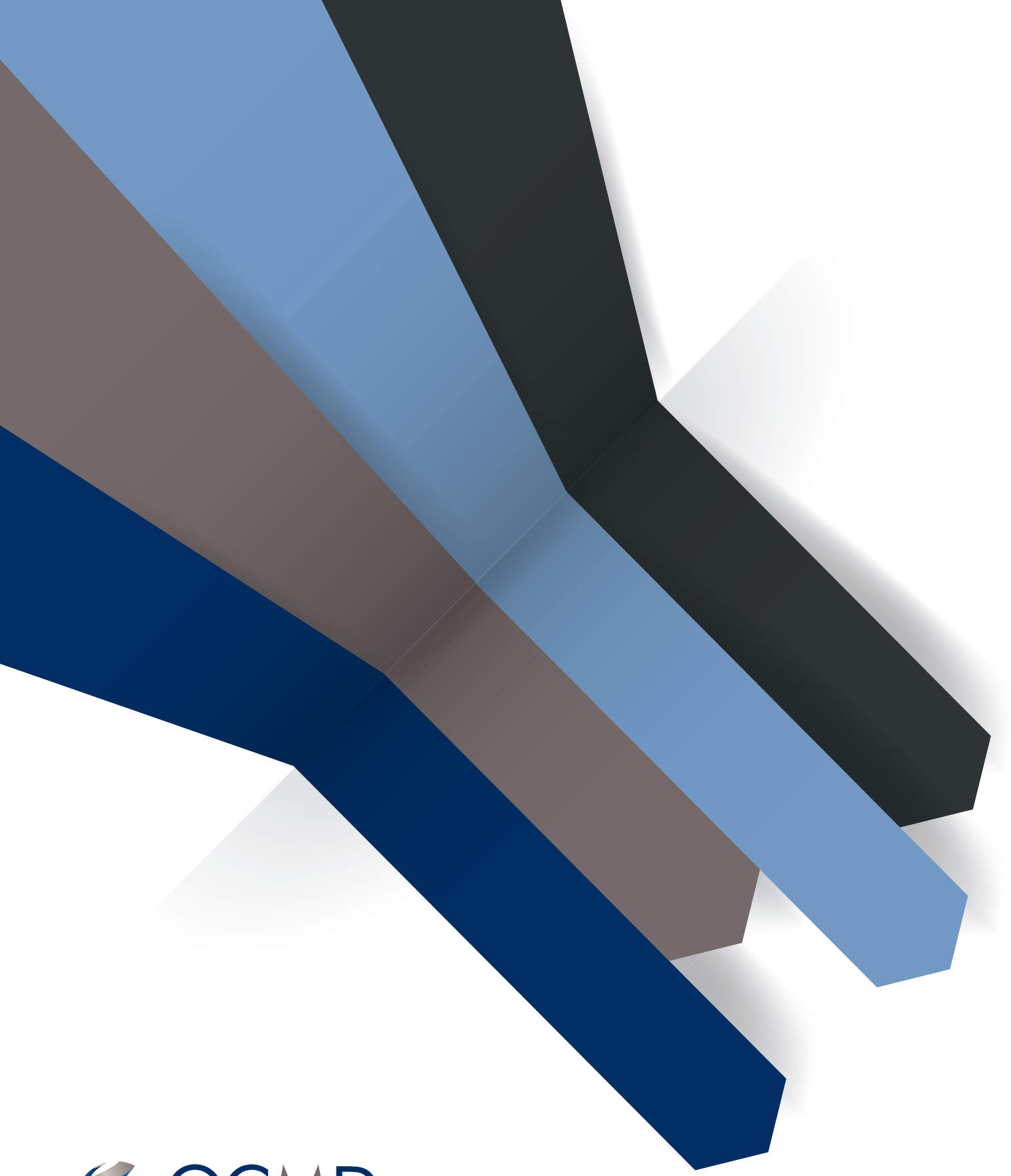


QCMD
Quality Control for Molecular Diagnostics

2022 EQA SCHEME CATALOGUE

Version number CAT2022/01

EQA FOR MOLECULAR INFECTIOUS DISEASE TESTING

QCMD (Quality Control for Molecular Diagnostics) is an independent External Quality Assessment (EQA) / Proficiency Testing (PT) scheme specialising in molecular testing of a wide range of infectious diseases.

AN INTRODUCTION TO THE QCMD EQA SCHEMES

The aim of QCMD's External Quality Assessment (EQA) programmes or schemes is to help monitor and improve laboratory quality by assessing a laboratory's use of molecular testing for infectious diseases. The EQA schemes are both educational and regulatory in application and support continuous quality improvement, as well as assist laboratory accreditation / certification to ISO15189 or equivalent.

Who can participate?

The EQA schemes are provided globally either directly from QCMD or through one of many QCMD approved QAcollaborators and distributors. To register or find out more go to www.qcmd.org

The EQA scheme format

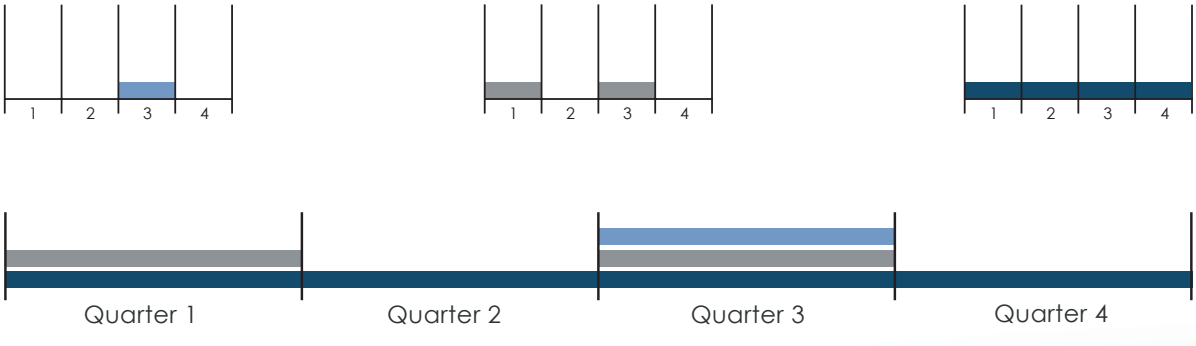
All individual QCMD EQA schemes have their own design specifications which are agreed by the QCMD scientific experts / advisors for each scheme. The distribution frequencies (number of challenges per year) within an EQA scheme often vary in different countries due to regional regulatory requirements. As a result, QCMD offers a range of options from a single challenge per year to a 4 challenge EQA format per year depending on the EQA scheme.

Participants can select which EQA format is best for their laboratory and regulatory requirements.
Please note: if the EQA scheme format within the catalogue does not meet your specific requirements contact the QCMD office and we will see what we can do to help you.

For more details on the format of each of the EQA schemes see the individual EQA specifications within the catalogue or visit the QCMD website.

For example, the HIVRNA, HBV, and HCV BBV viral load EQA schemes are provided with the option of either 1, 2 or 4 challenges per year.

1 CHALLENGE	2 CHALLENGES	4 CHALLENGES
Catalogue No. QAV994108_1	**Catalogue No.** QAV994108_2	**Catalogue No.** QAV994108_4
Panel Members: 8 per Challenge	**Panel Members:** 4 per Challenge	**Panel Members:** 4 per Challenge



Distribution and Testing Period(s)

EQA Distribution schedule

The EQA schemes are distributed at set dates throughout the year. An outline of the distribution schedule is provided in appendix I and further details regarding the annual distribution schedule are provided on registration through the QCMD website (www.qcmd.org). On receipt of the EQA panel the laboratory has a defined period of time to test the panel and return their results to QCMD through the secure web-based portal. An outline of the testing periods is also provided within appendix I.

