Individual Report	QCMD 2020 Coronavirus Outbreak Preparedness EQA Pilot Study					
Catalogue Code: QAV204214	**Ref Code:** CVOP20	**Challenge:** S2	**Analysis Type:** Qualitative	**Dataset:**	**Report UID:**	**Laboratory**

Intended Results / Panel Composition

Sample Code	Sample Content	Matrix	Sample Relationships [1]	Detection Frequency [2]	Sample Status [3]	Percentage Correct (All) [4]	
						(%)	*(n)*
CVOP20S2-01	SARS-CoV-2	TM	4.30 dPCR Log10 Copies/ml (D1, DS1_2)	Frequently Detected	CORE	99.0	486
CVOP20S2-02	Coronavirus NL63	TM	4.64 dPCR Log10 Copies/ml	Negative	EDUCATIONAL	97.3	486
CVOP20S2-03	SARS-CoV-2	TM	3.30 dPCR Log10 Copies/ml (DS1_3)	Frequently Detected	CORE	96.3	486
CVOP20S2-04	Coronavirus OC43	TM	4.03 dPCR Log10 Copies/ml	Negative	EDUCATIONAL	97.9	486
CVOP20S2-05	Negative	TM		Negative	CORE	99.2	486
CVOP20S2-06	SARS-CoV-2	TM	4.30 dPCR Log10 Copies/ml (D1, DS1_2)	Frequently Detected	CORE	98.8	486
CVOP20S2-07	SARS-CoV-2	TM	5.30 dPCR Log10 Copies/ml (DS1_1)	Frequently Detected	CORE	99.2	486
CVOP20S2-08	SARS-CoV-2	TM	2.30 dPCR Log10 Copies/ml (DS1_4)	Detected	CORE	84.8	486

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[1] **Sample Relationships:** Indicates the relationships of the samples within this challenge. The highest titre member of dilution series DS1 is indicated by DS1_1 and further members of the series as DS1_2, DS1_3 etc. in order of reducing titre. Additional dilution series are indicated by DS2 (e.g DS2_1, DS2_2 etc.), DS3 (e.g. DS3_1, DS3_2 etc.). If one duplicate pair is present this is indicated by 'D1'. Further duplicate pairs are indicated by 'D2', 'D3' etc.
[2] **Detection Frequency:** To aid qualitative analysis each panel member is assigned a frequency of detection. This is based on the peer group consensus of all qualitative results returned from participants within the EQA challenge / distribution.
[3] **Sample Status:** EQA samples are defined as "CORE" or "EDUCATIONAL". Core proficiency samples are reviewed by the QCMD Scientific Expert(s). This is on the basis of scientific information, clinical relevance, current literature and, where appropriate, professional clinical guidelines. Participating laboratories are expected to report core proficiency samples correctly within the EQA challenge / distribution.
[4] **Percentage Correct (All):** Percentage of datasets (%) reporting the correct qualitative result and the total number of datasets (n) reported for each panel member.
For further details please refer to the current participant manual.

[1] **Sample Relationships:** Includes dPCR Log10 Copies/ml, the value obtained using a digital droplet PCR assay (modified from Eurosurveillance Jan 2020 Corman et al).

Please note: The values provided are for reference only. The values obtained by individual participating laboratories will vary from the dPCR values provided. This is because quantitation is dependent on the molecular workflow each laboratory uses (i.e. nucleic acid extraction and molecular platform / assay) as well as the standards or reference material used to calibrate the molecular workflow. In the absence of an International Standard or Certified Reference Material (CRM), QCMD uses Internal Reference Materials (IRMs) with values established using a dPCR reference assay in order to support the consistency and traceability of the EQA materials. This also helps aid the comparison of results across laboratories.

Samples **CVOP20S2-02** and **CVOP20S2-04** were included in the panel as educational specificity samples. For this assessment, these samples have been assigned as SARS-CoV-2 Negative.

Your Summary Results

EQA Assessment Group [1]	Commercial
Core Panel Detection (Qualitative) Score [2]	0

Core Panel Members Results

Sample Code	Qualitative Results			Your Quantitative Data (for information only) [3]		
	Percentage Correct (All) [4]	Your Result [5]	Detection Score [6]	Reported Value	Unitage	Cycle Threshold
CVOP20S2-01	99.0	Positive	0		N/A	30.7
CVOP20S2-03	96.3	Positive	0		N/A	33.7
CVOP20S2-05	99.2	Negative	0		N/A	-
CVOP20S2-06	98.8	Positive	0		N/A	30.6
CVOP20S2-07	99.2	Positive	0		N/A	27.6
CVOP20S2-08	84.8	Positive	0		N/A	36.9

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[1] **EQA Assessment Group:** To aid data analysis, participant results are grouped according to the molecular amplification/detection method specified within their molecular workflow for this challenge / distribution. For further details refer to the *Additional Information: Individual Panel Member Analysis* section of this report.

[2] **Core Panel Detection (Qualitative) Score:** An overall core panel detection score provided per challenge / distribution.

[3] **Quantitative Data (for information only):** This is the quantitative value, unitage and cycle threshold you provided when you submitted your results. For qualitative programmes this information is not used as part of your formal EQA assessment.

