

CERTIFICATE

Survey of 19 May 2023

You have fulfilled the requirements of the External Quality Assessment with the following analysis

Urine Chemistry 01 (Qualitative) (171):

Validity 12 months:

Ascorbic Acid
Bilirubin
Erythrocytes
Glucose
Ketone Bodies
Leucocytes
Nitrite
Protein
Urobilinogen
pH
specific gravity

(R) analysis is subject to the RiliBÄK

Participant:
43733
CG Cytogenomics Medical Laboratory
CG Cytogenomics
313 Hrakleiou Av.
14122 Neo Irakleio

Düsseldorf, 06 June 2023



Prof. Dr. med. Michael Spannagl
(Head of Reference Institution)



Dr. Roman Fried
(Adviser)

CERTIFICATE OF PARTICIPATION

Survey of 19 May 2023

You have participated in the External Quality Assessment with the following analysis

Urine Chemistry 01 (Qualitative) (171):

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Bilirubin
Erythrocytes
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Dr. Roman Fried
(Adviser)

Listing and evaluation of the results

43733: CG Cytogenomics Medical Laboratory
CG Cytogenomics

Survey of 19 May 2023

Adviser:

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171

Urine Chemistry 01 (Qualitative)

Analyte	Sam- ple	Unit	Your value	Target value	TV- Type	Lower limit	Upper limit	Deviation	Z-Score	Meets criteria	
pH	31		6.3	6.2	ET	5.5	6.5	1.6%	0,333	+	
	32		6.5	6.5	SV	6	7	0.0%	0	+	
specific gravity	31		1.015	1.018	SV	1.008	1.028	-0.3%	-0,6	+	
	32		1.01	1.011	SV	1.001	1.021	-0.1%	-0,25	+	

Analyte	Sam- ple	Your unit	Stated value	Conversion factor	Method	Manu- facturer	Device	Cut Off
pH	31		6.3	1.00	177			
	32		6.5	1.00				
specific gravity	31		1.015	1.00	177			
	32		1.01	1.00				

Analyte	Sam- ple	Method	Manu- facturer	Device	Your specification(s)	Correct specification(s)	TV- Type	Meets criteria
Ascorbic Acid	31	177			negative (1)	negative (1)	M	+
	32				negative (1)	negative (1)	M	+
Bilirubin	31	177			negative (1)	negative (1)	M	+
	32				negative (1)	negative (1)	M	+
Erythrocytes	31	177			negative (1)	negative, borderline (1,2)	M	+
	32				positive (3)	positive (3)	M	+
Glucose	31	177			negative (1)	negative (1)	M	+
	32				negative (1)	negative (1)	M	+
Ketone Bodies	31	177			negative (1)	negative (1)	M	+
	32				negative (1)	negative (1)	M	+
Leucocytes	31	177			negative (1)	negative (1)	M	+
	32				positive (3)	positive (3)	M	+
Nitrite	31	177			negative (1)	negative (1)	M	+
	32				negative (1)	negative (1)	M	+
Protein	31	177			positive (3)	positive (3)	M	+
	32				negative (1)	negative (1)	M	+
Urobilinogen	31	177			negative (1)	negative (1)	M	+
	32				negative (1)	negative (1)	M	+

** BRAVO **

Individual summary of results

43733: CG Cytogenomics Medical Laboratory
CG Cytogenomics

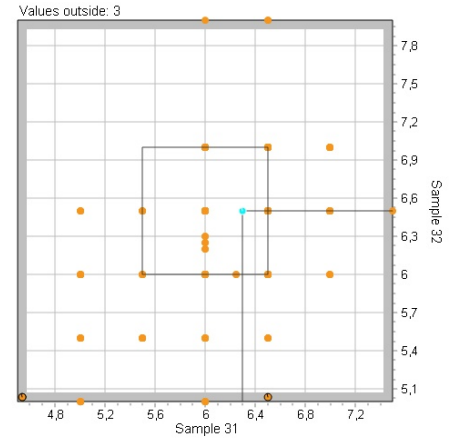
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171

Urine Chemistry 01 (Qualitative)

