

External Quality Assessment Scheme

Hepatitis B virus, DNA 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

Hepatitis B virus, DNA, quantitative
Hepatitis B virus, DNA, 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



S002



S003



2023-03-07

INSTRUCTIONS

Product no. 5679
LQ779023011-013/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



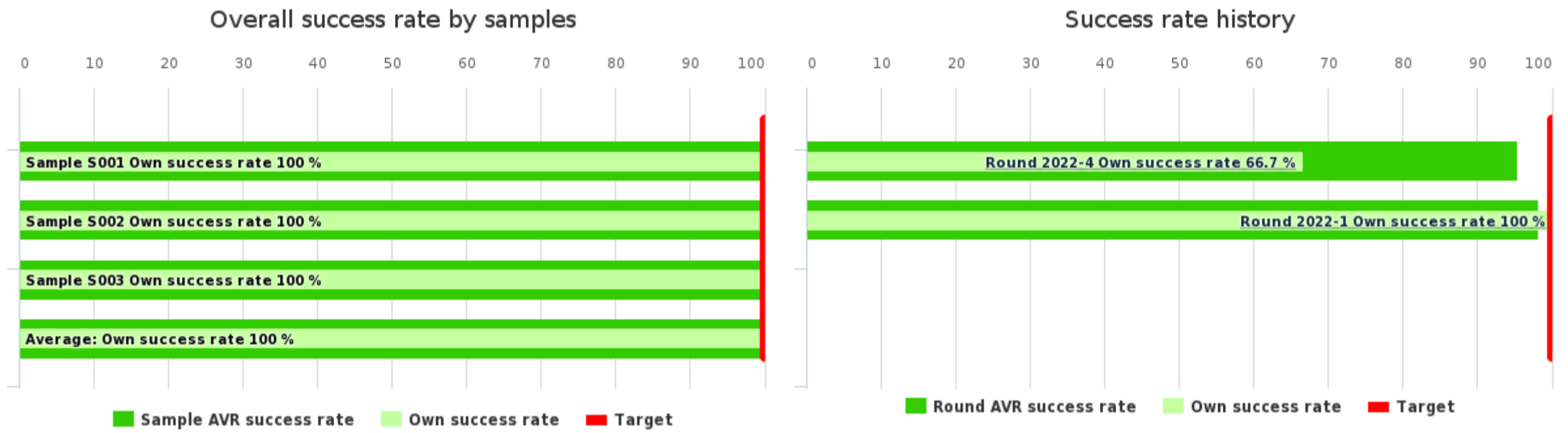
Only the qualitative analysis phase is accredited.



Client report

	No of participants	No of responded participants	Response percentage
Hepatitis B virus, nucleic acid detection (DNA), March, 1-2023	24	22	91.7 %

Summary

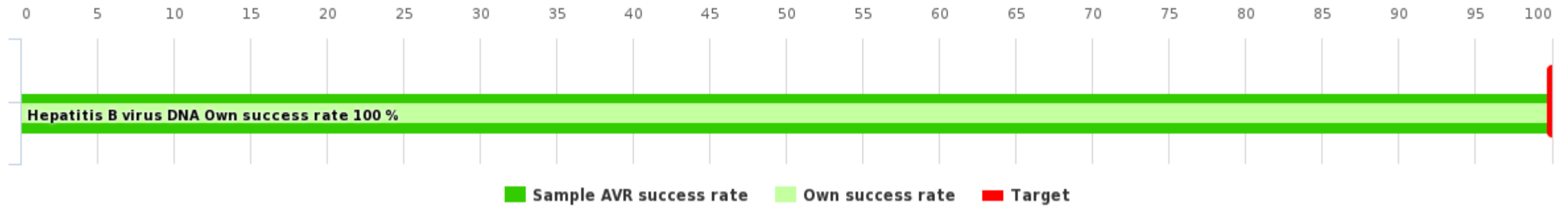


Summary	Own score	Max score	Own success rate	Difference	AVR success rate
Sample S001	2	2	100 %	0 %	100 %
Sample S002	2	2	100 %	0 %	100 %
Sample S003	2	2	100 %	0 %	100 %
Average:			100 %	0 %	100 %

History	Test nr.	Own success rate	Difference	AVR success rate
Round 2022-4	1-1	66.7 %	-28.7 %	95.4 %
Round 2022-1	1-1	100 %	1.7 %	98.3 %

