LABQUALITY

External Quality Assessment Scheme

HIV-1, RNA
Round 1, 2023

Specimens
Please find enclosed 3 lyophilized human plasma samples S001, S002 and S003, each 1.2 mL.

Caution
Quality control specimens derived from human blood must be handled with the same care as patient samples, i.e. as potential transmitters of serious diseases. The specimens may contain infectious viruses.

Examinations
HIV-1, RNA, quantitative
HIV-1, RNA, qualitative

Storage and use
After arrival, the samples should be stored at +2…8 °C. When disposing the samples, instructions concerning disposal of infectious specimens must be followed.

Handle the samples in a biological safety cabinet. Formation of aerosols and splashes as well as injuries and other contamination must be avoided.

1. Let the samples warm up to room temperature before rehydration.

2. Carefully add 1.2 mL of DNAse and RNAse free water into each vial.

3. Let the content of the vials to dissolve for 30 minutes and mix the vials gently from time to time. Ensure that the mixture is homogenous before performing the assay.

4. Perform the assay immediately after rehydration of the samples by following the instructions given by the manufacturer of your routine test method.

Result reporting
Please enter the results and methods via LabScala (www.labscala.com). If you cannot find your method from the registry, please contact the EQA Coordinator. Qualitative results will be scored.

S001
LQ778623011

S002
LQ778623012

S003
LQ778623013

2023-03-07

INSTRUCTIONS

Product no. 5680
LQ778623011-013/US
UN3373

Subcontracting: Sample pretesting

If the kit is incomplete or contains damaged specimens, please report immediately to info@labquality.fi.

The results should be reported no later than **April 3, 2023**.

The expected results of the round are published in LabScala in the View Reports section by April 7, 2023.

Inquiries
EQA Coordinator
Outi Rauta
outi.rauta@labquality.fi

EQA-koordinaattori
Elina Tuovinen
elina.tuovinen@labquality.fi

Labquality Oy
Kumpulantie 15
FI-00520 HELSINKI
Finland

Tel. + 358 9 8566 8200
Fax + 358 9 8566 8280

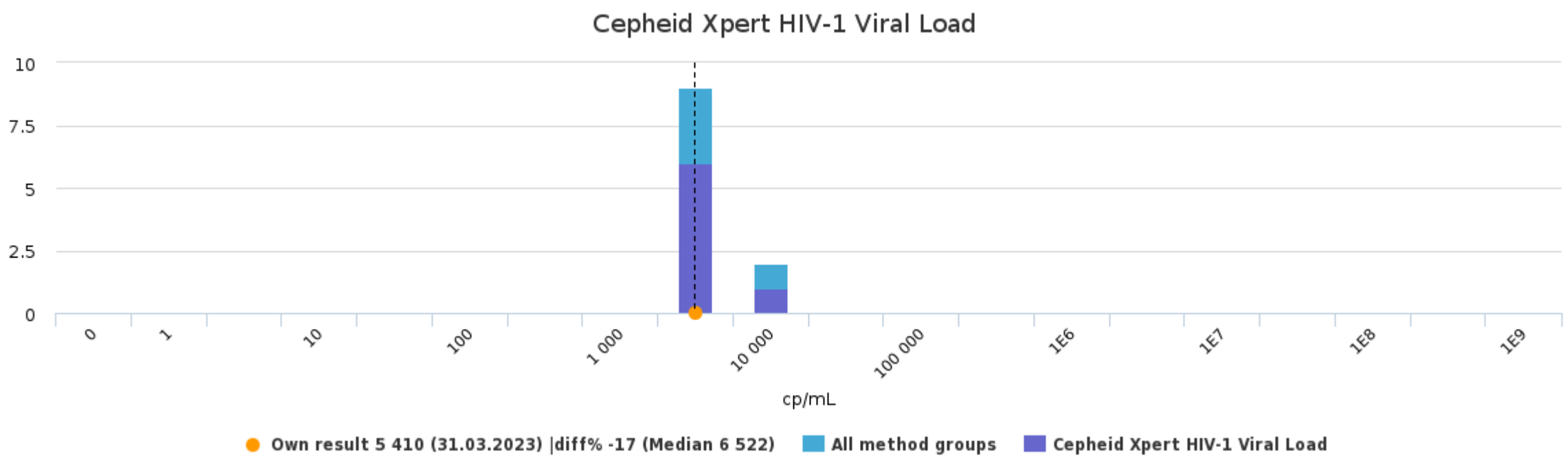
info@labquality.fi
www.labquality.com

FINAS
Finnish Accreditation Service
PT02 (EN ISO/IEC 17043)

Only the qualitative analysis phase is accredited.