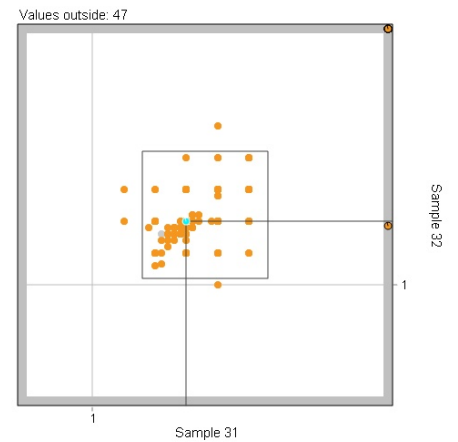
pH (N = 515)										
Collective	Sample	Target value	Target range			Participants collective			Rate (%)	
						AVG	CV	Num.	Sam.	total
all methods	31	6.2	5.5	-	6.5	6.2	4.8	515	94.0	90.1
	32	6.5	6	-	7	6.5	0	515	94.0	

Rate of success: 90,1%



specific gravity (g/ml, N = 498)										
Collective	Sample	Target value	Target range			Participants collective			Rate (%)	
						AVG	CV	Num.	Sam.	total
IRIS International	31	1.014	1.004	-	1.024	1.014	0	15	100	100
	32	1.009	0.999	-	1.019	1.009	0	15	100	
other providers	31	1.018	1.008	-	1.028	1.018	0.491	483	89.2	88.8
	32	1.011	1.001	-	1.021	1.011	0.396	483	89.9	

Rate of success: 89,2%





Urine Chemistry 01 (Qualitative)

Ascorbic Acid (N = 42, Rate of success: 95,2%)

Sample 31

Collective	negative (1)	borderline (2)	total
all methods	40 ●	2	42

Sample 32

Collective	negative (1)	total
all methods	42 ●	42

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

Bilirubin (N = 502, Rate of success: 99,2%)

Sample 31

Collective	negative (1)	positive (3)	total
Analyticon	7 ●	0	7
Siemens	128 ●	0	128
IRIS International	15 ●	0	15
AxonLab, Menarini	10 ●	0	10
Macherey-Nagel	12 ●	0	12
Roche	175 ●	0	175
Sysmex	84 ●	1	85
other providers	70 ●	0	70

Sample 32

Collective	negative (1)	positive (3)	total
Analyticon	7 ●	0	7
Siemens	128 ●	0	128
IRIS International	15 ●	0	15
AxonLab, Menarini	10 ●	0	10
Macherey-Nagel	12 ●	0	12
Roche	174 ●	1	175
Sysmex	83 ●	2	85
other providers	69 ●	1	70

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

Erythrocytes (N = 518, Rate of success: 92,1%)

Sample 31

Collective	negative (1)	borderline (2)	positive (3)	total
Analyticon	7 ●	1 ●	1	9
Siemens	105 ●	13 ●	12	130
IRIS International	8 ●	5 ●	2	15
AxonLab, Menarini	10 ●	0 ●	0	10
Macherey-Nagel	12 ●	0 ●	1	13
Roche	162 ●	2 ●	12	176
Sysmex	83 ●	2 ●	3	88
other providers	69 ●	4 ●	4	77

Sample 32

Collective	negative (1)	borderline (2)	positive (3)	total
Analyticon	0	0	9 ●	9
Siemens	3	1	126 ●	130
IRIS International	0	0	15 ●	15
AxonLab, Menarini	0	0	10 ●	10
Macherey-Nagel	2	0	11 ●	13
Roche	1	0	174 ●	175
Sysmex	1	0	87 ●	88
other providers	0	1	76 ●	77

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

Glucose (N = 520, Rate of success: 99,4%)

Sample 31

Collective	negative (1)	borderline (2)	total
Analyticon	9 ●	0	9
Siemens	130 ●	0	130
IRIS International	15 ●	0	15
AxonLab, Menarini	10 ●	0	10
Macherey-Nagel	13 ●	0	13
Roche	176 ●	1	177
Sysmex	88 ●	0	88
other providers	77 ●	1	78

Sample 32

Collective	negative (1)	borderline (2)	positive (3)	total
Analyticon	9 ●	0	0	9
Siemens	129 ●	0	1	130
IRIS International	15 ●	0	0	15
AxonLab, Menarini	10 ●	0	0	10
Macherey-Nagel	13 ●	0	0	13
Roche	177 ●	0	0	177
Sysmex	88 ●	0	0	88
other providers	77 ●	1	0	78