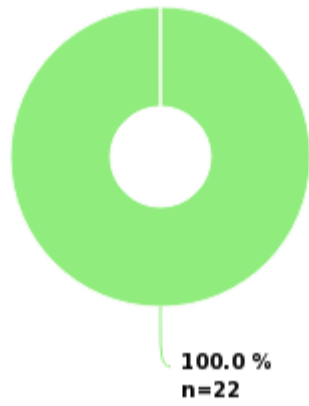
Sample S001

Sample S001 success rate



Sample S001 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Hepatitis B virus DNA	2	2	100 %	0 %	100 %	22
Total:		2	2	100 %	0 %	100 %	22

Sample S001 Hepatitis B virus DNA

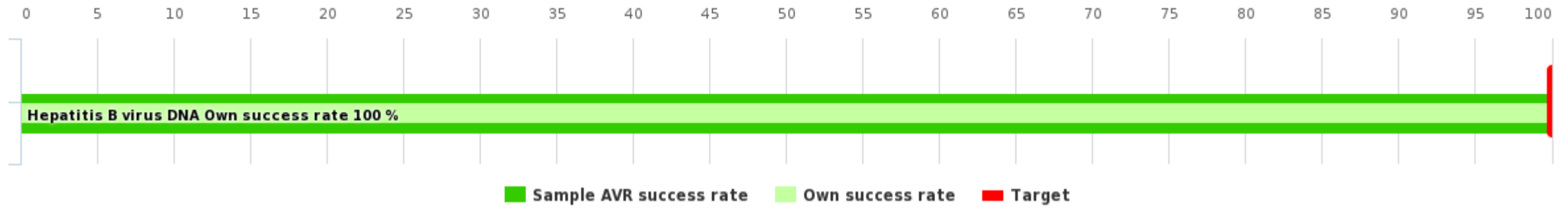


Positive

Hepatitis B virus DNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<input checked="" type="radio"/> Positive		22		2	2	100 %	0 %	100 %
		Abbott Alinity m HBV assay		2					
		Bioneer AccuPower HBV Quantitative PCR Kit		1					
		Cepheid Xpert HBV Viral Load		6					
		GeneProof Hepatitis B Virus PCR Kit		3					
		Grifols Procleix Panther System		1					
		NeuMoDx HBV Quant Test Strip		1					
		Qiagen Artus HBV RG PCR Kit		1					
		Roche COBAS HBV		3					
		<input checked="" type="radio"/> Roche COBAS MPX for 6800/8800 systems		4					
Total:			22		2	2	100 %	0 %	100 %

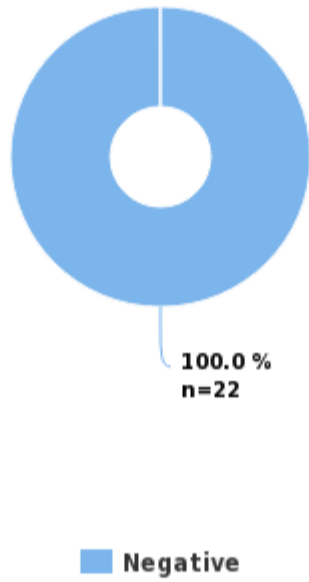
Sample S002

Sample S002 success rate



Sample S002 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Hepatitis B virus DNA	2	2	100 %	0 %	100 %	22
Total:		2	2	100 %	0 %	100 %	22

