

**Individual Report****QCMD 2017 Herpes Simplex Virus DNA  
EQA Programme - HSV1**

<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023
-------------------------------------	------------------------------	------------------------	--------------------------------------	---------------------------	--	-----------------------------

**Intended Results / Panel Composition**

Sample Code	Sample Content	Matrix	Sample Relationships <sup>[1]</sup>	Detection Frequency <sup>[2]</sup>	Sample Status <sup>[3]</sup>	Percentage Correct (All) <sup>[4]</sup>	
						(%)	(n)
HSVDNA17S-01	HSV Type 1	TM	D1, DS1_2	Frequently Detected	CORE	98.6	147
HSVDNA17S-02	HSV Type 1	TM	DS1_1	Frequently Detected	CORE	99.3	147
HSVDNA17S-03	HSV Type 1	TM	D1, DS1_2	Frequently Detected	CORE	98.6	147
HSVDNA17S-04	HSV Type 1	TM	DS1_4	Detected	EDUCATIONAL	87.1	147
HSVDNA17S-05	HSV Type 1	TM	DS1_3	Detected	CORE	92.5	147

[1] **Sample Relationships:** Indicates the relationships of the samples within this challenge. Dilution series are indicated by 'DS1' with each panel member in the dilution series represented by a number in order of titre, where DS1\_1 represents the highest titre within that dilution series. Further dilution series are indicated by 'DS2' 'DS3' 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.*

**Your Summary Results**

<b>EQA Assessment Group <sup>[1]</sup></b>	Commercial
<b>Core Panel Detection (Qualitative) Score <sup>[2]</sup></b>	0

<b>Individual Report</b>		<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>			 QCMD Quality Control for Molecular Diagnostics	
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023

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
HSVDNA17S-01	98.6	Positive	0	8067	Copies/ml	-
HSVDNA17S-02	99.3	Positive	0	11458	Copies/ml	-
HSVDNA17S-03	98.6	Positive	0	6050	Copies/ml	-
HSVDNA17S-04	87.1	Positive	0	473	Copies/ml	-
HSVDNA17S-05	92.5	Positive	0	1813	Copies/ml	-

[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.

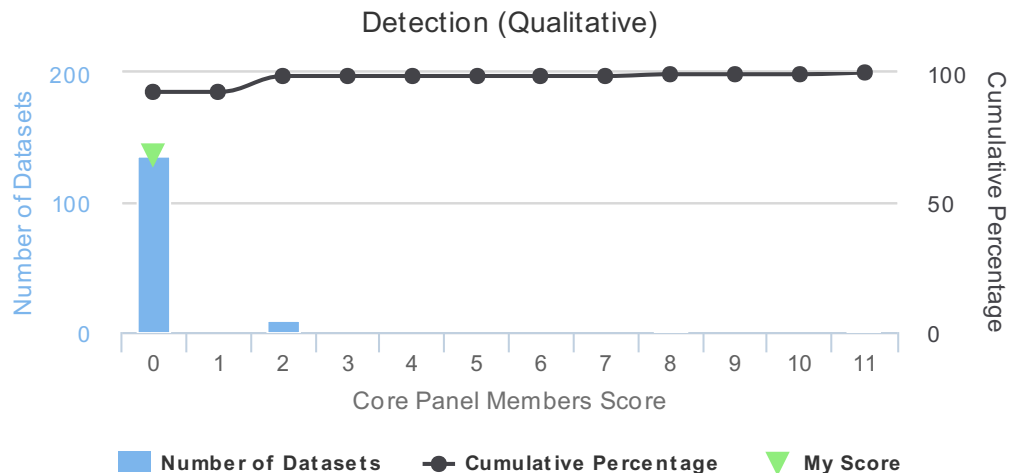
[4] **Percentage Correct (All)** Percentage of datasets (%) reporting the correct qualitative results for each panel member.