QCMD EQA Reports & feedback

After the close of the EQA results return phase, laboratories receive an individual report for the EQA challenge /scheme they have participated in. This provides an overview of their performance in relation to their method/technology type peer group and, where appropriate, the overall consensus from all participants within the EQA scheme.

On completion of the EQA scheme, a supplementary report may be provided (depending on the EQA scheme).

The supplementary report includes any relevant additional information regarding the recent EQA scheme, and where appropriate any Scientific Expert commentary / feedback on the overall EQA scheme results. Where required, National EQA providers or country specific EQA groups are also provided with an additional country specific EQA report.

Further information

For further details register on line, visit your profile area and download the QCMD participant manual at www.qcmd.org

EQA GROUPS

BLOODBORNE VIRUS

The Bloodborne Virus (BBV) group of QCMD External Quality Assessment (EQA) schemes consists of pathogens that are detected from the blood. This includes human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), B19 virus (B19) and more recently hepatitis A virus (HAV), hepatitis E virus (HEV) andhepatitis D virus (HDV).

To compliment the detection and viral load determination schemes above a range of genotyping and drug resistance BBV EQA schemes are available.

For the drug resistance BBV EQA schemes different current resistance markers are included and emphasis is placed on the determination and interpretation of these resistance markers.

CENTRAL NERVOUS SYSTEM

Infections of the Central Nervous System (CNS) can occur indirectly via the blood following damage to the blood brain barrier or directly through intraneuronal routes. Encephalitis and meningitis are important CNS infections which can have viral, bacterial or parasitic origins.

Viral encephalitis can occur as a result of acute infection or as the consequence of latent infection. Common viral causes include herpes simplex virus (HSV), specific enteroviruses (EV), JC and BK virus, as well as Varicella- Zoster virus (VZV). Bacterial infections within the CNS such as meningitis can be a result of direct infection of the brain or may be due to underlying diseases which can lead to secondary CNS infection. Parasites such as Toxoplasma gondii can also cause CNS infections particularly in immunocompromised individuals.

In recent years significant advances have been made in understanding CNS pathogenesis with the development of molecular technologies for the diagnosis and monitoring of disease, the introduction of effective treatment therapies and, in some cases, the development of vaccines (e.g. Japanese encephalitis & rabies). The range of QCMD EQA schemes within this area focus on pathogens known to play a significant clinical role in CNS infection. The general aim of this group of EQA schemes is to assess the laboratories' ability in the detection and determination of the selected pathogen. Where appropriate pathogen load estimation is also evaluated.

CONGENITAL INFECTIONS

The term congenital infection is used to describe those infections transmitted from mother to child either during pregnancy (Transplacental infection) or immediately after childbirth. They can be caused by viruses, bacteria and on occasion parasites. The ability of a particular pathogen to cross the placenta and infect the foetus /embryo is dependent on many factors including the mother's immune status. Primary infections during pregnancy can result in spontaneous abortion or major developmental disorders if undetected and left untreated.

In recent years the diagnosis of congenital infections has been significantly improved by the ability to obtain clinical samples such as blood through chorionic villus sampling. In addition, the application of molecular technologies has helped significantly in the diagnosis, monitoring, and treatment rationale. CMV Dried Blood Spots is one of the EQAs provided in this disease group.

DRUG RESISTANCE

The ability of microorganisms to adapt and develop resistance to antimicrobials is natural and an evolutionary trait they have been employing for thousands of years. Hence there are many examples of drug resistant strains in viral, bacterial and parasitic diseases. However, it is well recognised that the over prescription of antimicrobials within clinical practice and their overuse in domestic products has helped to accelerate drug resistance, and led to the emergence of multidrug resistance.

QCMD has established a range of Drug Resistance EQA schemes covering a variety of pathogen types. The primary aims of these schemes are to assess the laboratory in their ability to detect and determine the presence of drug resistance at the molecular level. In addition some of the schemes also cover drug resistance interpretation.

EXOTIC/EMERGING DISEASES

A complex relationship exists between pathogen genetics, host and the environment. As a result, predicting the future emergence of exotic diseases is difficult. However, globalisation coupled with rapid increases in human populations over the last 50 years has played an important role. Local environmental changes such as deforestation due to urbanisation bring humans into closer contact with potential new pathogen vectors. These factors disturb the subtle balance between pathogen, host and the environment and create the opportunity for the emergence of new disease pathogens or the re- emergence of existing pathogens. These diseases can be caused by newly identified pathogens, pathogen strains such as SARS or the mutation of existing strains such as Influenza virus. In addition, the spread of known pathogens (e.g. West Nile virus & dengue virus) into new geographical areas leading to new potential endemics account for a large number of exotic / emerging diseases. The EQAs within this group focus on those emerging diseases that are frequently being identified within progressive geographic regions.

GASTROINTESTINAL DISEASES

Gastroenteritis can be caused by a wide variety of bacteria, viruses and parasites. It is often associated with severe inflammation of the gastrointestinal tract involving both the stomach and small intestine. This results in acute diarrhoea and vomiting.

Diagnosis is primarily based on clinical symptoms, but laboratory diagnosis on the etiological cause is often needed in order to support patient care. In recent years molecular diagnostic techniques such as real-time PCR have also been introduced for the laboratory diagnosis of gastroenteritis, including the ability to simultaneously screen for a wide range of enteric pathogens using multiplex assays. As a result, molecular diagnostic techniques are increasingly being used in the routine laboratory setting for detection, determination and surveillance of a wide range of enteric pathogens.

The general aim of this group of EQA schemes is to allow laboratories to assess their ability in the use of molecular diagnostic tests for a range of viral, bacterial and parasitic enteric pathogens.

IMMUNOCOMPROMISED ASSOCIATED DISEASES

The treatment and management of patients with compromised immune systems has seen important developments in recent years with, for example, the introduction of novel multi-drug treatment regimes. As a result, the healthcare and management of immunocompromised patients has greatly improved. However, pathogen infection or viral reactivation remain significant contributors to morbidity and mortality in these patients.

A number of opportunistic parasitic, fungal and viral pathogens are of concern in the management of immunocompromised patients due to both acute infection and reactivation of latent virus in the immunocompromised host.

Advances in molecular diagnostics have allowed accurate pathogen assessment and quantitative monitoring, particularly of viral activity over time, which allows early and accurate pre-emptive intervention and management of antiviral drug therapy.

The range of QCMD EQA schemes within this area focus on pathogens known to play a significant clinical role in the management of immunocompromised patients. The general aim of this group of EQA schemes is to assess the ability of laboratories in the detection of the selected pathogen and where appropriate quantitative estimation is also evaluated.

MULTIPLE PATHOGEN/SYNDROMIC

Multiplex based molecular diagnostic tests offer the ability for the detection of a wide range of pathogens within a single diagnostic test.

Syndromic approaches to test respiratory, gastroenteritis and meningitis infections allows clinicians to identify the cause of infection from a wide range of pathogens often in a near patient, point of impact setting where rapid diagnosis aids faster clinical decision making and patient treatment. These technologies are generally used as a screening approach where identification of pathogens allow improved patient management at initial point of contact.

QCMD have introduced multi-pathogen/syndromic schemes to address this growing need in the clinical setting. A range of schemes cover respiratory infections, transplant associated infections, central nervous system infections, sexually transmitted infections and gastroenteritis infections caused by a range of aetiologies.

RESPIRATORY DISEASES

Respiratory tract infections (RTIs) are common conditions, experienced by most adults and children each year. They can affect both the upper and lower respiratory tract and range from the common cold to viral and bacterial pneumonia. For the young, the elderly and the immune compromised, RTIs can be a significant health threat if not managed effectively.

