Weqas Unit 6, Parc Tŷ Glas Llanishen, Cardiff, CF14 5DU

Tel: 02920 314750 Fax: 02920 314760 Email: contact@weqas.com



EXTERNAL QUALITY ASSESSMENT



INTERNAL QUALITY CONTROL



REFERENCE MEASUREMENT SERVICES



EDUCATION & TRAINING



# GLOBAL PROVIDER OF QUALITY IN DIAGNOSTIC MEDICINE

# Wegas Connect POCT EQA Report Interpretation

Samantha Jones

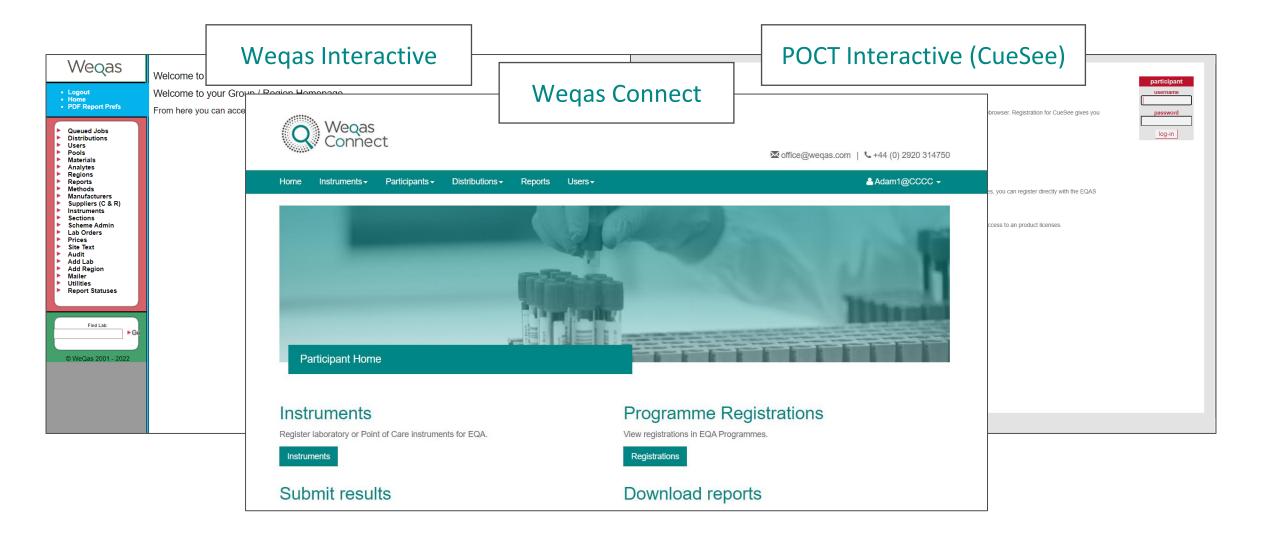


# **Presentation Summary**

- Wegas Connect current migration status for POCT
- Current Report Repertoire
- Standard Report (covered in full by Gareth Davies on Day 1)
- Simplified Report
- POCT Co-ordinators Report
- Poor Performance Report
- Non Returns Report
- Raw Data Report
- > Instrument Report



# One portal for all programmes – Weqas Connect

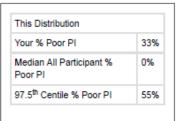


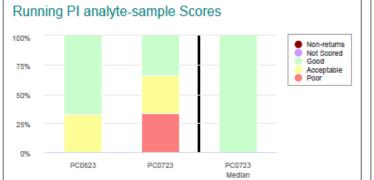
# Standard Reports

Programme: Procalcitonin • Distribution Code: PC0723

Distribution Start: 18-Jul-2023 • Distribution End: 01-Aug-2023 • Report Issued: 10-Aug-2023 • Report Status: Final Requested By: gareth@weqas.com

Weqas





PI Ranges
<1 Good
1-2 Acceptable
>2 Poor

Hyperlink to take you directly to the analyte report

Location

Instrument Name
Instrument Serial # 1393-838R0

Procalcitonin Warning

Overall % poor PI 33%

Overall % Non-return 0%

Individual Sample
Pls converted to
performance
category of
'warning'

Weqas specific comment

Participant comment

\*\*\*\*\* Please note\*\*\*\*\*\*\*

The NQAAP expects 100% compliance on EQA returns. If you are enrolled for an analyte and have not returned a result (denoted by NRR in your PI table), this will be treated as a poor performance score. Please let us know as soon as possible if you are no longer providing this analyte as part of your diagnostic service.

#### Distribution Specific Comment

Meaning

Not enrolled for this analyte

This quantitative analyte not scored for this distribution

Analyte enrolled but no

results returned

PI

Code

There is no specific comment for this distribution.

No participant comments have been submitted for any instruments for this distribution.