[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





<b>Individual Report</b>	<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>				 <small>Quality Control for Molecular Diagnostics</small>	
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023

**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 used to submit your results for this challenge.

<b>Name</b>	Herpes Simplex Virus (v4)
<b>Description</b>	
<b>Targets</b>	 herpes simplex virus
<b>Assays</b>	 <b>Extraction - Manual Extraction Process</b> <ul style="list-style-type: none"> <li>• Commercial <ul style="list-style-type: none"> <li>◦ Kit Manufacturer: <i>GeneProof</i></li> <li>◦ Kit Type: <i>PathogenFree DNA Isolation Kit</i></li> </ul> </li> </ul>  <b>Amplification - Shanghai Hongshi Medical Technology - SLAN</b> <ul style="list-style-type: none"> <li>• Commercial <ul style="list-style-type: none"> <li>◦ Kit Manufacturer: <i>GeneProof</i></li> <li>◦ Kit Type: <i>Herpes Simplex Virus (HSV-1/2) PCR Kit</i></li> <li>◦ Kit Version: <i>ISEX</i></li> </ul> </li> </ul>


## Further Programme Details

Number of Participants	144
Number of Countries	30
Number of Respondents	119
Number of Datasets Submitted	147
Qualitative Results Returned	147 (100.0%)

## Comments

**IMPORTANT NOTE:** The QCMD 2017 HSVDNA17S EQA panel includes both Herpes Simplex Virus Type 1 (HSV1) and Herpes Simplex Virus Type 2 (HSV2) panel members. Participants who reported separate datasets for the HSV1 and HSV2 will receive an individual report for each dataset, (one for HSV1 and one for HSV2). If you only submitted one dataset for either HSV1 or HSV2, you will receive an individual report for the corresponding target.

If you require any assistance when reviewing your individual reports please contact the Neutral Office (neutraloffice@qcmd.org).