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

Ketone Bodies (N = 514, Rate of success: 99,8%)

Sample 31

Collective	negative (1)	positive (3)	total
Analyticon	8 ●	0	8
Siemens	128 ●	0	128
IRIS International	15 ●	0	15
AxonLab, Menarini	10 ●	0	10
Macherey-Nagel	12 ●	0	12
Roche	176 ●	1	177
Sysmex	88 ●	0	88
other providers	76 ●	0	76

Sample 32

Collective	negative (1)	total
Analyticon	8 ●	8
Siemens	128 ●	128
IRIS International	15 ●	15
AxonLab, Menarini	10 ●	10
Macherey-Nagel	12 ●	12
Roche	177 ●	177
Sysmex	88 ●	88
other providers	76 ●	76

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

Leucocytes (N = 516, Rate of success: 94,2%)

Sample 31

Collective	negative (1)	positive (3)	total
Analyticon	8 ●	0	8
Siemens	128 ●	0	128
IRIS International	15 ●	0	15
AxonLab, Menarini	10 ●	0	10
Macherey-Nagel	12 ●	1	13
Roche	177 ●	1	178
Sysmex	86 ●	1	87
other providers	77 ●	0	77

Sample 32

Collective	negative (1)	borderline (2)	positive (3)	total
Analyticon	0	0	8 ●	8
Siemens	1	4	122 ●	127
IRIS International	0	2	13 ●	15
AxonLab, Menarini	0	0	10 ●	10
Macherey-Nagel	0	0	13 ●	13
Roche	5	2	171 ●	178
Sysmex	1	2	84 ●	87
other providers	1	10	66 ●	77

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

Nitrite (N = 519, Rate of success: 97,9%)

Sample 31

Collective	negative (1)	positive (3)	total
Analyticon	9 ●	0	9
Siemens	128 ●	1	129
IRIS International	15 ●	0	15
AxonLab, Menarini	10 ●	0	10
Macherey-Nagel	13 ●	0	13
Roche	176 ●	2	178
Sysmex	87 ●	0	87
other providers	77 ●	1	78

Sample 32

Collective	negative (1)	borderline (2)	positive (3)	total
Analyticon	9 ●	0	0	9
Siemens	128 ●	0	1	129
IRIS International	15 ●	0	0	15
AxonLab, Menarini	10 ●	0	0	10
Macherey-Nagel	11 ●	0	2	13
Roche	176 ●	0	2	178
Sysmex	87 ●	0	0	87
other providers	76 ●	1	1	78

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective

Protein (N = 520, Rate of success: 94,8%)

Sample 31

Collective	negative (1)	borderline (2)	positive (3)	total
Analyticon	0	0	9 ●	9
Siemens	1	2	128 ●	131
IRIS International	1	0	14 ●	15
AxonLab, Menarini	0	0	10 ●	10
Macherey-Nagel	1	0	12 ●	13
Roche	1	2	174 ●	177
Sysmex	1	0	87 ●	88
other providers	2	4	71 ●	77

Sample 32

Collective	negative (1)	borderline (2)	positive (3)	total
Analyticon	9 ●	0	0	9
Siemens	129 ●	1	1	131
IRIS International	15 ●	0	0	15
AxonLab, Menarini	10 ●	0	0	10
Macherey-Nagel	12 ●	0	1	13
Roche	169 ●	3	5	177
Sysmex	86 ●	0	2	88
other providers	74 ●	3	0	77

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective



Urobilinogen (N = 507, Rate of success: 99%)

Sample 31

Collective	negative (1)	borderline (2)	total
Analyticon	8 ●	0	8
Siemens	123 ●	2	125
IRIS International	15 ●	0	15
AxonLab, Menarini	9 ●	0	9
Macherey-Nagel	13 ●	0	13
Roche	176 ●	0	176
Sysmex	86 ●	0	86
other providers	73 ●	1	74

Sample 32

Collective	negative (1)	borderline (2)	total
Analyticon	8 ●	0	8
Siemens	123 ●	2	125
IRIS International	15 ●	0	15
AxonLab, Menarini	9 ●	0	9
Macherey-Nagel	13 ●	0	13
Roche	175 ●	0	175
Sysmex	86 ●	0	86
other providers	74 ●	1	75

The point corresponds to the correct result, the horizontal bar corresponds to your specification, the vertical bar corresponds to your collective