Programme: Procalcitonin • Distribution Code: PC0723

Distribution Start: 18-Jul-2023 • Distribution End: 01-Aug-2023 • Report Issued: 10-Aug-2023 • Report Status: Final

Participant Code: WQ000 • Location: • Analyser Name: n/a • Serial #: 1393-838R0

Date Samples received: 19-Jul-2023 • Date of Analysis: 19-Jul-2023 • Operator Details: TH • Storage Conditions: 2 - 8 °C

Analyte: Procalcitonin • Method: Radiometer • Kit: PCT Test Kit (942-970)

			Procalcitonin ng/ml		
	Your reported result (ng/ml)		Method: Radiometer	Instrument Model: AQT90 FLEX	Overall
Sample 1		Mean	0.575	0.575	0.485
	0.58	SD	0.024	0.024	0.038
	0.50	Uncertainty	0.0148	0.0148	0.0067
		n	4	4	52
	4.4	Mean	4.525	4.525	3.551
Sample 2		SD	0.251	0.251	0.294
		Uncertainty	0.1572	0.1572	0.0509
		n	4	4	52
		Mean	9.325	9.325	7.291
Sample 3	9.5	SD	0.457	0.457	0.615
oumpie o	0.0	Uncertainty	0.2857	0.2857	0.1067
		n	4	4	52

Your result compared to Method and Overall Mean.

Instrument data provided for information.

Hyperlink here to drill down into instrument details for this method group.



#### Instrument Report

Distribution Code: PC0723
Distribution Date: 18-Jul-2023
Analyte: Procalcitonin (ng/ml)
Method: Radiometer
Manufacturer: All
Instrument Model: AQT90 FLEX
Kit: All

#### Procalcitonin

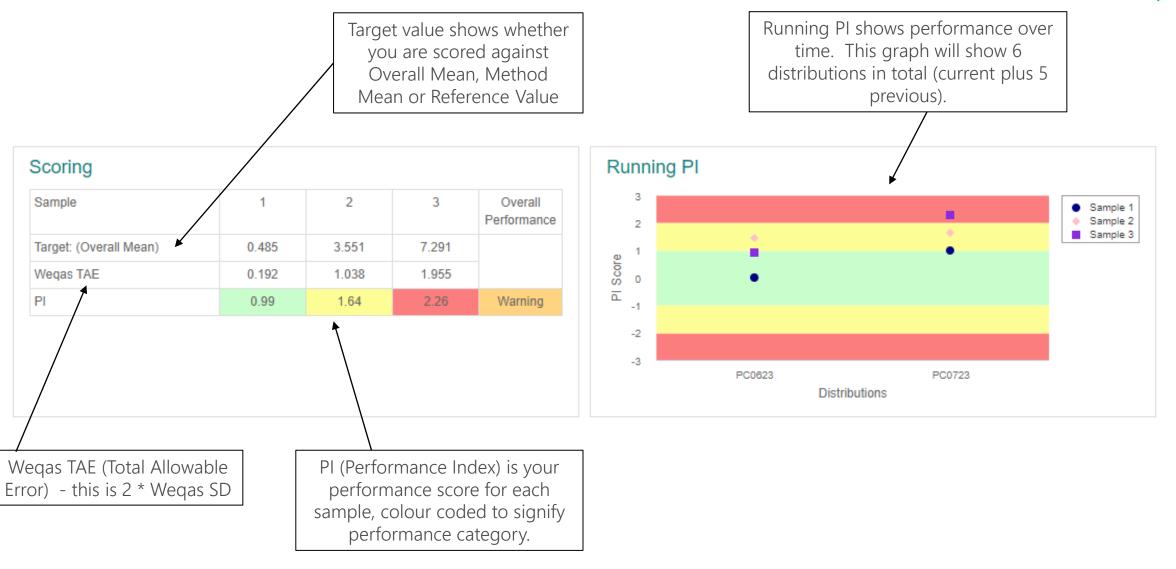
Key



Participant Code	Location Name	Instrument Name	Instrument Serial Number	1	2	3
WQ0000			838R0	0.57	4.6	8.9
WQ00			1393-838R0	0.58	4.4	9.5
WQ0			I393-838R	0.55	4.3	9.1

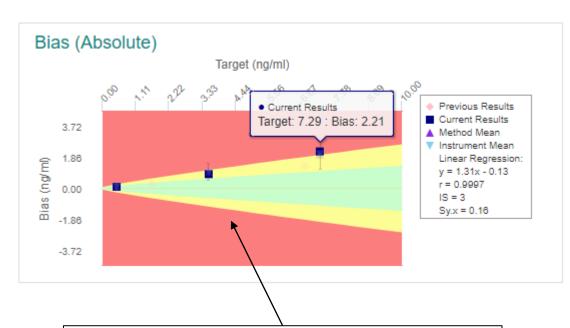


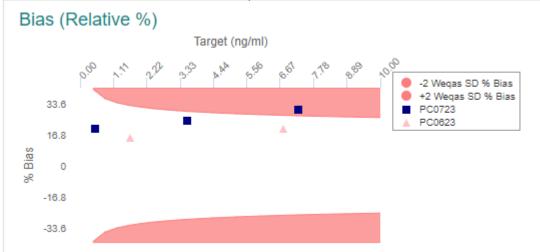
6





Relative Bias chart (% bias). In this example, data shows positive bias for all samples