<b>Individual Report</b>	<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>					
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023

## EQA Programme Aims

To assess the ability of participants molecular assays to detect different types and concentrations of herpes simplex virus (HSV).

## Feedback and Enquiries

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


Any queries about this report should be addressed to the QCMD Neutral Office ([neutraloffice@qcmd.org](mailto:neutraloffice@qcmd.org)).

## Additional Information: Individual Panel Member Analysis (Qualitative)

Qualitative analysis for each panel member is provided in relation to your EQA assessment group. EQA assessment groups are established using the molecular workflow information reported by all participants within this EQA challenge / distribution. The principal level of assessment is at the individual method level which is defined based on your reported "amplification/detection method" and other laboratories using the same or similar amplification/detection methods.

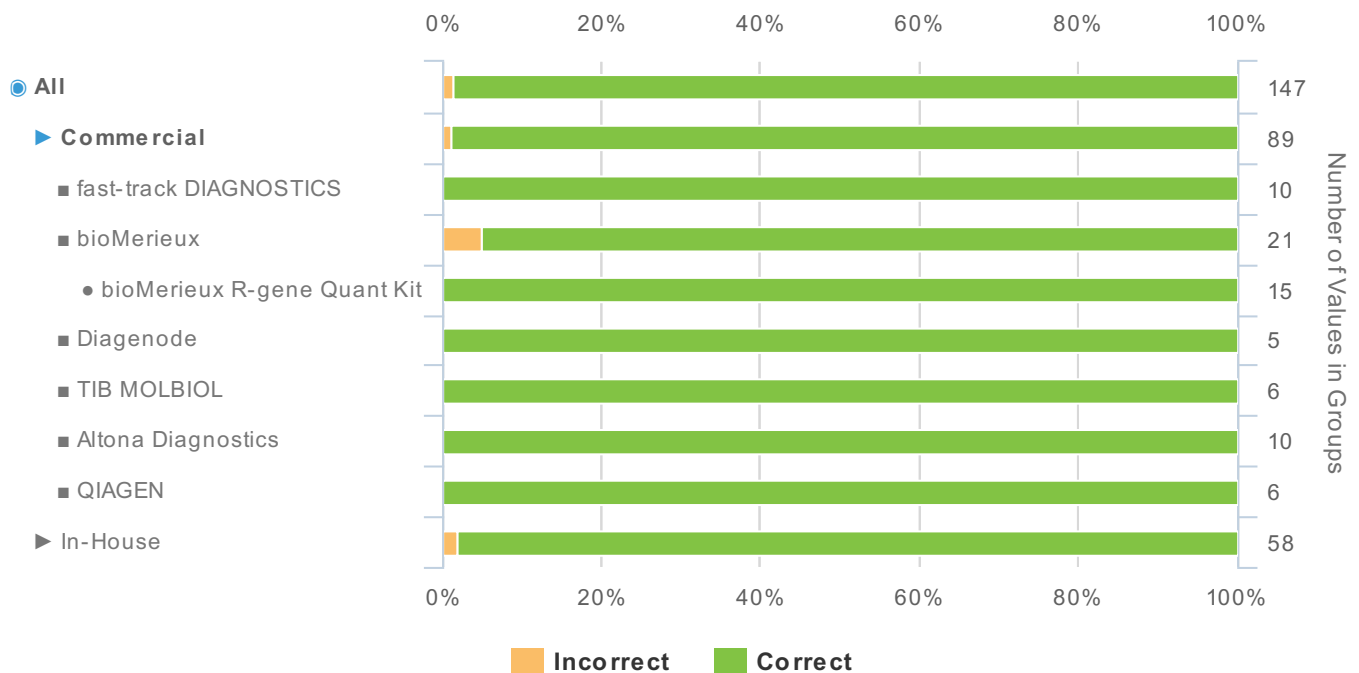
To allow meaningful assessment at the individual method level the EQA assessment group must consist of 5 or more datasets. If there are not sufficient datasets at the individual method level then your results will be included within a higher EQA assessment group based on whether it is a commercial or in house technology/method. The highest level assessment grouping is "All" participant reported qualitative results.