RTIs can be caused by a large number of bacterial, viral and fungal pathogens which have nearly indistinguishable physiological symptoms. This can increase the chances of undiagnosed or misdiagnosed infections leading to patients either not receiving critical medications, or receiving unnecessary antibiotics. The advance of molecular diagnostic techniques has improved our ability to rapidly determine the causative agents of RTIs and has the potential to improve patient management, control of nosocomial transmission and promote targeted therapy.

The Respiratory EQA schemes cover 17 of the major viral, bacterial and fungal causes of RTIs, focusing on the pathogen load and allowing assessment of the laboratories ability to accurately identify the species of interest at clinically relevant levels.

SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) remain a major public health concern throughout the world with some infections reaching epidemic proportions in sexually active groups. As a result, a number of WHO and UN global strategies have been initiated in an attempt to control the spread of STIs.

STIs are the main preventable cause of infertility, particularly in women. However, some STIs remain asymptomatic before leading to serious reproductive complications and congenital infections, therefore appropriate diagnosis and treatment is essential.

Molecular diagnostic assays allow the accurate assessment of STIs in patients that present with similar symptoms or asymptomatic persons from at risk groups allowing early and accurate intervention and treatment.

The range of QCMD EQA schemes within this area focus on pathogens known to be the most common cause of STIs. The general aim of this group of EQA schemes is to assess the ability of laboratories in the detection of the selected pathogen.

TRANSPLANT ASSOCIATED DISEASES

Advances in transplant medicine, including the development of immunosuppressive agents, has greatly improved the prospects of transplant recipients. However, pathogen infection and in particular viral reactivation remain significant contributors to transplant patient morbidity and mortality.

A number of viruses are of particular concern, these include: human herpes virus6 (HHV6), human cytomegalovirus (CMV) and Epstein-Barr virus (EBV) along with human adenovirus (ADV), JC virus (JCV) and BK virus (BKV). Other opportunistic infections such as the parasite Toxoplasma gondii are also relevant. Advances in molecular diagnostics have allowed accurate pathogen assessment prior to transplant and accurate quantitative monitoring, particularly of viral activity over time, after the transplant has been performed. This in turn allows early and accurate pre-emptive intervention and antiviral drug therapy.

The range of QCMD EQA schemes within this area focus on those pathogens known to play a significant clinical role in transplant medicine. The general aim of this group of EQA schemes is to assess the ability of laboratories in the detection of the selected pathogen and where appropriate quantitative estimation is also evaluated.

TYPING

Advances in the treatment and management of patient infection have seen important developments in recent years. In particular the introduction of novel antiviral drug therapies has improved the medium and long- term prospects of infected patients. However, the development of drug resistant pathogens is an increasing complication and remains a significant factor in the treatment of these patient groups.

The use of genotyping and sequencing technologies has allowed accurate pathogen assessment and monitoring of patient samples over time. This allows early and accurate determination of pathogen status. Which in turn allows pre- emptive intervention and management of antiviral drug therapy.

The range of QCMD EQA schemes within this area focus on pathogens known to play a significant clinical role in the management of infection. The general aim of this group of EQA schemes is to assess the ability of laboratories in the genetic determination of the selected pathogen and where appropriate the specific mutation points within the target gene.

OTHER

QCMD are continuously expanding our range of EQA schemes, some of which are outside the defined EQA groups listed above.

VIRAL EQA

ADENOVIRUS

ADVDNA22 - QAV054133

To assess the proficiency of laboratories in the detection and quantitation of adenovirus.
To assess the proficiency of laboratories in the detection of different adenovirus serotypes including currently circulating serotypes of interest.

Feature	Available format(s)	
Catalogue Number	QAV054133_1	QAV054133_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium and/or Plasma
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Condition	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

B19 VIRUS

B19DNA22 - QAV034116

To assess the proficiency of laboratories in the detection and quantitation of B19 virus.

Feature	Available format(s)	
Catalogue Number	QAV034116_1	QAV034116_2
Total Number of Challenges	1	2
Number of Panel Members	8	4
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Clinical material
Matrix Panel Format	Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.2 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

BK VIRUS

BKDNA22 - QAV144166

To assess the proficiency of laboratories molecular assays in detecting various types and concentrations of BK virus (BKV). To assess the proficiency of laboratories in the reliable quantitation of BKV viral load.

Feature	Available format(s)	
Catalogue Number	QAV144166_1	QAV144166_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium and/or Plasma and/or Urine
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CHIKUNGUNYA VIRUS

CHIKV22 - QAV154175

To assess the laboratory's ability to detect chikungunya virus using their routine molecular diagnostic platform and procedures.

Feature	Available format(s)
Catalogue Number	QAV154175_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

CMV DRUG RESISTANCE

CMVDR22- QAV144169

To assess the laboratories' ability to detect CMV drug resistance mutations in kinase UL97 and polymerase UL54 genes using sequencing techniques.

Feature	Available format(s)
Catalogue Number	QAV144169_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma and/or Physiological Buffer
Panel Member Target Range	various mutations - kinase (UL97) and polymerase (UL54) genes
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Sequence Analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Condition	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CORONAVIRUS

CVRNA22 - QAV064137

To assess the proficiency of laboratories in the detection of coronavirus. To assess the proficiency of laboratories in the detection of different coronavirus genotypes.

Feature	Available format(s)
Catalogue Number	QAV064137_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering Clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CYTOMEGALOVIRUS DRIED BLOOD SPOTS

CMVDBS22 - QAV064127

To assess the performance of laboratories in the detection of clinically relevant levels of human cytomegalovirus (CMV) from dried blood spots.

Feature	Available format(s)
Catalogue Number	QAV064127_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Dried Blood Spots
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	2x50µl
Panel Sample Pre-treatment Requirement	DNA extraction from dried blood spot
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

CYTOMEGALOVIRUS WHOLE BLOOD

CMVWB22 - QAV124150

To evaluate the ability of laboratories in the detection of CMV from whole blood samples. To assess the precision of molecular assays at clinically relevant viral loads.

Feature	Available format(s)	
Catalogue Number	QAV124150_1	QAV124150_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Whole Blood
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-30°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

DENGUE VIRUS

DENVRNA22 - QAV114148

To assess the proficiency of laboratories in the detection of dengue virus. To assess the proficiency of laboratories in distinguishing dengue virus from other flaviviruses.

Feature	Available format(s)
Catalogue Number	QAV114148_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

ENTEROVIRUS

EVRNA22 - QAV984104

To assess the ability of laboratories molecular assays to detect different types and concentrations of enterovirus (EV). To review the performance of laboratories quantitative EV molecular assays.

Feature	Available format(s)	
Catalogue Number	QAV984104_1	QAV984104_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured virus and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

ENTEROVIRUS TYPING

EVTP22 - QAV164185

To assess laboratories ability to correctly identify specific enterovirus types using their routine molecular method and procedures.

Feature	Available format(s)
Catalogue Number	QAV164185_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q1

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering Clinical range
Panel Member Sample Volume	1.0ml
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

EPSTEIN-BARR VIRUS

EBVDNA22 - QAV024121

To assess the proficiency of laboratories in the detection and quantitation of Epstein-Barr virus (EBV).

Feature	Available format(s)	
Catalogue Number	QAV024121_1	QAV024121_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium and/or Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

EPSTEIN-BARR VIRUS WHOLE BLOOD

EBVWB22 - QAV134161

To assess the proficiency of laboratories in the detection and quantitation of Epstein-Barr virus (EBV) in whole blood samples.

Feature	Available format(s)	
Catalogue Number	QAV134161_1	QAV134161_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Whole Blood
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-30°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HBV DRUG RESISTANCE

HBVDR22 - QAV124160

To assess the performance of laboratories in the detection of drug resistance mutations in the hepatitis B virus (HBV) DNA polymerase gene using sequencing techniques and/or LiPA technology.