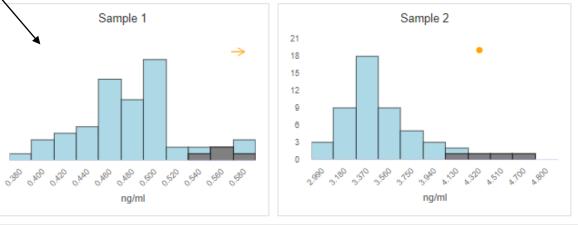
Absolute Bias chart (Bias in units of measurement. In this example data shows proportional positive bias (y=mx+c shows m as 1.31, so 31% positive bias).

Participant data follows instrument data.

The histograms shows breakdown of results for each sample, showing the spread of results for All Results, 'My Method' and 'My Instrument'.

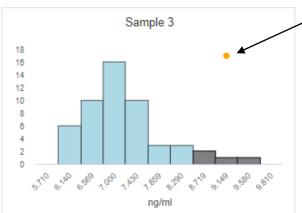
The Method Summary shows Mean and CV for each Method for each sample.





Sy.x is the average deviation from the best fit line and is an index of scatter.

IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)



#### Method Summary

PC0723	Sample 1		Sample 2		Sample 3	
Method Name	Mean	CV%	Mean	CV%	Mean	CV%
Abbott (n=8)	0.326	19.1	2.519	10.8	5.025	11.4
Beckman (n=8)	0.469	8.4	3.745	6.5	7.706	7.2
Radiometer (n=4)	0.575	4.1	4.525	5.6	9.325	4.9
Roche ECLIA (n=29)	0.486	5.0	3.412	5.4	7.056	6.3
Siemens (n=3)	0.673	3.5	4.963	1.7	10.220	3.1

■ All Results ■ My Method ■ My Instrument ● My Result

There are no Wegas or Participant supplied comments for Procalcitonin for this distribution.

Weqas

The orange dot shows where your result lies. An orange arrow signifies your result is outside of the graph limits.

Any analyte
specific
comments from
Weqas or
the participant are
shown here.

Reports are very interactive.

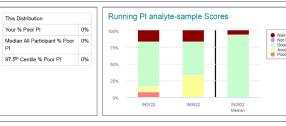
You can hover over various parts of any of the graphical displays within the reports to focus in on the element you wish to see.

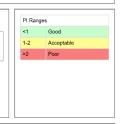
#### Sign in - Wegas Connect

Participant Code: WQ000

#### Wegas

Unit 6, Parc Ty Glas
Llanishen
Cardiff
United Kingdom
CF14 5DU
Tel: 02920 314750
Email: office@weqas.com
Programme Organiser: Mrs Annette Thomas





Location	Instrument Serial #	Instrument Name	INR	Overall % Poor PI	Overall % Non-Return
Anti-Coag Clinic	TZ1000001		Good	0%	0%
	TZ1000002		Acceptable	0%	0%
Day Surgery Unit	TZ1000003		Good	0%	0%
Endoscopy Unit	TZ1000004		Good	0%	0%
Ward 1	TZ1000005		Acceptable	0%	0%
Ward 2	UQ0000001		Acceptable	0%	0%
Pathology 1	UQ0000002		Good	0%	0%
Ward 3	TZ1000006		Good	0%	0%
Ward 4	TZ1000007		Acceptable	0%	0%
Ward 5	UQ0000003		NRR	0%	100%
West Building	TZ1000008		NRR	0%	100%
West Building Ward 1	U00000004		Good	0%	0%

# PI Code Meaning NIA Not enrolled for this analyte NRR Analyte enrolled but no results returned N/S This quantitative analyte not scored for this distribution

#### \*\*\*\*\* Please note\*\*\*\*\*\*

The NQAAP expects 100% compliance on EQA returns. If you are enrolled for an analyte and have not returned a result (denoted by NRR in your PI table), this will be treated as a poor performance score. Please let us know as soon as possible if you are no longer providing this analyte as part of your diagnostic service.

Distribution Specific Comment

There is no specific comment for this distribution.