A breakdown of qualitative results reported by participants on each of the panel members within this EQA challenge / distribution is provided below. You can compare your results to those within your EQA assessment group and those obtained within other EQA assessment groups or to the overall consensus for each sample within this EQA challenge / distribution.

<b>Individual Report</b>	<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>				 <small>Quality Control for Molecular Diagnostics</small>	
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023


**HSVDNA17S-01 - Qualitative Results Breakdown**

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
HSVDNA17S-01	HSV Type 1	TM	D1, DS1_2	Frequently Detected	CORE	98.6	147



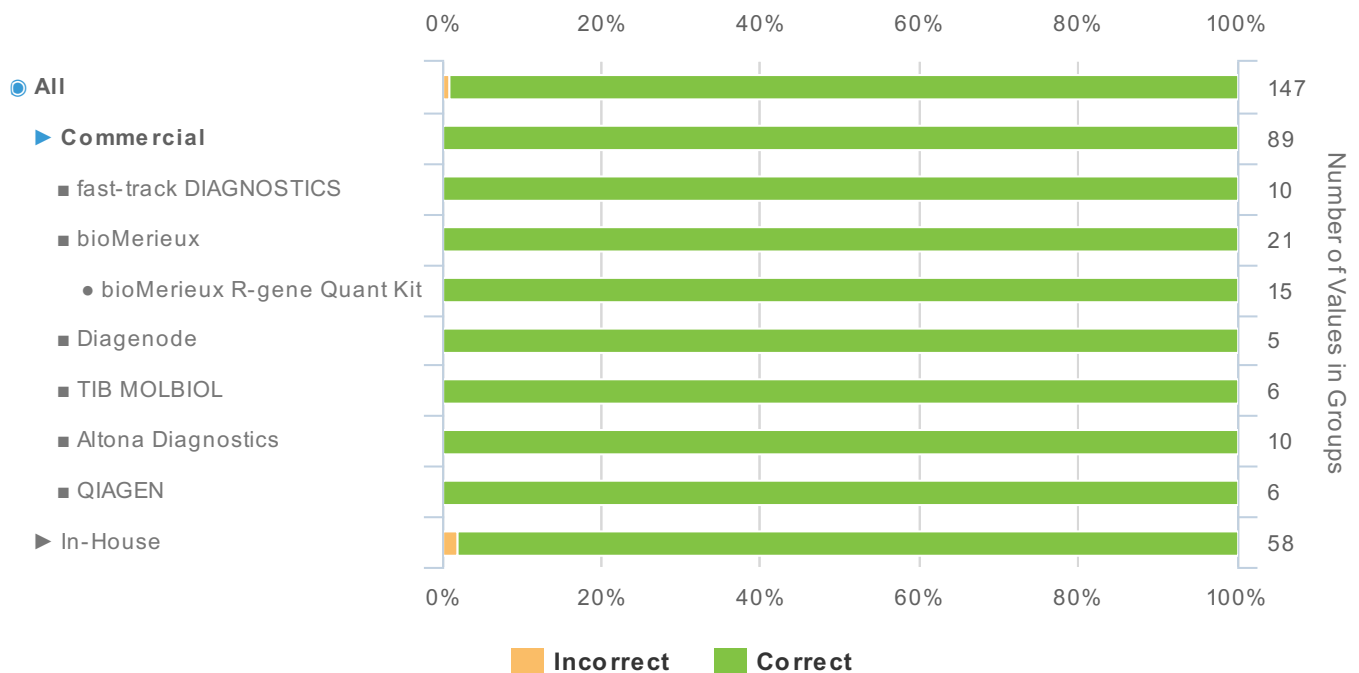
**Groups below n=5:** bioMerieux - BioFire FilmArray (n=3), bioMerieux - bioMerieux R-gene Kit (n=3), ELITech Group (n=4), ELITech Group - Elitech Elite Real time kit (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), BioGX (n=1), BioGX - BioGX Sample-Ready (n=1), Vitassay (n=1), Vitassay - Vitassay Real-Time PCR (n=1), AusDiagnostics (n=1), AusDiagnostics - AusDiagnostics Easy-Plex (n=1), Biolegio (n=2), Biolegio - Biolegio ReadyMax (n=1), Biolegio - Biolegio Other (n=1), Roche (n=4), Roche - Roche Cobas 4800 (n=3), Roche - Roche LightCycler (n=1), Certest (n=1), Certest - Certest Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), PathoFinder (n=2), PathoFinder - PathoFinder Real Time PCR (n=2), Progenie Molecular (n=2), Progenie Molecular - Progenie Molecular RealCycler (n=2), AB Analitica (n=1), AB Analitica - AB Analitica REALQUALITY RQ (n=1), BD Molecular Diagnostics (n=1), BD Molecular Diagnostics - BD ProbeTec (n=1), RTA Laboratories (n=1), RTA Laboratories - RTA Laboratories Real time (n=1), Cepheid (n=3), Cepheid - Cepheid Smart Reagents (n=3), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FluoroType (n=1), Seegene (n=1), Seegene - Seegene Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3)