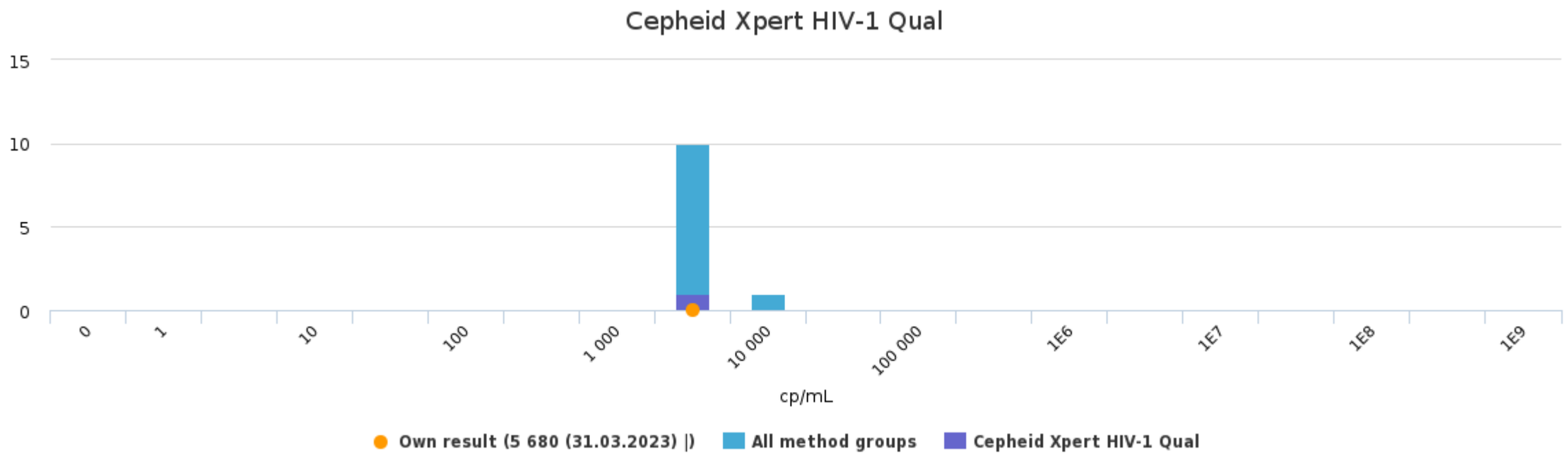
Quality Management
ISO 9001:2015

Sample S002 | HI-virus RNA, cp/mL



	Median	min	max	n
Cepheid Xpert HIV-1 Viral Load	6 522	4 720	10 400	7
All methods	6 522	4 720	11 200	11

Sample S003 | HI-virus RNA, cp/mL



	Median	min	max	n
Cepheid Xpert HIV-1 Qual	-	5 680	5 680	1
All methods	7 430	5 680	10 700	11

Report info

Participants

15 participants from 8 countries.

Report info

The quantitative results from the positive samples are presented as histograms as well as a numerical summary table. Your own result should be compared to others using the same method.

The median value of each method group is the median of the results where results deviating more than +/- 3*standard deviation from the median are removed. In case the client's result is the only one in the method group, no median value will be presented. In case there are only a few results in the client's own method group, the result can be compared to all method median or to a group that is similar to the own method. Results reported with < or > signs cannot be included in the statistics. The result distribution can also be viewed graphically from the histograms.

For information on report interpretation and performance evaluation, please see the " EQAS Interpretation guidelines" LabScala User instructions (top right corner ?Help link).