Feature	Available format(s)
Catalogue Number	QAV124160_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Panel Member Target Range	Various mutations – DNA polymerase
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Sequence Analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HBV GENOTYPING

HBVGT22 - QAV064118

To assess the proficiency of laboratories in the correct genotyping of hepatitis B virus (HBV) using molecular methods.

Feature	Available format(s)
Catalogue Number	QAV064118_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q1

Specifications	
Sample NA Target Source	Clinical material
Genotypic Variant	Various HBV genotypes
Matrix Panel Format	Plasma
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.2 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HCV DRUG RESISTANCE

HCVDR22 - QAV134167

The QCMD HCV Drug Resistance (HCVDR) scheme has to-date been based around resistance to the first generation Direct Acting Antiviral (DAA) NS3 protease inhibitors, boceprevir and telaprevir, which became widely available circa 2011. However the "previr" family of drugs are only effective against HCV genotype 1 infections limiting the scope of the HCVDR scheme to single genotype, single gene target. First generation DAAs were supplemented in 2014 with the release of the first "buvir" NS5b inhibitors for use against genotype 1 followed by the release of the first NS5a inhibitor "asvir" family of drugs in 2015, which are effective against both genotype 1 and 3 infections.

All three drug families are now in routine use and are included in both the WHO list of essential medicines and the national guidelines of several countries for treatment of HCV. Based on this the HCVDR scheme has been updated to reflect the current clinical environment with regards to drug resistance testing.

The aim of the HCVDR EQA is to assess the performance of laboratories in the detection of drug resistance mutations in the hepatitis C virus (HCV) genotypes 1 and 3 (NS3 and NS5 regions) using sequencing techniques.

Feature	Available format(s)
Catalogue Number	QAV134167_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Panel Member Target Range	Various mutations – NS3 and NS5a regions
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Sequence Analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HCV GENOTYPING

HCVGT22 - QAV034117

To assess the proficiency of laboratories in the correct genotyping of hepatitis C virus (HCV) using molecular methods.

Feature	Available format(s)
Catalogue Number	QAV034117_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q1

Specifications	
Sample NA Target Source	Clinical material
Genotypic Variant	Various HCV genotypes and subtypes
Matrix Panel Format	Plasma
Panel Member Target Range	Covering clinical range
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HEPATITIS A VIRUS

HAVRNA22 - QAV124156

To evaluate the ability of laboratories in the molecular detection of hepatitis A virus (HAV) in terms of sensitivity and specificity.

Feature	Available format(s)	
Catalogue Number	QAV124156_1	QAV124156_2
Total Number of Challenges	1	2
Number of Panel Members	8	4
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.2 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HEPATITIS B VIRUS

HBVDNA22 - QAV994110

To assess the proficiency of laboratories in the detection and quantitation of hepatitis B virus (HBV). To assess the proficiency of laboratories is the detection and quantitation of different HBV genotypes.

Feature	Available format(s)		
Catalogue Number	QAV994110_1	QAV994110_2	QAV994110_4
Total Number of Challenges	1	2	4
Number of Panel Members	8	4	4
Distribution / Testing Period	Q3	Q1 & Q3	Q1, Q2, Q3 & Q4

Specifications	
Sample NA Target Source	Cultured virus and/or Clinical material
Matrix Panel Format	Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.2 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HEPATITIS C VIRUS

HCVRNA22 - QAV994112

To assess the proficiency of laboratories in the detection and quantitation of hepatitis B virus (HBV). To assess the proficiency of laboratories is the detection and quantitation of different HBV genotypes.

Feature	Available format(s)		
Catalogue Number	QAV994112_1	QAV994112_2	QAV994112_4
Total Number of Challenges	1	2	4
Number of Panel Members	8	4	4
Distribution / Testing Period	Q3	Q1 & Q3	Q1, Q2, Q3 & Q4

Specifications	
Sample NA Target Source	Clinical material
Matrix Panel Format	Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.2 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HEPATITIS D VIRUS

HDV22 - QAV144170

To evaluate laboratories in the detection of HDV within the routine clinical setting.

Feature	Available format(s)
Catalogue Number	QAV144170_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Analysis type	Qualitative & Quantitative
Panel Member Sample Volume	1.2 ml
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HEPATITIS E VIRUS

HEVRNA22 - QAV124157

To evaluate the ability of laboratories in the detection and quantification of hepatitis E virus (HEV).

Feature	Available format(s)
Catalogue Number	QAV124157_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Panel Member Target Range	Covering Clinical range
Panel Member Sample Volume	0.6 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HERPES SIMPLEX VIRUS 1 & 2

HSVDNA22 - QAV994105

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

Feature	Available format(s)	
Catalogue Number	QAV994105_1	QAV994105_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured virus and/or Clinical material
Matrix Panel Format	Transport medium and/or synthetic CSF
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HERPES SIMPLEX VIRUS DRUG RESISTANCE

HSVDR22 - QAV164184

To assess the performance of laboratories in the detection of drug resistance mutations in the herpes simplex virus thymidine kinsase (UL23) and DNA polymerase (UL30) genes using sequencing techniques.

Feature	Available format(s)
Catalogue Number	QAV164184_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q1

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Various mutations - Thymidine Kinase (UL23) and DNA polymerase (UL30)
Panel Member Sample Volume	1.0ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse acordingly
Panel Analysis type	Sequence Analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HIV-1 (DNA)

HIVDNA22 - QAV034114

To assess the proficiency of laboratories in the detection of human immunodeficiency virus type 1 (HIV-1) pro-viral DNA.

Feature	Available format(s)	
Catalogue Number	QAV034114_1	QAV034114_2
Total Number of Challenges	1	2
Number of Panel Members	8	4
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured proviral cells
Matrix Panel Format	Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	0.1 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse acordingly
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HIV-1 (RNA)

HIVRNA22 - QAV994108

To assess the proficiency of laboratories in the detection and quantitation of human immunodeficiency virus(HIV) RNA. To assess the proficiency of laboratories in the detection and quantitation of different HIV genotypes.

Feature	Available format(s)		
Catalogue Number	QAV994108_1	QAV994108_2	QAV994108_4
Total Number of Challenges	1	2	4
Number of Panel Members	8	4	4
Distribution / Testing Period	Q3	Q1 & Q3	Q1, Q2, Q3 & Q4

Specifications	
Sample NA Target Source	Cultured virus and/or Clinical material
Matrix Panel Format	Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.2 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse acordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HIV-1 DRUG RESISTANCE

HIVDR22 - QAV024131

To assess the performance of laboratories in the detection of drug resistance mutations in the HIV-1 protease and reverse transcriptase genes.

Feature	Available format(s)
Catalogue Number	QAV024131_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Panel Member Target Range	Various mutations - reverse transcriptase (RT) and protease (PR) genes
Panel Member Sample Volume	1.0ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse acordingly
Panel Analysis type	Sequence Analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HIV-1 DRUG RESISTANCE (INTEGRASE)

HIVDRint22 - QAV114146

To assess the performance of laboratories in the detection of drug resistance mutations in the HIV-1 integrase gene using sequencing techniques.

Feature	Available format(s)
Catalogue Number	QAV114146_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Panel Member Target Range	Various mutations - integrase (INT) gene
Panel Member Sample Volume	1.0ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Sequence Analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HIV-2

HIV2_22 - QAV204212

To assess the proficiency of laboratories in the detection and quantitation of human immunodeficiency virus type2 (HIV-2).

Feature	Available format(s)	
Catalogue Number	QAV204212_1	QAV204212_2
Total Number of Challenges	1	2
Number of Panel Members	8	4
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured material and/or Clinical material
Matrix Panel Format	Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.2ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HUMAN CYTOMEGALOVIRUS

CMVDNA22 - QAV014120

To assess the proficiency of laboratories in the detection and quantitation of human cytomegalovirus (CMV).