Participant submitted comments					
Location Instrument Name / Serial # Distribution specific comment from the participant					
West Building	TZ1000008	ANALYSER NOT IN CLINICAL USE - AWAITING TRAINING FROM ROCHE			

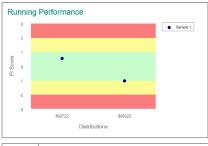
Programme: POCT INR • Distribution Code: IN0922
Distribution Start: 13-Sep-2022 • Distribution End: 11-Oct-2022 • Report Issued: • Report Status: n/a

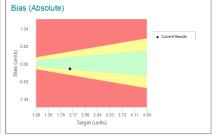
Participant Code: WQ00000 • Location: Anti-Coag Clinic • Analyser Name: n/a • Serial #: TZ1000002
Date Samples received: n/a • Date of Analysis: n/a • Operator Details: n/a • Storage Conditions: 2 - 8 °C

Analyte: INR · Method: CoaguChek Pro II · Kit: na









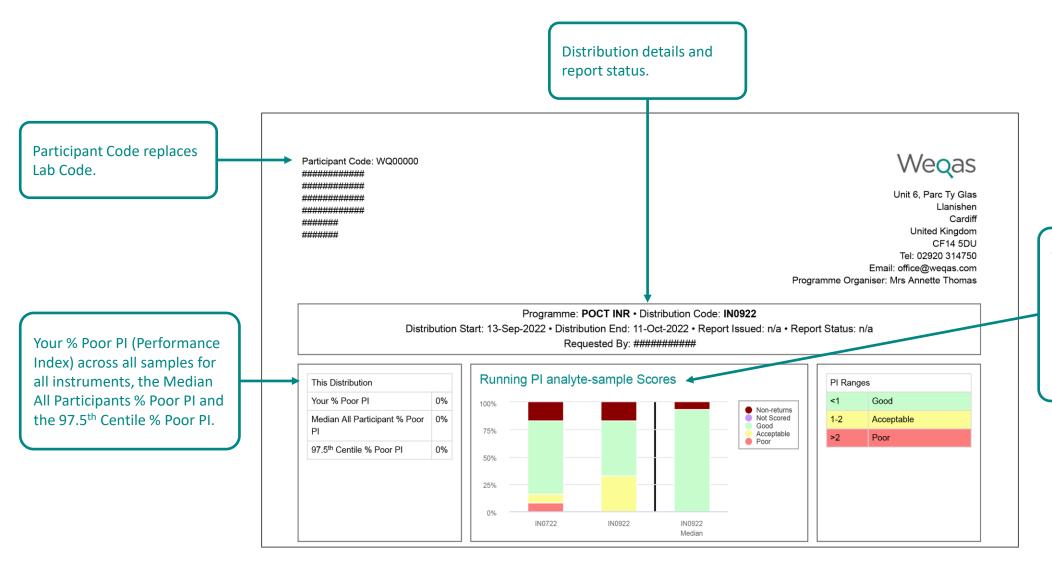


Your overall performance for this analyte is: Acceptable

• Your results for this distribution are acceptable

There are no Wegas or Participant supplied comments for INR for this distribution.





The running table shows the current distribution PI scores, and ultimately the previous 5 distribution PI scores for all analytes, for your Participant Code, plus all-Participant Median performance.



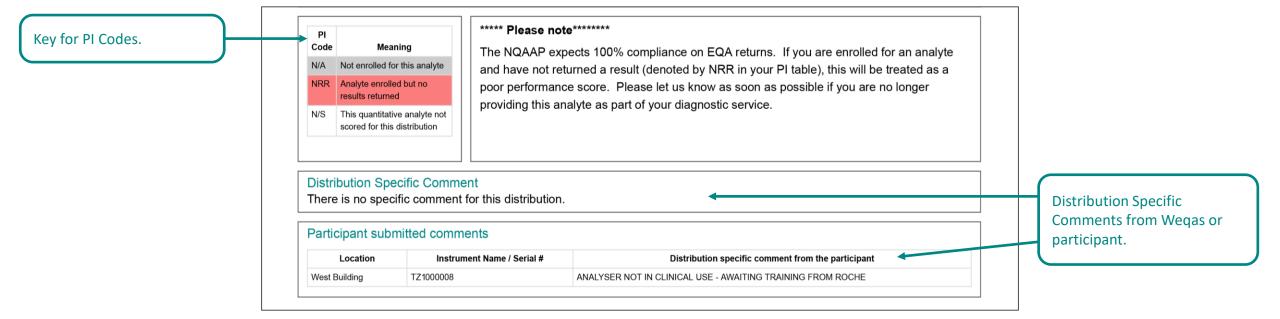
The PI Scores table shows performance for all analytes and all instruments.

PI Scores are converted into performance categories and colour coded.

Location	Instrument Serial #	Instrument Name	INR	Overall % Poor Pl	Overall % Non-Return
Anti-Coag Clinic	TZ1000001		Good	0%	0%
	TZ1000002		Acceptable	0%	0%
Day Surgery Unit	TZ1000003		Good	0%	0%
Endoscopy Unit	TZ1000004		Good	0%	0%
Ward 1	TZ1000005		Acceptable	0%	0%
Ward 2	UQ0000001	,	Acceptable	0%	0%
Pathology 1	UQ0000002		Good	0%	0%
Ward 3	TZ1000006		Good	0%	0%
Ward 4	TZ1000007		Acceptable	0%	0%
Ward 5	UQ0000003		NRR	0%	100%
West Building	TZ1000008		NRR	0%	100%
West Building Ward 1	U00000004		Good	0%	0%

Overall % Poor PI across all analytes for each instrument, and Overall % non return for each instrument.