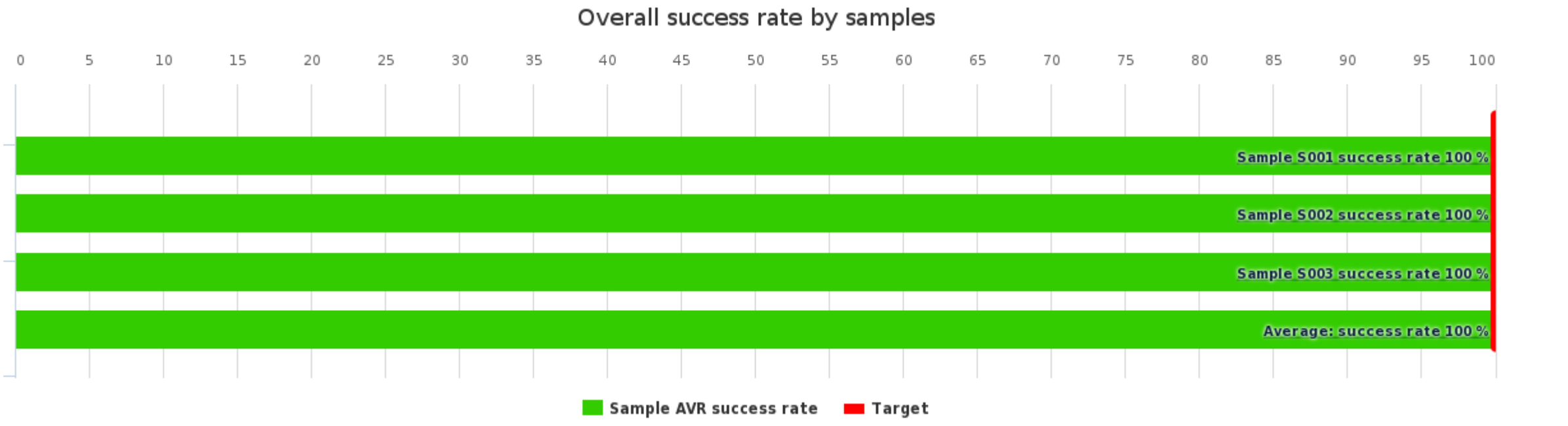
HIV-1, nucleic acid detection (RNA), March, 1-2023

Qualitative scoring report

GLOBAL REPORT

	No of participants	No of responded participants	Response percentage
HIV-1, nucleic acid detection (RNA), March, 1-2023	15	13	86.7 %

Summary

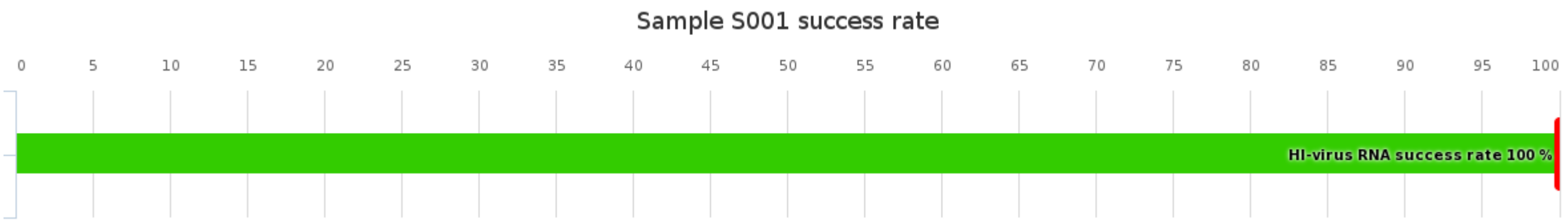


Summary	AVR success rate
Sample S001	100 %
Sample S002	100 %
Sample S003	100 %
Average:	100 %

HIV-1, nucleic acid detection (RNA), March, 1-2023

Qualitative scoring report

Sample S001



Sample S001 results	Responded	AVR success rate	Count
	HI-virus RNA	100 %	13
Total:		100 %	13