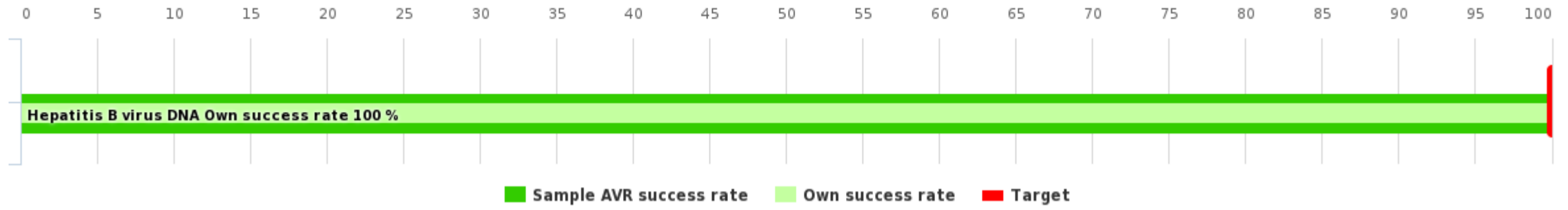
Sample S002 Hepatitis B virus DNA



Hepatitis B virus DNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<input checked="" type="radio"/> Negative		22		2	2	100 %	0 %	100 %
		Abbott Alinity m HBV assay		2					
		Bioneer AccuPower HBV Quantitative PCR Kit		1					
		Cepheid Xpert HBV Viral Load		6					
		GeneProof Hepatitis B Virus PCR Kit		3					
		Grifols Procleix Panther System		1					
		NeuMoDx HBV Quant Test Strip		1					
		Qiagen Artus HBV RG PCR Kit		1					
		Roche COBAS HBV		3					
		<input checked="" type="radio"/> Roche COBAS MPX for 6800/8800 systems		4					
Total:			22		2	2	100 %	0 %	100 %

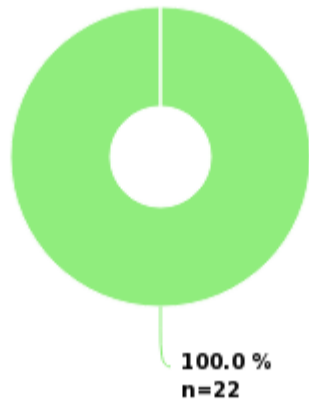
Sample S003

Sample S003 success rate



Sample S003 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Hepatitis B virus DNA	2	2	100 %	0 %	100 %	22
Total:		2	2	100 %	0 %	100 %	22

Sample S003 Hepatitis B virus DNA



Positive

Hepatitis B virus DNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<input checked="" type="radio"/> Positive		22		2	2	100 %	0 %	100 %
		Abbott Alinity m HBV assay		2					
		Bioneer AccuPower HBV Quantitative PCR Kit		1					
		Cepheid Xpert HBV Viral Load		6					
		GeneProof Hepatitis B Virus PCR Kit		3					
		Grifols Procleix Panther System		1					
		NeuMoDx HBV Quant Test Strip		1					
		Qiagen Artus HBV RG PCR Kit		1					
		Roche COBAS HBV		3					
		<input checked="" type="radio"/> Roche COBAS MPX for 6800/8800 systems		4					
Total:			22		2	2	100 %	0 %	100 %

Report Info

PARTICIPANTS

Altogether 24 laboratories from 13 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.

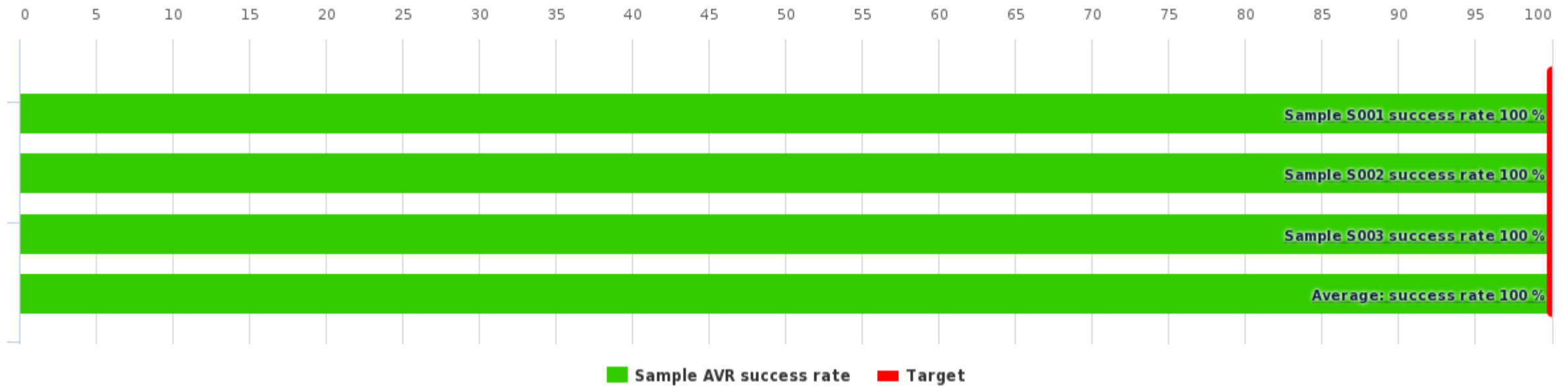
The success rate for the entire round (AVR success rate) is calculated from the total number of scores given to the results per sample (all scores/maximum scores*100). The AVG success rate of the entire round is the average of the sample success rates. The difference in the Laboratory's Own success rate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

