

HIRA CLINICAL LAB (441)

Outlier And Analyte Summary Report

Result Details For Cycle No 210103 and Sample No 03

Report Date : 19/03/2021

Instrument : Roche cobas c 311

Analyte	StandardUnit	Result Value	Mean	Z-Score	RMZ
@ Glucose	mg/dl	81.00	75.76	1.01	0.45
@ Urea	mg/dl	29.00	25.81	1.19	0.74
@ Creatinine	mg/dl	0.76	0.78	-0.04	0.32
@ Phosphorous Inorganic	mg/dl	3.60	3.39	0.57	0.38
@ Cholesterol	mg/dl	152.00	150.00	0.15	0.15

Legend @ : z score ≤ 2.0 - Acceptable

! : 2.0 < z score < 3.0 - Warning

X : z score ≥ 3 - Unacceptable

# : Not Evaluated

⌚ : Delayed Result Entry

\* : Not considered for evaluation.

Total Parameters	5
Not Evaluated Parameters	0
Evaluated Parameters	5
Outlier Parameters (X)	0
EQAS Score Biochemistry	100.00 %

*PK Nigam*

Dr Puneet Kumar Nigam  
 PT coordinator & Technical Manager, MHL EQAS  
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 Mumbai - 400070



Lab 187418

HIRA CLINICAL LAB  
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INDIA

Sample Summary Report  
Clinical Chemistry (Monthly) Program

Cycle 19

Jul 2020 - Jul 2021  
Sample No: 10  
Sample Date: 26 Apr 21  
Lot No: 211800



Instrument: Roche cobas 6000/8000/c 311/c 503

Analyte	Unit	Result	Mean	Z-score	RMZ	Comparator
✓ Albumin	g/dL	2.47	2.35	1.51	0.29	Peer
✓ ALT (ALAT/GPT)	U/L	25	26.6	-1.56	0.32	Peer
✗ Amylase, Pancreatic	U/L	83	67.0	8.09	7.36	Peer
✓ AST/GOT	U/L	29	32.5	-1.82	-1.53	Peer
▽ Bilirubin, Direct	mg/dL	0.44	0.499	-2.72	3.69	Peer
▽ Bilirubin, Total	mg/dL	1.2	1.09	2.56	3.53	Peer
✗ Calcium	mg/dL	5.4	6.01	-3.28	-1.00	Peer
✓ Chloride	mmol/L	78	77.2	0.30	-0.91	Peer
✗ Cholesterol, Total	mg/dL	79	92.4	-5.00	0.32	Peer
▽ G-Glutamyltransferase	U/L	72	76.5	-2.36	-0.16	Peer
✗ Glucose	mg/dL	26	30.2	-4.99	-1.10	Peer
✓ Phosphorus	mg/dL	2	1.99	0.21	-0.12	Peer
✓ Potassium	mmol/L	1.9	1.88	0.40	-0.17	Peer
✓ Protein, Total	g/dL	3.7	3.65	0.61	0.42	Peer
✓ Sodium	mmol/L	115	116	-0.53	-1.58	Peer

Instrument: Roche cobas 6000/c 311/c 503

Analyte	Unit	Result	Mean	Z-score	RMZ	Comparator
✓ Alkaline Phosphatase	U/L	61	64.7	-0.99	-0.47	Peer
✓ Cholesterol, HDL	mg/dL	21	21.2	-0.22	1.17	Peer
✓ Creatinine	mg/dL	3.49	3.67	-1.57	-1.24	Peer
✓ Triglycerides	mg/dL	54	54.9	-0.48	0.49	Peer
▽ Urea	mg/dL	16	14.4	2.92	0.50	Peer
✓ Uric Acid	mg/dL	3	3.13	-1.26	-1.10	Peer

Instrument: Roche Elecsys / cobas e 411 Series

Analyte	Unit	Result	Mean	Z-score	RMZ	Comparator
✓ T3, Free	pg/mL	2.1	2.09	0.08	-1.04	Peer
✓ T3, Total	ng/mL	0.97	0.848	1.84	-0.39	Peer
✓ T4, Free	ng/dL	0.97	0.967	0.06	0.12	Peer
✓ T4, Total	µg/dL	4.95	4.71	0.71	0.07	Peer
✓ TSH	µIU/mL	0.92	0.830	0.76	1.02	Method

Legend: ✓ No Warnings    ✗ Missing Result     Late Results    ▽ 2.0 ≤ |Z-score| < 3.0    ✗ |Z-score| ≥ 3.0  
\* Amended Result (per participant's request)    † Non-robust determination of Mean and SD

Problem Classification: \_\_\_\_\_

Corrective Action: \_\_\_\_\_

Reviewed by: \_\_\_\_\_

Date: \_\_\_\_\_

HIRA CLINICAL LAB (441)

Outlier And Analyte Summary Report

Result Details For Cycle No 210103 and Sample No 01

Report Date : 19/03/2021

Instrument : Roche cobas c 311

Analyte	StandardUnit	Result Value	Mean	Z-Score	RMZ
@ Bilirubin Total	mg/dl	0.30	0.20	1.65	1.83
@ Bilirubin Direct	mg/dl	0.09	0.09	-0.14	0.97
@ Total Protein	g/dL	6.90	6.47	1.83	1.83
@ Albumin	g/dL	3.90	3.82	0.59	0.59
@ Uric Acid	mg/dl	4.30	3.95	1.07	1.07
@ Calcium	mg/dl	8.70	7.92	1.40	1.40
@ Triglycerides	mg/dl	129.00	127.01	0.23	0.23
! ALT	U/L	18.00	13.02	2.17	1.80
@ AST	U/L	26.00	20.46	1.59	0.81
@ ALP	U/L	80.00	78.32	0.12	-0.17
@ Amylase	U/L	69.00	66.72	0.47	0.47
@ Chloride	mmol/L	91.00	87.23	0.55	0.55
@ Sodium	mmol/L	126.00	124.25	0.39	0.39
@ Potassium	mmol/L	4.40	4.32	0.46	0.46

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

Total Parameters	14
Not Evaluated Parameters	0
Evaluated Parameters	14
Outlier Parameters (X)	0
EQAS Score Biochemistry	100.00 %

PKNigam

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 Mumbai - 400070

CAPA taken for ALT, outlier.

The leftover EQAS was thawed, mixed & rerun on 20/3/21  
 The new value came as 17.3 U/Lr which gives  
 a Z score of less than 2%. Hence the  
 previous result submitted was a random error

End of Report

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*Hira*  
 20/3/21