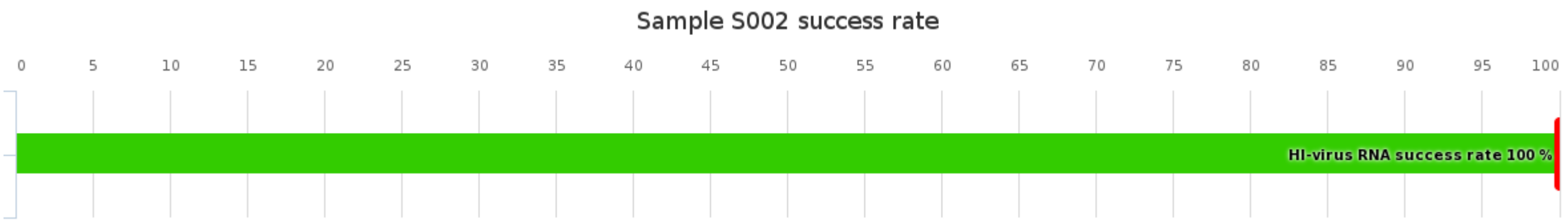
HI-virus RNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	AVR success rate	Qualitative interpretation Score
	Negative		13		100 %	2
		Cepheid Xpert HIV-1 Viral Load		7		
		Grifols Procleix Panther System		1		
		Qiagen Artus HI Virus-1 RG RT-PCR Kit		1		
		Roche COBAS HIV-1		1		
		Roche COBAS MPX for 6800/8800 systems		3		
	Total:		13		100 %	

LABQUALITY

HIV-1, nucleic acid detection (RNA), March, 1-2023

Qualitative scoring report

Sample S002



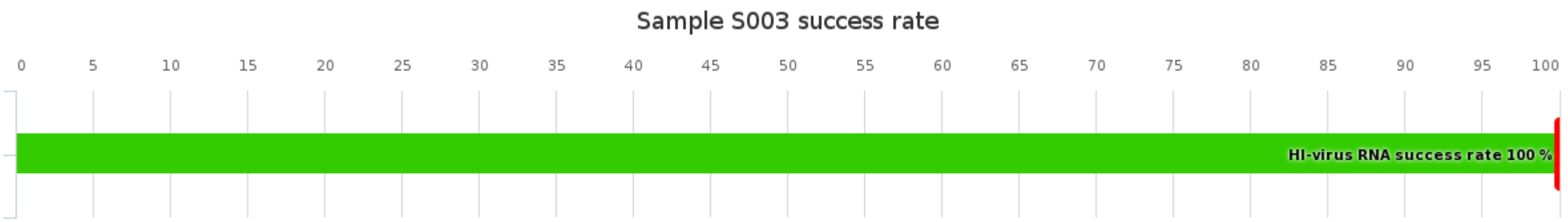
Sample S002 results	Responded	AVR success rate	Count
	HI-virus RNA	100 %	13
Total:		100 %	13

HI-virus RNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	AVR success rate	Qualitative interpretation Score
	Positive		13		100 %	2
		Cepheid Xpert HIV-1 Viral Load		7		
		Grifols Procleix Panther System		1		
		Qiagen Artus HI Virus-1 RG RT-PCR Kit		1		
		Roche COBAS HIV-1		1		
		Roche COBAS MPX for 6800/8800 systems		3		
	Total:		13		100 %	

HIV-1, nucleic acid detection (RNA), March, 1-2023

Qualitative scoring report

Sample S003



Sample S003 results	Responded	AVR success rate	Count
	HI-virus RNA	100 %	13
Total:		100 %	13

HI-virus RNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	AVR success rate	Qualitative interpretation Score
	Positive		13		100 %	2
		Cepheid Xpert HIV-1 Qual		1		
		Cepheid Xpert HIV-1 Viral Load		6		
		Grifols Procleix Panther System		1		
		Qiagen Artus HI Virus-1 RG RT-PCR Kit		1		
		Roche COBAS HIV-1		1		
		Roche COBAS MPX for 6800/8800 systems		3		
	Total:		13		100 %	

HIV-1, nucleic acid detection (RNA), March, 1-2023

Qualitative scoring report

Report Info

PARTICIPANTS

Altogether 15 laboratories from 8 countries participated in this EQA round.