GLOBAL REPORT

	No of participants	No of responded participants	Response percentage
Hepatitis B virus, nucleic acid detection (DNA), March, 1-2023	24	22	91.7 %

Summary

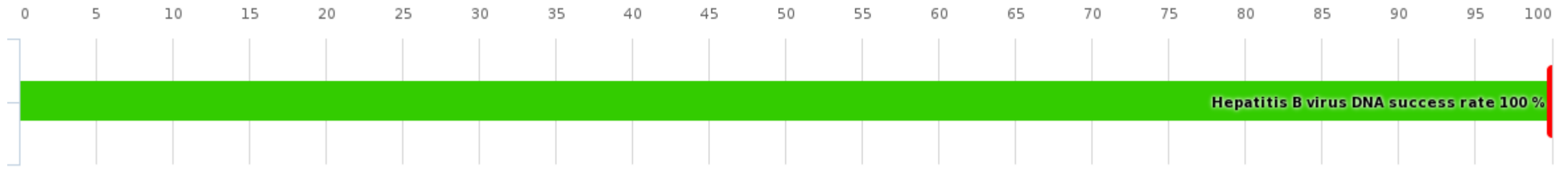
Overall success rate by samples



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

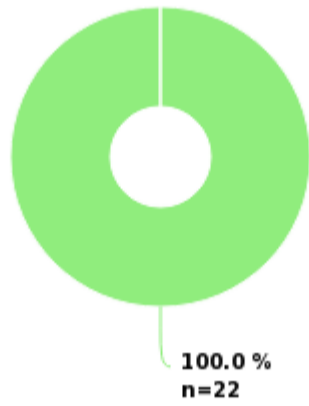
Sample S001

Sample S001 success rate



Sample S001 results	Responded	AVR success rate	Count
	Hepatitis B virus DNA	100 %	22
	Total:	100 %	22

Sample S001 Hepatitis B virus DNA

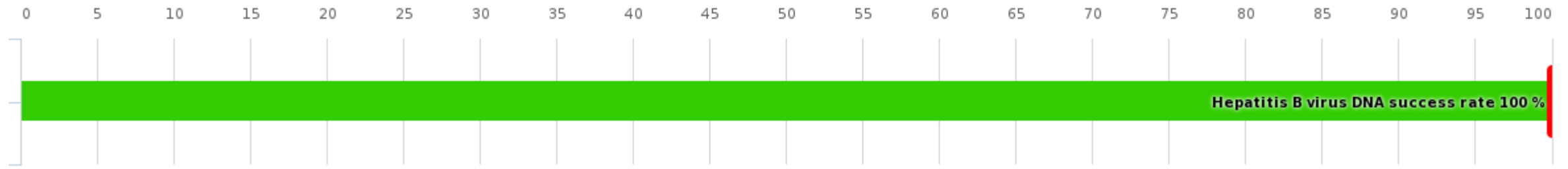


Positive

Hepatitis B virus DNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	AVR success rate	Qualitative interpretation Score
	Positive		22		100 %	2
		Abbott Alinity m HBV assay		2		
		Bioneer AccuPower HBV Quantitative PCR Kit		1		
		Cepheid Xpert HBV Viral Load		6		
		GeneProof Hepatitis B Virus PCR Kit		3		
		Grifols Procleix Panther System		1		
		NeuMoDx HBV Quant Test Strip		1		
		Qiagen Artus HBV RG PCR Kit		1		
		Roche COBAS HBV		3		
		Roche COBAS MPX for 6800/8800 systems		4		
	Total:		22		100 %	

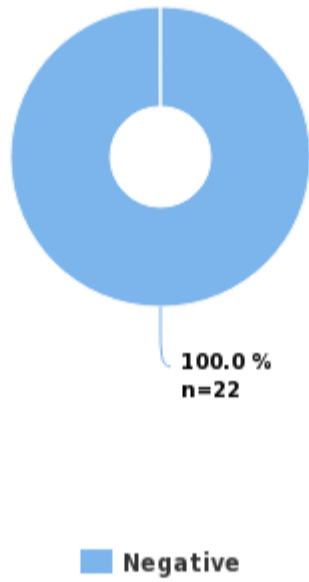
Sample S002

Sample S002 success rate



Sample S002 results	Responded	AVR success rate	Count
	Hepatitis B virus DNA	100 %	22
	Total:	100 %	22

