac Curve F4 Rerun F5 Review F6 Print F7 Host F8