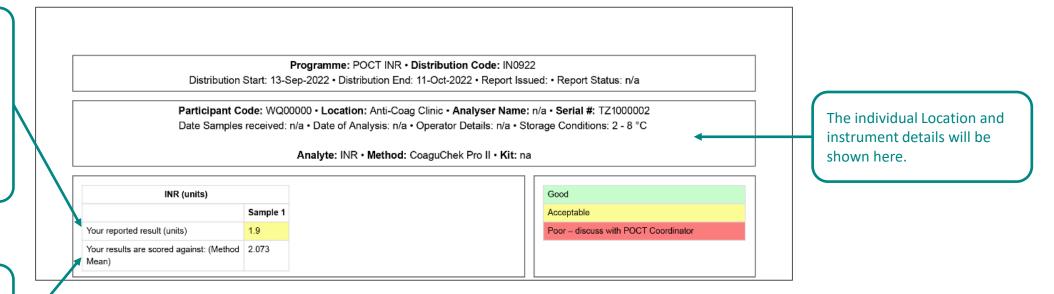






'Your reported result' will be shown in the units entered, in the Weqas standard units (if units entered are different from the Weqas standard units), and method corrected result (if appropriate for the analyte).

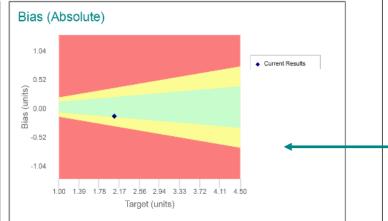
This will show whether you have been scored against Reference Value, Method Mean or Overall Mean and the actual target value will be shown here.





Running Performance chart shows the PI (Performance Index) score for each sample for the current distribution and the last 5 distributions, with colour coding for each performance category.

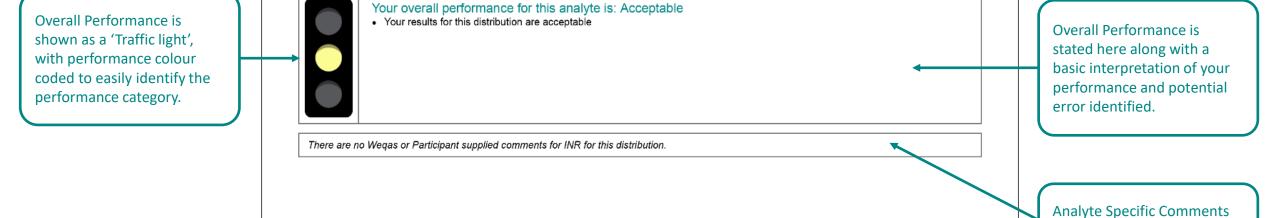




The Bias (Absolute) Plot shows absolute bias in Weqas standard units for each sample for the current distribution. The x-axis is the target value; if the target value is a Reference Value or the Overall Mean, your Method Means will be plotted.



from Wegas or participant.





### **Performance Comments**

Your results for this distribution are acceptable

You have at least one sample in this distribution with a poor score: |score| > 2

You have at least two samples in this distribution with a poor score: |score| > 2

Your results show a consistent bias.

Please discuss your results with your EQA officer / POCT Co-ordinator

There are no current performance alerts for this analyte

Non-compliance: you have not reported results for this analyte

You have at least one sample in this distribution with a very poor score: |score| > 3

Your results suggest a potential bias

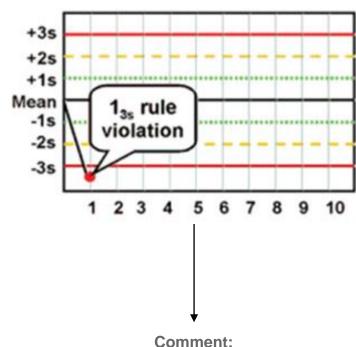
You have poor performance for this distribution due to a mixed positive and negative bias

Scoring is currently unavailable for your reported results

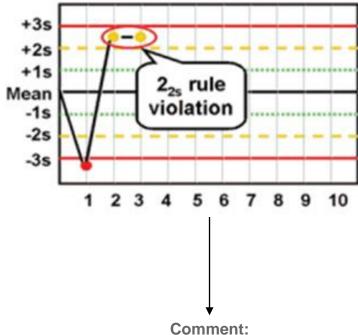
You have a poor score for this distribution: |score| > 2



# Examples of rules used for the Performance Alert



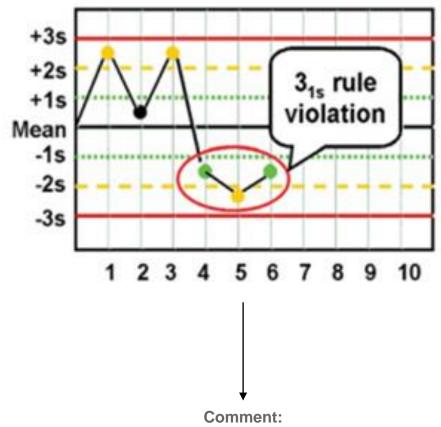
You have at least one sample in this distribution with a very poor score: |score| > 3



You have at least two samples in this distribution with a poor score: |score| > 2

#### **Consistent Bias**





Your results show a consistent bias.