**Groups Rolled Up:** fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Diagenode - Diagenode Real Time kit (n=5), TIB MOLBIOL - TIB-MolBiol LightMix (n=6), Altona Diagnostics - Altona Diagnostics RealStar (n=10), QIAGEN - Qiagen Artus Real Time (n=6), In-House - Real-time In-House PCR (n=58)

<b>Individual Report</b>	<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>				 Quality Control for Molecular Diagnostics		
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory</b> CZ023	


### HSVDNA17S-02 - Qualitative Results Breakdown

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
HSVDNA17S-02	HSV Type 1	TM	DS1_1	Frequently Detected	CORE	99.3	147



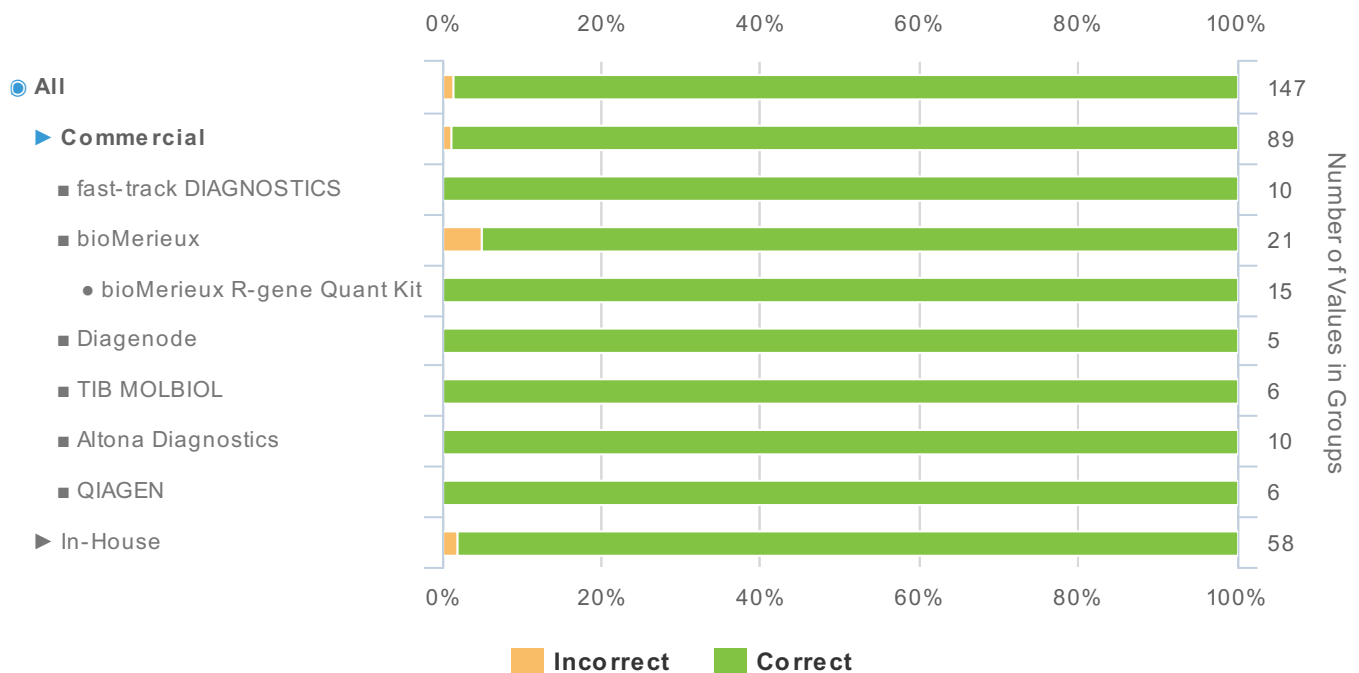
**Groups below n=5:** bioMerieux - BioFire FilmArray (n=3), bioMerieux - bioMerieux R-gene Kit (n=3), ELITech Group (n=4), ELITech Group - Elitech Elite Real time kit (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), BioGX (n=1), BioGX - BioGX Sample-Ready (n=1), Vitassay (n=1), Vitassay - Vitassay Real-Time PCR (n=1), AusDiagnostics (n=1), AusDiagnostics - AusDiagnostics Easy-Plex (n=1), Biolegio (n=2), Biolegio - Biolegio ReadyMax (n=1), Biolegio - Biolegio Other (n=1), Roche (n=4), Roche - Roche Cobas 4800 (n=3), Roche - Roche LightCycler (n=1), Certest (n=1), Certest - Certest Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), PathoFinder (n=2), PathoFinder - PathoFinder Real Time PCR (n=2), Progenie Molecular (n=2), Progenie Molecular - Progenie Molecular RealCycler (n=2), AB Analitica (n=1), AB Analitica - AB Analitica REALQUALITY RQ (n=1), BD Molecular Diagnostics (n=1), BD Molecular Diagnostics - BD ProbeTec (n=1), RTA Laboratories (n=1), RTA Laboratories - RTA Laboratories Real time (n=1), Cepheid (n=3), Cepheid - Cepheid Smart Reagents (n=3), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FluoroType (n=1), Seegene (n=1), Seegene - Seegene Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3)

**Groups Rolled Up:** fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Diagenode - Diagenode Real Time kit (n=5), TIB MOLBIOL - TIB-MolBiol LightMix (n=6), Altona Diagnostics - Altona Diagnostics RealStar (n=10), QIAGEN - Qiagen Artus Real Time (n=6), In-House - Real-time In-House PCR (n=58)

<b>Individual Report</b>	<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>				 Quality Control for Molecular Diagnostics	
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023


**HSVDNA17S-03 - Qualitative Results Breakdown**

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
HSVDNA17S-03	HSV Type 1	TM	D1, DS1_2	Frequently Detected	CORE	98.6	147