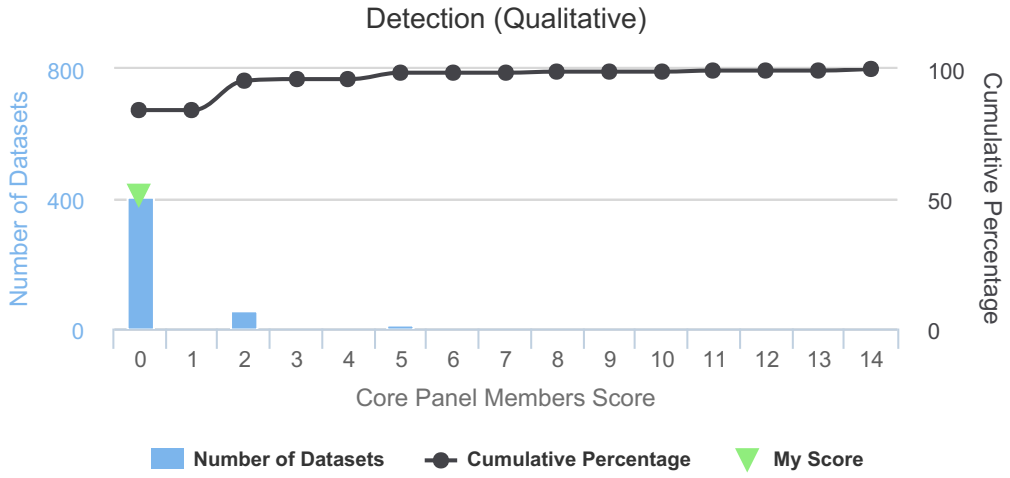
[4] **Percentage Correct (All):** Percentage of datasets (%) reporting the correct qualitative results for each panel member.

[5] **Your Result:** The qualitative result you reported for each sample within this EQA challenge / distribution.

[6] **Detection Score:** Your detection (qualitative) scores are based on the assigned detection frequency of each panel members, where 0 (zero) is "highly satisfactory" and 3 (three) is "highly unsatisfactory". Scores are provided for individual panel members.

For further details please refer to the current participant manual.

Core Panel Member Score Breakdown



Core Panel Member Score Breakdown - Detection: This figure gives you a breakdown of the qualitative detection scores for all qualitative datasets returned within this EQA challenge / distribution independent of the EQA assessment group. Panel detection scores are generated from only those panel members that are defined as “CORE”.

For further details please refer to the current participant manual.

My Workflow Details

The details of the workflow(s) used to submit your results for this challenge.

Name	SARS-CoV-2
Description	
Targets	V coronavirus

Assays	*Extraction* - DNA-TECHNOLOGY, RUSSIA
	• Commercial
	  ◦ Kit Manufacturer: *DNA-TECHNOLOGY, RUSSIA*
	  ◦ Kit Type: PREP *Viral NA Kit*
	
	Amplification - DNA-TECHNOLOGY, RUSSIA
	• Multiplex
	• Commercial
	  ◦ Kit Manufacturer: *DNA-TECHNOLOGY, RUSSIA*
	  ◦ Kit Type: *SARS-CoV-2/SARS-CoV, Multiplex REAL-TIME PCR Detection Kit*
	  ◦ Kit Version: -

Educational Panel Members Results

Sample Code	Qualitative Results			Your Quantitative Data (for information only) [1]		
	Percentage Correct (All) [2]	**Your Result** [3]	**Detection Score** [4]	Reported Value	Unitage	Cycle Threshold
CVOP20S2-02	97.3	Negative	0		N/A	-
CVOP20S2-04	97.9	Negative	0		N/A	-

[1] **Quantitative Data (for information only):** This is the quantitative value, unitage and cycle threshold you provided when you submitted your results. For qualitative programmes this information is not used as part of your formal EQA assessment.

[2] **Percentage Correct (All):** Percentage of datasets (%) reporting the correct qualitative results for each panel member.

[3] **Your Result:** The qualitative result you reported for each sample within this EQA challenge / distribution.

[4] **Detection Score:** Your detection (qualitative) scores are based on the assigned detection frequency of each panel members, where 0 (zero) is "highly satisfactory" and 3 (three) is "highly unsatisfactory". Scores are provided for individual panel members.

For further details please refer to the current participant manual.

Further Programme Details

Number of Participants	404
Number of Countries	60
Number of Respondents	323
Number of Datasets Submitted	486
Qualitative Results Returned	486 (100.0%)

Comments

Eight (1.6%) laboratories reported sample CVOP20S2-02 as Negative for SARS-CoV-2 and correctly reported the sample as Coronavirus NL63.

Nine (1.9%) laboratories reported sample CVOP20S2-04 as Negative for SARS-CoV-2 and correctly reported the sample as Coronavirus OC43.

EQA Programme Aims

To assess the proficiency of laboratories molecular technologies for the detection and determination of SARS-CoV-2 from other coronaviruses.

Feedback and Enquiries

Participants are encouraged to read the QCMD Participants' Manual, which can be downloaded from the QCMD website.

Any enquiries should be submitted through the ‘Contact Us’ form that you can find in the ‘Help’ section of your QCMD (ITEMS) Participant Profile Area.