Feature	Available format(s)	
Catalogue Number	QAV014120_1	QAV014120_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HUMAN HERPES VIRUS 6

HHV6DNA22 - QAV084119

To assess the proficiency of laboratories' molecular assays in the detection of various types of human herpes virus 6 (HHV6). To assess the proficiency of laboratories in the reliable quantitation of HHV6 viral load.

Feature	Available format(s)	
Catalogue Number	QAV084119_1	QAV084119_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Genotypic Variant	Subtypes A and B
Matrix Panel Format	Transport Medium and/or Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HUMAN METAPNEUMOVIRUS

MPV22 - QAV054135

To assess the sensitivity and specificity of laboratories in the detection of human metapneumovirus (MPV). To assess the ability of laboratories in the detection of different human MPV types.

Feature	Available format(s)
Catalogue Number	QAV054135_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HUMAN PAPILLOMAVIRUS (PRESERVCYT)

HPVPRES22 - QAV094130

Human Papillomavirus (HPV) infection has been detected in over 95% of cervical cancers. The second most common cancer detected in females worldwide. The detection of HPV infection is an important part of the triage, with cytomorphological examination in the early detection of cervical cancer in scrapings. For effective triage, quantitative detection and accurate HPV-typing at clinically relevant levels is essential. The introduction of nucleic acid amplification technologies (NAT) and nucleic acid hybridisation assays has led to the development of sensitive, type specific diagnostic tests that can rapidly identify HPV infection. As a result, these tests are now of great practical and clinical relevance.

The aim of the EQA is to assessthe proficiency of laboratories in the detection of different high risk Human Papillomavirus types within aPreservCyt matrix.

Feature	Available format(s)	
Catalogue Number	QAV094130_1	QAV094130_2
Total Number of Challenges	1	2
Number of Panel Members	12	6
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Clinical material and/or cell lines containing HPV
Matrix Panel Format	Transport Medium (PreservCyt)
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	15-30°C / Liquid Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

HUMAN PAPILLOMAVIRUS (SUREPATH)

HPVSURE22 - QAV184204

Human Papillomavirus (HPV) infection has been detected in over 95% of cervical cancers, the second most common cancer detected in females worldwide. The detection of HPV infections is an important part of the triage with cytomorphological examination in the early detection of cervical cancer in scrapings. For effective triage, quantitative detection and accurate HPV- typing at clinically relevant levels is essential. The introduction of nucleic acid amplification technologies (NAT) and nucleic acid hybridisation assays has led to the development of sensitive, type specific diagnostic tests that can rapidly identify HPV infection. As a result, these tests are now of great practical and clinical relevance.

To assess the proficiency of laboratories in the detection of different high risk Human Papillomavirus types within a SurePath™ matrix.

Feature	Available format(s)
Catalogue Number	QAV184204_1
Total Number of Challenges	1
Number of Panel Members	12
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Clinical material and/or cell lines containing HPV
Matrix Panel Format	Transport Medium (SurePath)
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

INFLUENZA A & B VIRUS

INFRNA22 - QAV054134

To assess the proficiency of laboratories in detection of influenza virus RNA.
To assess the proficiency of laboratories in distinguishing influenza virus A and B.

Feature	Available format(s)	
Catalogue Number	QAV054134_1	QAV054134_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

INFLUENZA TYPING

INFTP22 - QAV064138

To assess the proficiency of laboratories in the detection of different influenza virus types, subtypes and lineages To assess the proficiency of laboratories in the typing and subtyping/lineage determination of influenza viruses.

Feature	Available format(s)
Catalogue Number	QAV064138_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

JC VIRUS

JCDNA22 - QAV074106

To assess the proficiency of laboratories molecular assays in detecting various types and concentrations of JC virus (JCV). To assess the proficiency of laboratories in the reliable quantitation of JCV viral load.

Feature	Available format(s)	
Catalogue Number	QAV074106_1	QAV074106_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium and/or Plasma
Units of Measurement	The primary unit is IU/ml however other units will be accepted
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

MEASLES / MUMPS

MM22 - QAV144171

To assess the proficiency of laboratories in the detection of mumps and/or measles using routine molecular methods.

Feature	Available format(s)
Catalogue Number	QAV144171_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

MERS CORONAVIRUS

MERS22 - QAV154181

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

Feature	Available format(s)
Catalogue Number	QAV154181_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering Clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

NOROVIRUS

NVRNA22 - QAV084139

To assess the specificity and sensitivity of laboratories in the detection of norovirus. To assess the ability of the laboratories to detect different norovirus genogroups.

Feature	Available format(s)	
Catalogue Number	QAV084139_1	QAV084139_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium and/or Physiological Buffer and/or Synthetic Faecal Matrix
Panel Member Sample Volume	1.0 ml VTM, 0.1 ml Buffer
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical or semi-processed samples
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

PARAINFLUENZA VIRUS

PINFRNA22 - QAV064136

To assess the proficiency of laboratories in the detection of parainfluenza virus.
To assess the proficiency of laboratories in the detection of different parainfluenza virus types.

Feature	Available format(s)
Catalogue Number	QAV064136_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering Clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

PARECHOVIRUS

PEVRNA22 - QAV114145

To assess the ability of laboratories molecular assays to detect different types and concentrations of parechovirus.

Feature	Available format(s)	
Catalogue Number	QAV114145_1	QAV114145_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured virus and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

RESPIRATORY SYNCYTIAL VIRUS

RSV22 - QAV054142

To assess the specificity and sensitivity of laboratories in the detection of respiratory syncytial virus (RSV). To assess the ability of laboratories in the detection of different RSV types.

Feature	Available format(s)	
Catalogue Number	QAV054142_1	QAV054142_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

RHINOVIRUS

RVRNA22 - QAV064143

To assess the proficiency of laboratories in the detection of rhinovirus.
To assess the proficiency of laboratories in the detection of different rhinovirus genotypes

Feature	Available format(s)
Catalogue Number	QAV064143_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

SARS-COV-2

SCV2_22 - QAV204215

To assess the proficiency of laboratories in the detection of the new variant SARS-CoV-2 coronavirus including variants of concern (VOC). To assess the proficiency of laboratories in the differentiation of different coronavirus genotypes.

Feature	Available format(s)			
Catalogue Number	QAV204215_1A	QAV204215_1B	QAV204215_1C	QAV204215_1D
Total Number of Challenges	1	1	1	1
Number of Panel Members	5	5	5	5
Distribution / Testing Period	Q1	Q2	Q3	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

SARS-COV-2 ANTIGEN TESTING

SCV2Ag22 – QAS214224

To assess the proficiency of laboratories in the detection of the new variant SARS-CoV-2 coronavirus antigen including variant of concern (VOC).

The EQA is aimed at both laboratory based immunoassays as well as those used within the Point of Care (PoC) setting such as rapid lateral flow antigen tests and PoC analysers.

Feature	Available format(s)			
Catalogue Number	QAS214224_1A	QAS214224_1B	QAS214224_1C	QAS214224_1D
Total Number of Challenges	1	1	1	1
Number of Panel Members	5	5	5	5
Distribution / Testing Period	Q1	Q2	Q3	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	0.5 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various antigen testing methodologies
Storage / Shipment Conditions	Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

TORQUE TENO VIRUS

TTV22 - QAV184203

The aim of the Torque Teno Virus (TTV) EQA is to assess laboratories ability to detect TTV using routine molecular diagnostic platform and procedures.

Feature	Available format(s)
Catalogue Number	QAV184203_1
Total Number of Challenges	1
Number of Panel Members	6
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

VARICELLA-ZOSTER VIRUS

VZVDNA22 - QAV034103

To assess the ability of laboratories molecular assays to detect different concentrations of Varicella-Zoster virus (VZV). To review the performance of laboratories quantitative VZV molecular assays.