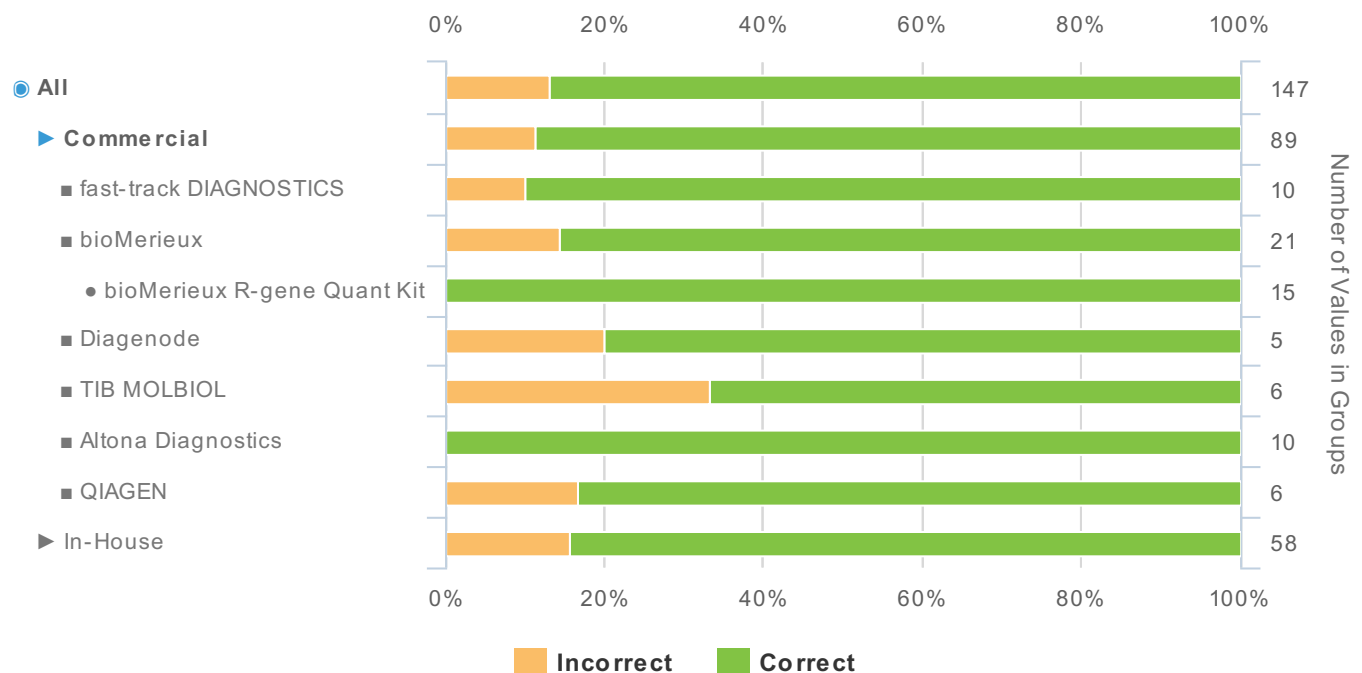
**Groups below n=5:** bioMerieux - BioFire FilmArray (n=3), bioMerieux - bioMerieux R-gene Kit (n=3), ELITech Group (n=4), ELITech Group - Elitech Elite Real time kit (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), BioGX (n=1), BioGX - BioGX Sample-Ready (n=1), Vitassay (n=1), Vitassay - Vitassay Real-Time PCR (n=1), AusDiagnostics (n=1), AusDiagnostics - AusDiagnostics Easy-Plex (n=1), Biolegio (n=2), Biolegio - Biolegio ReadyMax (n=1), Biolegio - Biolegio Other (n=1), Roche (n=4), Roche - Roche Cobas 4800 (n=3), Roche - Roche LightCycler (n=1), Certest (n=1), Certest - Certest Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), PathoFinder (n=2), PathoFinder - PathoFinder Real Time PCR (n=2), Progenie Molecular (n=2), Progenie Molecular - Progenie Molecular RealCycler (n=2), AB Analitica (n=1), AB Analitica - AB Analitica REALQUALITY RQ (n=1), BD Molecular Diagnostics (n=1), BD Molecular Diagnostics - BD ProbeTec (n=1), RTA Laboratories (n=1), RTA Laboratories - RTA Laboratories Real time (n=1), Cepheid (n=3), Cepheid - Cepheid Smart Reagents (n=3), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FluoroType (n=1), Seegene (n=1), Seegene - Seegene Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3)

**Groups Rolled Up:** fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Diagenode - Diagenode Real Time kit (n=5), TIB MOLBIOL - TIB-MolBiol LightMix (n=6), Altona Diagnostics - Altona Diagnostics RealStar (n=10), QIAGEN - Qiagen Artus Real Time (n=6), In-House - Real-time In-House PCR (n=58)

<b>Individual Report</b>		<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>			 QCMD Quality Control for Molecular Diagnostics	
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023

### HSVDNA17S-04 - Qualitative Results Breakdown


Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
HSVDNA17S-04	HSV Type 1	TM	DS1_4	Detected	EDUCATIONAL	87.1	147