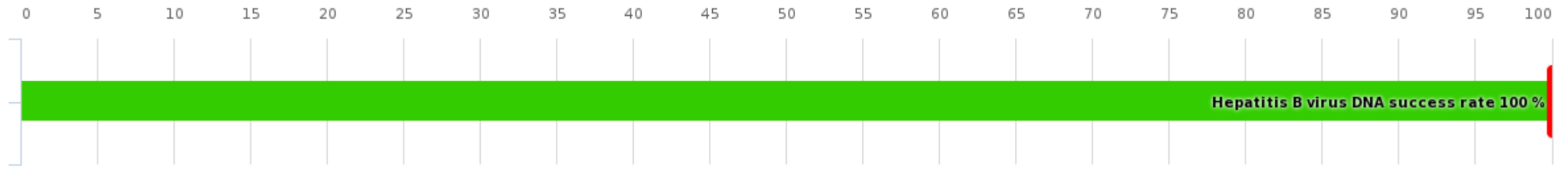
Sample S002 Hepatitis B virus DNA



Hepatitis B virus DNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	AVR success rate	Qualitative interpretation Score
	Negative		22		100 %	2
		Abbott Alinity m HBV assay		2		
		Bioneer AccuPower HBV Quantitative PCR Kit		1		
		Cepheid Xpert HBV Viral Load		6		
		GeneProof Hepatitis B Virus PCR Kit		3		
		Grifols Procleix Panther System		1		
		NeuMoDx HBV Quant Test Strip		1		
		Qiagen Artus HBV RG PCR Kit		1		
		Roche COBAS HBV		3		
		Roche COBAS MPX for 6800/8800 systems		4		
	Total:		22		100 %	

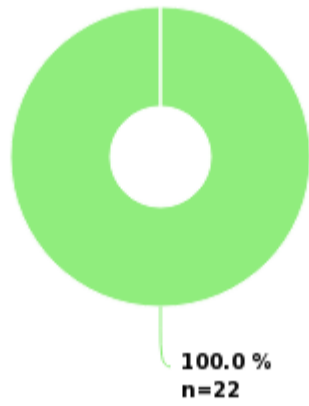
Sample S003

Sample S003 success rate



Sample S003 results	Responded	AVR success rate	Count
	Hepatitis B virus DNA	100 %	22
	Total:	100 %	22

Sample S003 Hepatitis B virus DNA



Positive

Hepatitis B virus DNA	Qualitative interpretation	Method	Qualitative interpretation count	Method count	AVR success rate	Qualitative interpretation Score
	Positive		22		100 %	2
		Abbott Alinity m HBV assay		2		
		Bioneer AccuPower HBV Quantitative PCR Kit		1		
		Cepheid Xpert HBV Viral Load		6		
		GeneProof Hepatitis B Virus PCR Kit		3		
		Grifols Procleix Panther System		1		
		NeuMoDx HBV Quant Test Strip		1		
		Qiagen Artus HBV RG PCR Kit		1		
		Roche COBAS HBV		3		
		Roche COBAS MPX for 6800/8800 systems		4		
	Total:		22		100 %	

Report Info

PARTICIPANTS

Altogether 24 laboratories from 13 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.

External Quality Assessment Scheme

Hepatitis B virus, DNA 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 (LQ779023011)

HBV DNA: positive

Quantitative result according to the pre-testing was 1 120 IU/mL.

Sample S002 (LQ779023012)

HBV DNA: negative

Quantitative result according to the pre-testing was <10 IU/mL.

S003 (LQ779023013)

HBV DNA: positive

Quantitative result according to the pre-testing was 4 130 IU/mL.

Pre-test method: Roche, cobas HBV

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 HBV DNA positive samples, reported in unit IU/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 HBV DNA level of the sample is >10 000 000 IU/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 and S003 were expected to be HBV DNA positive whereas S002 was expected to be HBV DNA negative according to the pretesting.

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

Exceptions in scoring

No exceptions.

End of report

Copyright © Labquality Oy

Labquality does not permit any reproduction for commercial purposes of any portion of the material subject to this copyright. Labquality prohibits any use of its name, or reference to Labquality EQA program, or material in this report in any advertising, brochures, or other commercial publications. Labquality EQA data do not necessarily indicate the superiority of instruments, reagents, testing equipments or materials used by participating laboratories. Use of Labquality EQA data to suggest superiority or inferiority of equipments or materials may be deceptive and misleading. Proficiency test results are handled confidentially. Labquality will not issue any statements to third parties of the performance of laboratories in external quality assessment schemes unless otherwise agreed.

2023-04-17

FINAL REPORT

Product no. 5679

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



*Only the qualitative analysis phase
is accredited.*