Feature	Available format(s)	
Catalogue Number	QAV034103_1	QAV034103_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured virus and/or Clinical material
Matrix Panel Format	Transport medium and/or synthetic CSF
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

WEST NILE VIRUS

WNVRNA22 - QAV104141

To assess the proficiency of laboratories in the detection of West Nile virus.
To determine the proficiency of laboratories in distinguishing West Nile virus from other flaviviruses.

Feature	Available format(s)
Catalogue Number	QAV104141_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

YELLOW FEVER VIRUS

YFV22 - QAV194207

To assess the proficiency of laboratories in the detection of yellow fever virus.
To determine the proficiency of laboratories in distinguishing yellow fever virus from other flaviviruses.

Feature	Available format(s)
Catalogue Number	QAV194207_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

ZIKA VIRUS

ZIKA22 - QAV164186

To assess the proficiency of laboratories in the detection of Zika virus and determine the proficiency of laboratories in distinguishing Zika virus from other flaviviruses.

Feature	Available format(s)
Catalogue Number	QAV164186_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

BACTERIAL EQA

ATYPICAL MYCOBACTERIUM

NTM22 - QAB194208

To assess the proficiency of laboratories to detect atypical mycobacterium or non-tuberculous mycobacteria (NTM).

Feature	Available format(s)
Catalogue Number	QAB194208_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

BACTERIAL 16S RIBOSOMAL RNA

B16SrRNA22 - QAB164183

To assess the proficiency of laboratories to detect, identify and interpret which bacterial species are provided within each panel member using their routine 16S rRNA molecular diagnostic procedures.

Feature	Available format(s)
Catalogue Number	QAB164183_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Physiological Buffer
Panel Member Target Range	Covering Clinical range
Panel Member Sample Volume	0.5 ml
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

BORDETELLA PERTUSSIS

BPDNA22 - QAB094132

To assess the proficiency of laboratories in the detection of Bordetella pertussis.

Feature	Available format(s)
Catalogue Number	QAB094132_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

BORRELIA BURGDORFERI SPP. (LYME DISEASE)

BbDNA22 - QAB114147

To assess the qualitative detection of B. burgdorferi sensu lato genospecies complex at different concentrations.

Feature	Available format(s)
Catalogue Number	QAB114147_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Microbiological Medium and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CHLAMYDIA PSITTACI

CPS22 - QAB134165

To assess the laboratories ability in the molecular detection of Chlamydia psittaci.

Feature	Available format(s)
Catalogue Number	QAB134165_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CHLAMYDIA TRACHOMATIS

CTDNA22 - QAB004101

To assess the qualitative performance of laboratories molecular assays in detecting Chlamydia trachomatis at various concentrations.
To assess the ability of laboratories molecular assays to correctly identify different C. trachomatis strains.

Feature	Available format(s)	
Catalogue Number	QAB004101_1	QAB004101_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured bacteria and/or Clinical material
Matrix Panel Format	Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHOEAE

CTNG22 - QAB174191

To assess the proficiency of laboratories in the detection of Chlamydia trachomatis and Neisseria gonorrhoeae using molecular technologies.

Feature	Available format(s)	
Catalogue Number	QAB174191_1	QAB174191_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured bacteria and/or Clinical material
Matrix Panel Format	Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CHLAMYDOPHILA PNEUMONIAE

CP22 - QAB084107

To assess the proficiency of laboratories in the correct detection of Chlamydophila pneumoniae.

Feature	Available format(s)
Catalogue Number	QAB084107_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Bronchoalveolar Lavage (BAL) and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	0.5 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CLOSTRIDIUM DIFFICILE

CDDNA22 - QAB084125

A terminology update in the Clostridium field has introduced a name change from Clostridium difficile to Clostridioides difficile. This has been adopted by the European Study Group for Clostridium difficile. Please note that QCMD will however continue to refer to this scheme and associated pathogens as Clostridium difficile at this time.

To assess the proficiency of laboratories in the molecular detection of Clostridium difficile.

Feature	Available format(s)	
Catalogue Number	QAB084125_1	QAB084125_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Microbiological Medium and/or Synthetic Faecal Matrix
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

DIARRHEAGENIC ESCHERICHIA COLI

E.COLI22 - QAB154179

To assess laboratories ability to detect diarrheagenic E. coli strains using their routine molecular diagnostic platform and procedures.

Feature	Available format(s)
Catalogue Number	QAB154179_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Synthetic Faecal Matrix and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Molecular Typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

EXTENDED SPECTRUM β-LACTAMASE AND CARBAPENEMASE

ESBL22 - QAB134162

To assess the laboratories ability to detect and determine different ESBL and carbapenemases in a clinical setting using their routine molecular diagnostic procedures.

Feature	Available format(s)
Catalogue Number	QAB134162_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Genotypic Variant	Various drug resistance strains
Matrix Panel Format	Physiological Buffer
Panel Member Sample Volume	0.5 ml
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

GROUP B STREPTOCOCCUS

GBS22 - QAB174200

To assess the laboratories ability in the qualitative detection of group B Streptococcus using their routine molecular diagnostic procedures.

Feature	Available format(s)
Catalogue Number	QAB174200_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured material and/or Clinical material
Matrix Panel Format	Plasma and/or Synthetic CSF and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HELICOBACTER PYLORI

H.PYLORI22 - QAB164190

To assess the laboratories ability in the qualitative detection of H. pylori and where appropriate, the identification of H. pylori antibiotic resistance status using their routine molecular diagnostic procedures.

Feature	Available format(s)
Catalogue Number	QAB164190_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Synthetic Faecal Matrix and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

LEGIONELLA PNEUMOPHILA

LPDNA22 - QAB044122

To assess proficiency of laboratories in the detection of Legionella pneumophila.

Feature	Available format(s)
Catalogue Number	QAB044122_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q1

Specifications	
Sample NA Target Source	Cultured bacteria and/or Clinical material
Matrix Panel Format	Bronchoalveolar lavage (BAL) and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	0.5 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS TYPING (EPIDEMIOLOGY AND OUTBREAK STUDIES)

MRSATP22 - QAB074128

To assess the proficiency of laboratories in the molecular typing for outbreak analysis of Methicillin Resistant Staphylococcus aureus.

Feature	Available format(s)
Catalogue Number	QAB074128_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Microbiological Medium and/or Transport Medium
Panel Member Target Range	Genetic variants of Staphylococcus aureus
Panel Member Sample Volume	0.2 ml
Panel Sample Pre-treatment Requirement	Culture followed by standard NA extraction
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS

MRSADNA22 - QAB064124

To assess the performance of laboratories in the detection of Methicillin Resistant Staphylococcus aureus.

Feature	Available format(s)
Catalogue Number	QAB064124_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Microbiological Medium and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

MYCOBACTERIUM TUBERCULOSIS

MTBDNA22 - QAB014129

To assess the proficiency of laboratories in the molecular detection of Mycobacterium tuberculosis complex.

Feature	Available format(s)	
Catalogue Number	QAB014129_1	QAB014129_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Sputum and/or Synthetic Sputum and/or Synthetic CSF
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Sample Pre-treatment Requirement	Routine respiratory sample treatment
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

MYCOBACTERIUM TUBERCULOSIS DRUG RESISTANCE

MTBDR22 - QAB194209

To assess the proficiency of laboratories to detect and differentiate MTB drug resistance strains using their routine molecular diagnostic procedures.

Feature	Available format(s)
Catalogue Number	QAB194209_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Genotypic Variant	Various drug resistance strains
Matrix Panel Format	Sputum and/or Synthetic Sputum and/or Synthetic CSF
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

MYCOPLASMA GENITALIUM

MG22 - QAB184205

To assess the performance of laboratories in the detection of Mycoplasma genitalium.