The rule is used when the distribution has a set of 3 or more samples.

If the PI (Performance Index) for all samples is >1 OR PI for all samples < -1

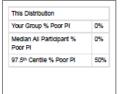
The rule does not show whether the bias is positive or negative, but indicates that there is a bias to be investigated.

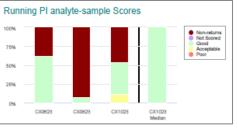
This example shows a negative bias.

#### Wegas

Unit 6, Parc Ty Glas
Llanishen
Cardiff
United Kingdom
CF14 500
Tel: 02920 314750
Email: office@weqas.com
Programme Organiser. Mrs. Annette Thomas

### Programme: POCT CRP - Distribution Code: CX1023 Distribution Start: 17-Oct-2023 - Distribution End: 31-Oct-2023 - Report Issued: 16-Nov-2023 - Report Status: Final Requested By: sam@weqas.com





PI Ranges		
<1 Good		
1-2 Acceptable		
>2 Poor		

Participant Code	Location	Instrument Serial #	Instrument Name	CRP	Overall % Poor PI	Overall % Non- Return
WQ00428	Surgery 1	AS 00519		Good	0%	0%
WQ00432	Surgery 2	AS 00537		NRR	0%	100%
WQ00437	Surgery 3	AS 00549		Acceptable	0%	0%
WQ00438	Surgery 4	AS 00381		NRR	0%	100%
WQ00443	Surgery 5	AS 00400		NRR	0%	100%
WQ00444	Surgery 6	AS 00519		NRR	0%	100%
WQ00461	Surgery 7	AS 00533		Good	0%	0%
WQ00462	Surgery 8	AS 00518		NRR	0%	100%
WQ00464	Surgery 9	AF 200333		Good	0%	0%
WQ00470	Surgery 10	AS 00339		Good	0%	0%
WQ00471	Surgery 11	AS 00548		NRR	0%	100%
WQ00475	Surgery 12	AS 00558		Acceptable	0%	0%
WQ00477	Surgery 13	AF 200356		Good	0%	0%

PI	
Code	Meaning
N/A	Not enrolled for this analyte
NRR	Analyte enrolled but no results returned
N/S	This quantitative analyte not scored for this distribution

\*\*\*\*\* Please note\*\*\*\*\*\*\*

The NQAAP expects 100% compliance on EQA returns. If you are enrolled for an analyte and have not returned a result (denoted by NRR in your PI table), this will be treated as a poor performance score. Please let us know as soon as possible if you are no longer providing this analyte as part of your diagnostic service.

#### Distribution Specific Comment

There is no specific comment for this distribution.

# Group User Summary page



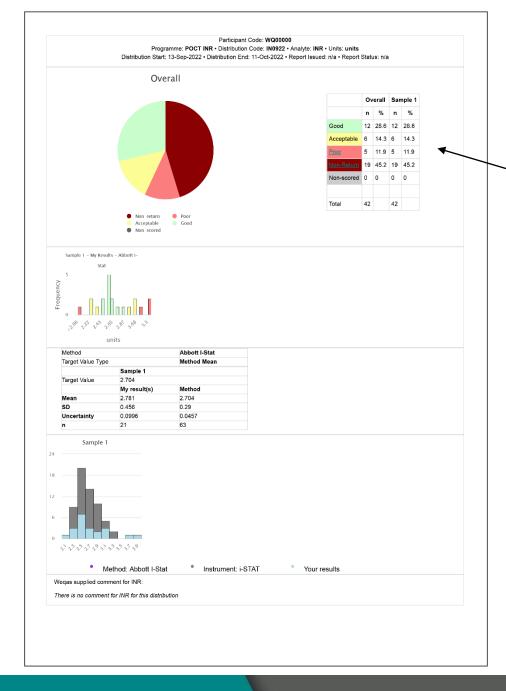
Participant	Location	Instrument Name / Serial #	Distribution specific comment from the participant
WQ00428	Surgery 1	AS 00519	no lot number provided
WQ00461	Surgery 7	AS 00533	no lot number given and there is a possibility that the sample has been left out of the fridge before testing
WQ00464	Surgery 9	AF 200333	no lot numbers provided
WQ00470	Surgery 10	AS 00339	no lot number supplied
WQ00475	Surgery 12	AS 00558	no lot number provided
WQ00477	Surgery 13	AF 200356	no lot number provided

# POCT Co-ordinators Report

Reports are very interactive.

You can hover over various parts of any of the graphical displays within the reports to focus in on the element you wish to see.

Sign in - Wegas Connect



Weqas

Hyperlinks on 'Poor' and 'Non Returns' to take you to further information.