**Groups below n=5:** bioMerieux - BioFire FilmArray (n=3), bioMerieux - bioMerieux R-gene Kit (n=3), ELITech Group (n=4), ELITech Group - Elitech Elite Real time kit (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), BioGX (n=1), BioGX - BioGX Sample-Ready (n=1), Vitassay (n=1), Vitassay - Vitassay Real-Time PCR (n=1), AusDiagnostics (n=1), AusDiagnostics - AusDiagnostics Easy-Plex (n=1), Biolegio (n=2), Biolegio - Biolegio ReadyMax (n=1), Biolegio - Biolegio Other (n=1), Roche (n=4), Roche - Roche Cobas 4800 (n=3), Roche - Roche LightCycler (n=1), Certest (n=1), Certest - Certest Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), PathoFinder (n=2), PathoFinder - PathoFinder Real Time PCR (n=2), Progenie Molecular (n=2), Progenie Molecular - Progenie Molecular RealCycler (n=2), AB Analytica (n=1), AB Analytica - AB Analytica REALQUALITY RQ (n=1), BD Molecular Diagnostics (n=1), BD Molecular Diagnostics - BD ProbeTec (n=1), RTA Laboratories (n=1), RTA Laboratories - RTA Laboratories Real time (n=1), Cepheid (n=3), Cepheid - Cepheid Smart Reagents (n=3), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FluoroType (n=1), Seegene (n=1), Seegene - Seegene Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3)

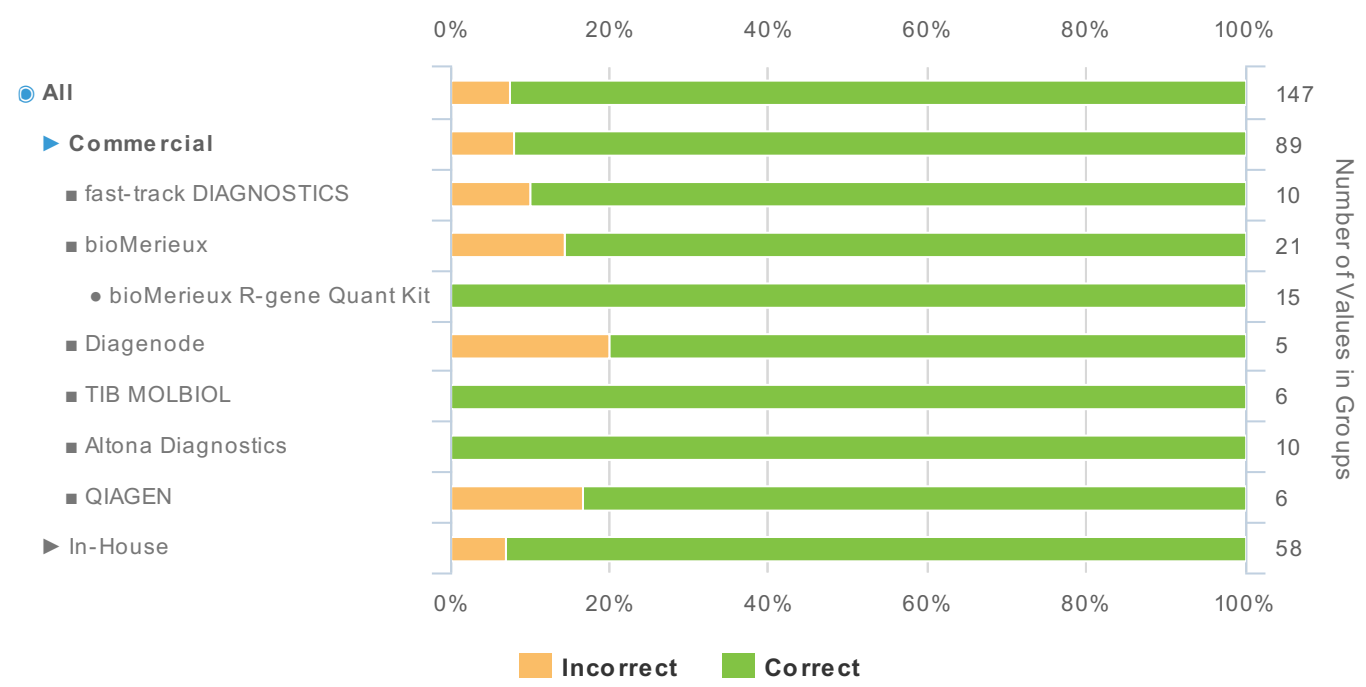
**Groups Rolled Up:** fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Diagenode - Diagenode Real Time kit (n=5), TIB MOLBIOL - TIB-MolBiol LightMix (n=6), Altona Diagnostics - Altona Diagnostics RealStar (n=10), QIAGEN - Qiagen Artus Real Time (n=6), In-House - Real-time In-House PCR (n=58)