Feature	Available format(s)
Catalogue Number	QAB184205_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured material and/or Clinical material
Matrix Panel Format	Transport medium and/or Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

MYCOPLASMA PNEUMONIAE

MP22 - QAB174192

To assess the proficiency of laboratories in the correct detection of Mycoplasma pneumoniae.

Feature	Available format(s)
Catalogue Number	QAB174192_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q2

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Bronchoalveolar Lavage (BAL) and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	0.5 ml
Panel Sample Pre-treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

NEISSERIA GONORRHOEAE

NGDNA22 - QAB034126

To assess the proficiency of laboratories in the detection of Neisseria gonorrhoeae using molecular technologies.

Feature	Available format(s)	
Catalogue Number	QAB034126_1	QAB034126_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured bacteria and/or Clinical material
Matrix Panel Format	Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

STAPHYLOCOCCUS AUREUS SPA

SASPA22 - QAB134164

To assess the laboratories ability in the use of spa typing as a technique for the identification of Staphylococcus aureus.

Feature	Available format(s)
Catalogue Number	QAB134164_1
Total Number of Challenges	1
Number of Panel Members	6
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Microbiological Medium and/or Transport Medium
Panel Member Sample Volume	0.2 ml
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

SYPHILIS

SYPH22 - QAB154180

To assess laboratories ability to detect Treponema pallidum using their routine molecular diagnostic platform and procedures.

Feature	Available format(s)
Catalogue Number	QAB154180_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

VANCOMYCIN RESISTANT ENTEROCOCCI

VRE22 - QAB134163

This EQA will focus on the laboratories ability to detect and determine different VRE in clinically relevant sample types using molecular techniques.

Feature	Available format(s)
Catalogue Number	QAB134163_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Genotypic Variant	Various drug resistance strains
Matrix Panel Format	Microbiological Medium and/or Transport Medium
Panel Member Sample Volume	0.5 ml
Panel Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

FUNGAL EQA

ASPERGILLUS SPP.

ASPDNA22 - QAF104140

To assess the qualitative detection of Aspergillus species at different concentrations.

Feature	Available format(s)
Catalogue Number	QAF104140_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma and/or Physiological Buffer and/or Synthetic Sputum
Panel Member Target Range	Covering Clinical Range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative, Quantative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CANDIDA SPP.

CANDNA22 - QAF124151

To evaluate the ability of laboratories to use molecular techniques for detection of Candida species.

Feature	Available format(s)
Catalogue Number	QAF124151_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma and/or Physiological Buffer
Panel Member Target Range	Covering clinical and analytical range
Sputum	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

DERMATOPHYTOSIS

DERMA22 - QAF164187

To assess laboratories ability to detect dermatophytes using their routine molecular diagnostic platform and procedures.

Feature	Available format(s)
Catalogue Number	QAF164187_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

PNEUMOCYSTIS JIROVECII PNEUMONIA (PCP)

PCPDNA22 - QAF114144

To assess laboratories ability in the molecular detection of Pneumocystis jirovecii.
To assess the sensitivity of molecular assays in routine clinical use for the detection of P. jirovecii

Feature	Available format(s)
Catalogue Number	QAF114144_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Clinical material
Matrix Panel Format	Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis Type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

TRICHOMONAS VAGINALIS

TV22 - QAP184202

To assess the performance of laboratories in the detection of Trichomonas vaginalis.

Feature	Available format(s)
Catalogue Number	QAP184202_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport medium, Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

TOXOPLASMA GONDII

TGDNA22 - QAP044123

To assess the qualitative detection of toxoplasma gondii at different concentrations.

Feature	Available format(s)	
Catalogue Number	QAP044123_1	QAP044123_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Amniotic Fluid and/or Plasma
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

ARTHROPOD-BORNE VIRUSES

ARBO22 - QAM194206

The Arthropod-borne virus EQA will focus on the molecular detection and determination of different arthropod-borne viruses (including viruses from Flavi-, Toga-, Bunya-, and/or Reoviridae families). The panel is designed to represent various clinical scenarios (fever, haemorrhagic symptoms and/or neurological illness) and may include medically important arboviruses such as tick-borne encephalitis viruses, sandfly fever viruses, Japanese encephalitis viruses, Rift Valley fever viruses, Usutu virus, Murray Valley encephalitis virus, or St. Louis encephalitis virus. Participating laboratories will be expected to test each panel using their appropriate molecular methods and report their individual test results to QCMD.

Feature	Available format(s)
Catalogue Number	QAM94206_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-Treatment Requirement	Reconstitution of lyophilised material
Panel Analysis Type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C /Lyophilised Ambient
Accreditation/Regulatory Status	Accredited to ISO17043

BACTERIAL GASTROENTERITIS

GASTROB22 - QAB124153

Different species of pathogenic bacteria are known to cause gastroenteritis. The panel members of this EQA will resemble clinical samples and may include current clinically relevant strains of Salmonella, Shigella, Yersinia, E.coli 0157, C. difficile or Campylobacter species. The aim of the Bacterial Gastroenteritis EQA is to assess laboratories ability to detect a range of bacterial pathogens known to cause gastroenteritis using their routine molecular diagnostic platform and procedures.

Feature	Available format(s)	
Catalogue Number	QAB124153_1	QAB124153_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Synthetic Faecal Matrix and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative.
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CENTRAL NERVOUS SYSTEM I (VIRAL MENINGITIS AND ENCEPHALITIS)

CNSI22 - QAV174195

The central nervous system I (viral meningitis and encephalitis) EQA scheme will focus on the molecular detection and determination of various enterovirus, parechovirus, herpes simplex virus 1/2, Varicella-Zoster virus and JC virus strains. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and report their individual test results to QCMD.

Feature	Available format(s)	
Catalogue Number	QAV174195_1	QAV174195_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured material and/or Clinical material
Matrix Panel Format	Synthetic CSF and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

CENTRAL NERVOUS SYSTEM II (NON-VIRAL MENINGITIS AND ENCEPHALITIS)

CNSII22 - QAM174196

The central nervous system II (non-viral meningitis and encephalitis) EQA scheme will focus on the molecular detection and determination of various Listeria spp, Neisseria meningitidis, Streptococcus pneumoniae, Streptococcus agalactiae, Escherichia coli K1, Cryptococcus spp., Aspergillus spp. or Haemophilus influenzae strains. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and report their individual test results to QCMD.

Feature	Available format(s)	
Catalogue Number	QAM174196_1	QAM174196_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured material and/or Clinical material
Matrix Panel Format	Synthetic CSF and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

MALDI-TOF

MALDI22 - QAB124155

The primary aim of this EQA is to evaluate the ability of laboratories in the detection and determination of different clinically relevant isolates using MALDI-TOF and other similar mass spectrometry based technologies in the routine microbiology laboratory.

Feature	Available format(s)
Catalogue Number	QAB124155_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Microbiological Medium and/or Transport Medium
Panel Member Target Range	Clinically relevant range of microorganisms for detection & determination
Panel Member Sample Volume	0.5 ml
Panel Analysis type	Typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

PARASITIC GASTROENTERITIS

GASTROP22 - QAP124154

Parasites are a frequent cause of gastroenteritis and are a growing risk in this age of global travel. The panel members of this EQA will resemble clinical samples and may include current clinically relevant strains of Giardia, Cryptosporidium, Dientamoeba, Blastocystis and Entamoeba. The aim of the Parasitic Gastroenteritis EQA is to assess laboratories' ability to detect a range of parasitic pathogens known to cause gastroenteritis using their routine molecular diagnostic platform and procedures.

Feature	Available format(s)	
Catalogue Number	QAP124154_1	QAP124154_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured material and/or Clinical material
Matrix Panel Format	Synthetic Faecal Matrix and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0 ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

RESPIRATORY I

RESPI22 - QAV164188

The Respiratory I EQA will focus on the molecular detection and determination of various influenza A & B and respiratory syncytial virus strains. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and report their individual test results to QCMD.