REPORT INFO

The results are divided into groups according to the method stated by the laboratory and presented in laboratory-specific tables. Accepted results are marked with green color and laboratory's own result with a black radio button ◉. In the scoring report you will find summaries of overall success rate and sample specific success rates (%). Sample specific interpretations are shown in pie diagrams as percentages and the total interpretation and methodic counts in the tables. If you have not reported any results you will get a note: "You have not responded in time, only global report is available".

For information on report interpretation and performance evaluation, please see the "EQAS Interpretation guidelines" in LabScala User instructions. In case you have any questions regarding the reports, please contact the EQA Coordinator.

SCORING

The round is scored based on test results when 60% or more of the participants report the expected result and when at least three results are reported.
The following general rules are applied:

Correct/expected test result 2/2 points
False/deviating test result 0/2 points

The performance of the laboratory is assessed by the Own success rate (%). The target is 100%. The examination-specific scores obtained by the laboratory in the round are converted to Own success rate per sample (scores/maximum scores*100). The Laboratory's Own success rate is the average of the sample success rates.

The success rate for the entire round (AVR success rate) is calculated from the total number of scores given to the results per sample (all scores/maximum scores*100). The AVG success rate of the entire round is the average of the sample success rates. The difference in the Laboratory's Own success rate (%) to the corresponding numbers for the entire round is shown in the table.

LABQUALITY

External Quality Assessment Scheme

HIV-1, RNA
Round 1, 2023

Specimens
Samples of this EQA round were lyophilized plasma. Based on the pre-testing and the results obtained in the round, the samples were homogeneous, stable, and suitable for the external quality assessment scheme. The materials were sent without temperature control packaging.

The expected results were as follows:

Sample S001 (LQ778623011)
HIV-1 RNA: negative
Quantitative result according to the pre-testing was <20 cp/mL.

Sample S002 (LQ778623012)
HIV-1 RNA: positive
Quantitative result according to the pre-testing was 6 900 cp/mL.

Sample S003 (LQ778623013)
HIV-1 RNA: positive
Quantitative result according to the pre-testing was 7 100 cp/mL.

Pre-test method: Roche, cobas HIV-1

Report info
Please see the description of the data analysis on the last page of the laboratory-specific reports and global reports. The round is scored based on the qualitative results. The quantitative results from the HIV-1 RNA positive samples, reported in unit cp/mL are presented in a separate laboratory-specific report as histograms as well as a numerical summary table. The quantitative results reported with < or > signs, or, if the HIV-1 RNA level of the sample is >10 000 000 cp/mL, are not processed. The quantitative results cannot be compared statistically due to the low number of results. It is important to read the Final report first, because it contains important information of the samples and results in each round.

Comments – EQA Coordinator
In this round there were three lyophilized human plasma samples. S001 was expected to be HIV-1 RNA negative whereas S002 and S003 were expected to be HIV-1 RNA positive according to the pre-testing.

The overall performance was excellent. All reported qualitative results were in line with expected results.

Exceptions in scoring
No exceptions.

End of report

2023-04-17

FINAL REPORT

Product no. 5680

Subcontracting: Sample pretesting

Samples sent	2023-03-07
Round closed	2023-04-03
Expected results	2023-04-06
Final report	2023-04-17

Request for correction
Typing errors in laboratory's result forms are on laboratory's responsibility. Labquality accepts responsibility only for result processing. Requests must be notified by writing within three weeks from the date of this letter.

Authorized by
EQA Coordinator
Elina Tuovinen
elina.tuovinen@labquality.fi

EQA Coordinator
Outi Rauta
outi.rauta@labquality.fi

Expert
MD, PhD, Adjunct professor,
Specialist in Clinical Microbiology,
Maija Lappalainen,
HUSLAB, Helsinki, Finland.

Labquality Oy
Kumpulantie 15
FI-00520 HELSINKI
Finland

Tel. + 358 9 8566 8200
Fax + 358 9 8566 8280

info@labquality.fi
www.labquality.com

FINAS
Finnish Accreditation Service
PT02 (EN ISO/IEC 17043)

Only the qualitative analysis phase is accredited.