### Poor Performance report from Hyperlink



Participant Code: WQ00

Programme: POCT INR • Distribution Code: IN0922 • Analyte: INR • Units: units

Distribution Start: 13-Sep-2022 • Distribution End: 11-Oct-2022 • Report Issued: 26-Oct-2022 • Report Status: Final

Location	Serial #	Name	Sample 1 result	Sample 1 score	Overall performance
	338	n/a	3.3	2.76	Poor
	338	n/a	3.2	2.29	Poor
	338	n/a	3.3	2.76	Poor
	34	n/a	3.2	2.29	Poor

PDF will be created only for the sites that have poor performance to allow full review of the individual reports.

### Non-Returns report from Hyperlink



#### Non-Returns Report

Participant: WQ00001

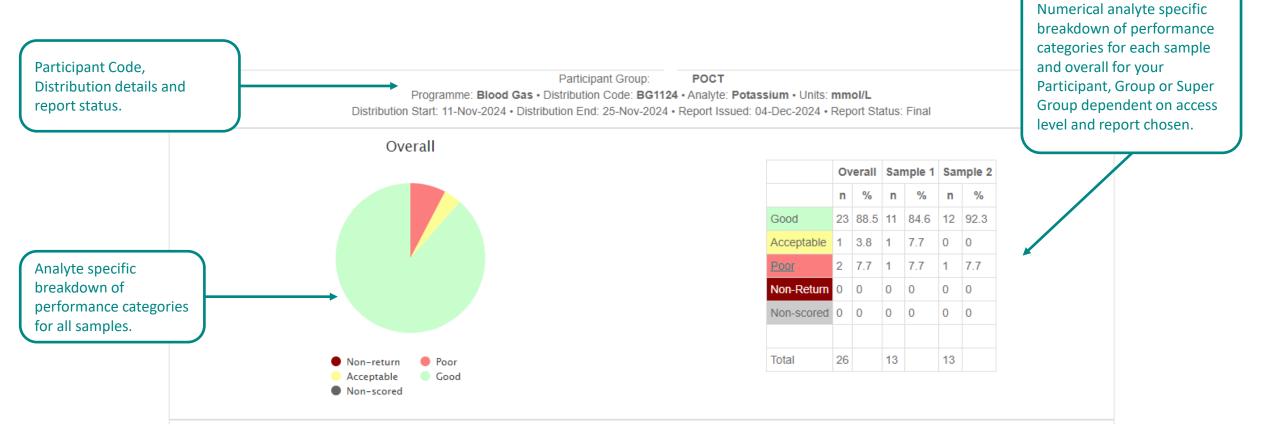
Programme: POCT INR • Distribution Code: IN0922 • Analyte: INR

Distribution start: 13-Sep-2022 • Distribution End: 11-Oct-2022 • Report Issued: 26-Oct-2022 • Report Status: n/a

Participant Code	Location	Serial #	Name
WQ00001	POCT Lab		n/a
WQ00001	POCT Lab		n/a

# **POCT Co-ordinators Report**





# **POCT Co-ordinators Report**



### Method specific data table showing:

- Target Value to which the submitted result is compared against and Target Value type e.g. Method Mean.
- Mean and SD of your submitted results for this method / instrument.
- Method data (all participants within this method) is also supplied in the right-hand column.

If you have more than one meter type, this data will be shown in a separate table.



Histograms showing the spread of your results. Bars are colour coded to show performance categories across the range.

www.weqas.com 24

13

708

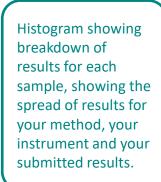
705

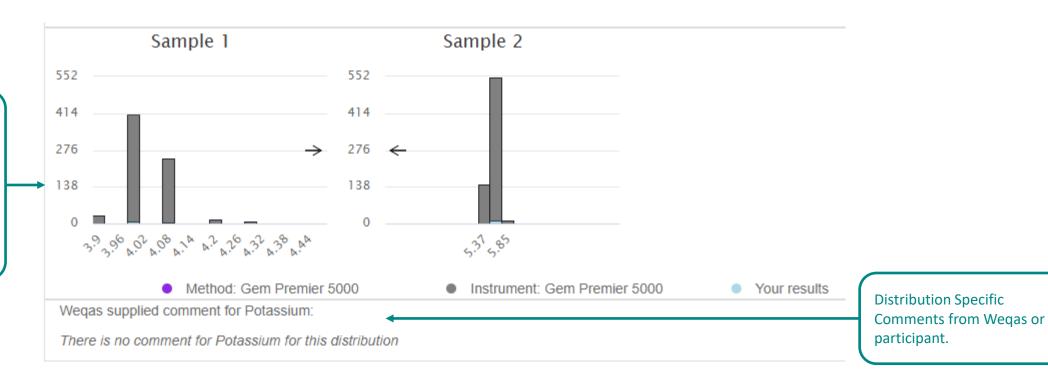
13

n

# **POCT Co-ordinators Report**









# Raw Data Report

<b>Distribution Code</b>	<b>Distribution Start Date</b>	<b>Distribution Close Date</b>	Analyte Name	Location	Serial Number	Instrument Name
GK1124	29-Oct-2024	19-Nov-2024	Glucose	A&E	552043	
GK1124	29-Oct-2024	19-Nov-2024	Ketones	Paeds OPD	425851	