<b>Individual Report</b>		<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>			 Quality Control for Molecular Diagnostics	
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory:</b> CZ023


**HSVDNA17S-05 - Qualitative Results Breakdown**

Sample Code	Sample Content	Matrix	Sample Relationships	Detection Frequency	Sample Status	Percentage Correct All	
						(%)	(n)
HSVDNA17S-05	HSV Type 1	TM	DS1_3	Detected	CORE	92.5	147



**Groups below n=5:** bioMerieux - BioFire FilmArray (n=3), bioMerieux - bioMerieux R-gene Kit (n=3), ELITech Group (n=4), ELITech Group - Elitech Elite Real time kit (n=4), Sacace (n=1), Sacace - Sacace Real TM (n=1), BioGX (n=1), BioGX - BioGX Sample-Ready (n=1), Vitassay (n=1), Vitassay - Vitassay Real-Time PCR (n=1), AusDiagnostics (n=1), AusDiagnostics - AusDiagnostics Easy-Plex (n=1), Biolegio (n=2), Biolegio - Biolegio ReadyMax (n=1), Biolegio - Biolegio Other (n=1), Roche (n=4), Roche - Roche Cobas 4800 (n=3), Roche - Roche LightCycler (n=1), Certest (n=1), Certest - Certest Real Time PCR (n=1), PrimerDesign (n=1), PrimerDesign - PrimerDesign Genesig (n=1), PathoFinder (n=2), PathoFinder - PathoFinder Real Time PCR (n=2), Progenie Molecular (n=2), Progenie Molecular - Progenie Molecular RealCycler (n=2), AB Analitica (n=1), AB Analitica - AB Analitica REALQUALITY RQ (n=1), BD Molecular Diagnostics (n=1), BD Molecular Diagnostics - BD ProbeTec (n=1), RTA Laboratories (n=1), RTA Laboratories - RTA Laboratories Real time (n=1), Cepheid (n=3), Cepheid - Cepheid Smart Reagents (n=3), Hain Lifescience (n=1), Hain Lifescience - Hain Lifescience FluoroType (n=1), Seegene (n=1), Seegene - Seegene Real Time PCR (n=1), GeneProof (n=3), GeneProof - GeneProof Real Time PCR kit (n=3)

**Groups Rolled Up:** fast-track DIAGNOSTICS - FTD Real Time PCR (n=10), Diagenode - Diagenode Real Time kit (n=5), TIB MOLBIOL - TIB-MolBiol LightMix (n=6), Altona Diagnostics - Altona Diagnostics RealStar (n=10), QIAGEN - Qiagen Artus Real Time (n=6), In-House - Real-time In-House PCR (n=58)

<b>Individual Report</b>	<b>QCMD 2017 Herpes Simplex Virus DNA EQA Programme - HSV1</b>					
<b>Catalogue Code:</b> QAV994105	<b>Ref Code:</b> HSVDNA17	<b>Challenge:</b> S	<b>Analysis Type:</b> Qualitative	<b>Dataset:</b> 163949	<b>Report UID:</b> 2677/163949/1089	<b>Laboratory</b> CZ023

**QCMD © 2016.** The QCMD EQA programme samples, associated reports and data generated during this programme are intended for External Quality Assessment (EQA) and Proficiency Testing (PT) purposes only. QCMD operates according to a strict Code of Practice which is in line with ISO/IEC 17043 and associated standards. Data reported in QCMD programmes is representative of a laboratory's standard diagnostic testing protocols irrespective of the technology they use. The data provided in the reports are based on technical information provided by the individual laboratories as part of the assessment process, as such it does not constitute a formal technology method comparison. All text and images produced by QCMD are the property of QCMD unless otherwise stated.

The reproduction and use of these materials is not permitted without the express written consent of QCMD. The use of the information provided in QCMD reports for commercial purposes is strictly prohibited.