Sample 1 Target Value	Sample 1 Reported Value	Sample 1 PI Score	<b>Analyte Performance Category</b>
10.24	10.1	-0.18	Good
2.21	2.2	-0.02	Good

<b>Linear Regression Slope</b>	<b>Linear Regression Intercept</b>	Standard Deviation Of Residuals	The Coefficient Of Linear Correlation	Imprecision Score	Sigma Score

# Instrument Report – all instruments

#### Instrument Report

Distribution Code: CR1023
Distribution Date: 09-Oct-2023

Analyte: All Method: All

Manufacturer: All Instrument Model: All

Kit: All

#### Creatinine

Key



Participant Code	1	2	3
WQ00001			
WQ00002	259	706	476
WQ00002	285	732	492
WQ00007	364	1090	665
WQ00014	234	764	451
WQ00014	260	784	492
WQ00014	300	748	460
WQ00036	384	1081	654
WQ00038	263	768	474
WQ00038	240	775	468
WQ00038	302	765	478

Mean	22.9	6.4	10.3
SD	4.6	1	1
Uncertainty	0.52	0.11	0.11
Number	125	125	123
Reference Value			
Nonscoring Reference Value			

Wec	as
-----	----

Method	Instrument	Kit		1	2	3
I-STAT 4vMDRD			Mean	14.1	4	6.9
			SD	0.8	0	0.6
			Uncertainty	0.24	0	0.17
			Number	18	18	17
	Abbott i-STAT		Mean	15.6	4	7.5
			SD	0.6	0	0.6
			Uncertainty	0.43	0	0.41
			Number	3	3	3
	Abbott i-STAT Alinity		Mean	13.9	4	6.8
			SD	0.7	0	0.5
			Uncertainty	0.23	0	0.16
			Number	15	15	14
-STAT CKD-EPI			Mean	15	4	7
			SD	1.2	0.5	0.6
			Uncertainty	0.26	0.11	0.13
			Number	36	36	35
	Abbott i-STAT		Mean	15	4.2	7.7
			80	1.2	0.5	0.9
			Uncertainty	0.63	0.24	0.47
			Number	6	6	6
	Abbott i-STAT Alinity		Mean	15	4	6.9
			SD	1.3	0.6	0.6
			Uncertainty	0.29	0.13	0.13
			Number	30	30	29
NOVA 4vMDRD			Mean	19.6	6	10.5
			80	2.3	0.7	1.1
			Uncertainty	0.42	0.12	0.2
			Number	48	48	48
	Nova StatSensor		Mean	19.5	6	10.4
	Creatinine Connectivity Meter		SD	2.3	0.7	1.1
			Uncertainty	0.43	0.12	0.21
			Number	46	46	46
	Nova StatSensor Xpress		Mean	21.5	5.5	11.5
	Creatinine Meter		SD	0.8	0.8	0.8
			Uncertainty	0.71	0.71	0.71
			Number	2	2	2

# Instrument Report –

### instrument / kit selection

#### Instrument Report

Distribution Code: CR1023
Distribution Date: 09-Oct-2023
Analyte: Creatinine (µmol/L)

Method: i-STAT

Manufacturer: Abbott
Instrument Model: i-STAT

Kit: Abbott 03P84-25 i-STAT CREA

#### Creatinine

Key



1	2	3
380	1064	691
361	1118	673
362	1147	680
369	1068	682
378	1085	695
375	1054	689
354	1053	658
382	1114	674
346 *	1011 *	654
377	1138	663
344 *	1032 *	640
343 *	1050	627 *
	380 361 362 369 378 375 354 382 346 * 377	380 1064 361 1118 362 1147 369 1068 378 1085 375 1064 354 1053 382 1114 346* 1011* 377 1138



Overall	1	2	3
Mean	243.7	702.8	432.3

SD	44.4	101.3	63.3
Uncertainty	4.32	9.86	6.19
Number	165	165	163
Reference Value			
Nonscoring Reference Value			

Method	Instrument	Kit		1	2	3
I-STAT			Mean	367.4	1096.4	672.1
			SD	12.2	40.2	23.2
			Uncertainty	1.64	5.38	3.15
			Number	87	87	85
	Abbott i-STAT		Mean	368	1090.2	669.3
			SD	12.7	50.2	25.5
			Uncertainty	2.86	11.47	5.81
			Number	31	30	30
		Abbott I-STAT CREA	Mean	368	1090.2	669.3
		03P84-25	SD	12.7	50.2	25.5
			Uncertainty	2.86	11.47	5.81
			Number	31	30	30