Feature	Available format(s)	
Catalogue Number	QAB164188_1	QAV164188_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering Clinical Range
Panel Member Sample Volume	1.0ml
Panel Analysis Type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

RESPIRATORY I PLUS

RESPIplus22 - QAM204216

The Respiratory I Plus EQA will focus on the molecular detection and determination of various influenza A & B, respiratory syncytial virus strains and SARS-Cov-2. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and report their individual test results to QCMD.

Feature	Available format(s)
Catalogue Number	QAM204216_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering Clinical Range
Panel Member Sample Volume	1.0ml
Panel Analysis Type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

RESPIRATORY II

RESPII22 - QAV164189

The Respiratory II EQA will focus on the molecular detection and determination of human metapneumovirus, respiratory adenoviruses, rhinoviruses , coronaviruses, enterovirus and parainfluenza viruses. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and report their individual test results to QCMD.

Feature	Available format(s)	
Catalogue Number	QAV164189_1	QAV164189_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

RESPIRATORY III

RESPIII22 - QAM174193

The Respiratory III EQA will focus on the molecular detection and determination of various Bordetella pertussis, Legionella pneumophila, Mycoplasma pneumoniae, Streptococcus pneumoniae or Haemophilus influenzae strains. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and to report their individual test results to QCMD.

Feature	Available format(s)	
Catalogue Number	QAM174193_1	QAM174193_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q1 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

SEPSIS

SEPSIS22 - QAB164178

This EQA scheme consists of a range of pathogens associated with sepsis such as Staphylococcus, Serratia, Escherichia coli, Enterococcus, Streptococcus, Klebsiella, coagulase- negative Staphylococcus, Pseudomonas and Candida spp. The participating laboratory will be required to use their current molecular diagnostic processes and procedures for the detection and identification of microorganisms within blood or plasma based matrices.

Feature	Available format(s)
Catalogue Number	QAB164178_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Whole Blood and/or Plasma and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

SEXUALLY TRANSMITTED INFECTIONS I

STI_I22 - QAB154177

The aim of the Sexually Transmitted Infection (STI) EQA is to assess the laboratories' ability to detect a range of sexually transmitted infections known to cause disease using their routine molecular diagnostic platform andprocedures. The panel members will resemble clinical samples and may include current clinically relevantstrains of Mycoplasma genitalium, Mycoplasma hominis, Trichomonas vaginalis, Ureaplasma urealyticumand Gardnerella vaginalis.

Feature	Available format(s)	
Catalogue Number	QAB154177_1	QAB154177_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

SEXUALLY TRANSMITTED INFECTIONS II

STI_II22 - QAM174201

The sexually transmitted infection II EQA will focus on the molecular detection and determination of various Chlamydia trachomatis, Neisseria gonorrhoeae, Treponema pallidum, and herpes simplex virus strains. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and to report their individual test results to QCMD.

Feature	Available format(s)	
Catalogue Number	QAM174201_1	QAM174201_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q3	Q2 & Q3

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Urine and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	4.0ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

TRANSPLANTATION (VIRAL)

TRANS22 - QAM174198

The viral transplant EQA scheme will focus on the molecular detection and determination of various cytomegalovirus, Epstein-Barr virus, human herpes virus 6, BK virus, B19 virus and adenovirus strains. The panel is designed to represent various clinical scenarios. Participating laboratories will be expected to test each panel using their appropriate molecular methods and to report their individual test results to QCMD.

Feature	Available format(s)	
Catalogue Number	QAM174198_1	QAM174198_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Plasma and/or Transport Medium
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0ml
Panel Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

VIRAL GASTROENTERITIS

GASTROV22 - QAV124152

Viruses are a major cause of gastroenteritis outbreaks. It has been estimated that at least 50% of foodborne gastroenteritis cases are caused by noroviruses. Approximately another 20% of cases, and the majority of severe cases in children, are due to rotavirus. Other clinically significant viral enteropathogens include adenovirus, particularly types 40 and 41, and astroviruses. The aim of the Viral Gastroenteritis EQA is to assess laboratories ability to detect a range of viral pathogens known to cause gastroenteritis using their routine molecular diagnostic platform and procedures. The panel members will resemble clinical samples and may include current clinically relevant strains of norovirus, rotavirus, astrovirus, sapovirus and adenovirus.

Feature	Available format(s)	
Catalogue Number	QAV124152_1	QAV124152_2
Total Number of Challenges	1	2
Number of Panel Members	10	5
Distribution / Testing Period	Q4	Q2 & Q4

Specifications	
Sample NA Target Source	Cultured material and/or Clinical material
Matrix Panel Format	Synthetic Faecal Matrix and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	1.0ml
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

EQA PILOT STUDIES

BABESIA

BABESIA22 - QAP214219

Pathogens of the genus Babesia (Family: Babesiidae, Order: Piroplasmida) are important blood parasites in mammals and less frequently in birds. Of the more than 100 known tick-borne species, only a few have been identified as causing human infections. Of zoonotic importance are parasites of bovine babesiosis (Babesia divergens and B. divergens-like forms), rodent babesiosis (B. microti) and a few other Babesia species like B. venatorum in wild deer. During a blood meal, hard-bodied ticks (e.g. Ixodes ricinus) inoculate sporozoites with their saliva, which, like plasmodia, enter human erythrocytes and undergo asexual reproduction.

In Europe, B. divergens is the main pathogen of human babesiosis. Occasionally, there also occur infections with B. microti and B. venatorum (EU1). Single infections have been reported in various European countries, however, the total number of around 50 documented clinically severe cases from mostly splenectomised patients in Europe is very low. But infections are probably asymptomatic, as indicated by serologic surveys. In the United States, B. microti is the agent most frequently identified in more than 300 known clinical manifestations (in the Northeast and Midwest), and can occur in non-splenectomised individuals. Babesia duncani has been isolated in patients in Washington and California. MO-1 has been isolated from patients in Missouri. Other cases have been reported from Africa, Mexico, Japan, Taiwan and India (B. microti or unidentified Babesia).

The diagnosis of an acute infection is confirmed through identification of Babesia on microscopic examination of Wright or Giemsa-stained thin blood-film or detection of Babesia nucleic acid, whereby nucleic acid testing (NAT) offers a better correlate of active infection. Also, nucleic acid detection-based tests, such as polymerase chain reaction (PCR) and transcription-mediated amplification (TMA), more effectively identify low-level infections than other laboratory tests, making them important for donor screening and donation testing to reduce the risk of transfusion-transmitted babesiosis.

The pilot EQA scheme will assess the proficiency of laboratories in the correct detection and identification of Babesia species causing human babesiosis.

Feature	Available format(s)
Catalogue Number	QAP214219_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Whole Blood
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient

CHAGAS

CHAGAS22 - QAP214217

Trypanosoma cruzi is the causative agent of Chagas disease or American trypanosomiasis. T. cruzi is primarily transmitted by triatomine bugs, known as "kissing bugs"; other transmission routes such as transplacental, blood transfusion, organ transplantation and contaminated food are known.

Since parasite detection is difficult during both the acute and the latent phase of infection, antibody detection plays a crucial role in laboratory diagnostics. Serologic testing is also the method for blood donor screening. Compared to conventional blood smears techniques, molecular tools such as PCR offer improved sensitivity for detection of acute and early congenital disease and are considered the test of choice in these settings. Also, PCR is maybe useful for monitoring reactivation in immunosuppressed patients or parasitological response to treatment.

The pilot EQA scheme will assess the proficiency of laboratories in the correct detection of Trypanosoma cruzi causing Chagas disease.

Feature	Available format(s)
Catalogue Number	QAP214217_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Whole Blood
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient

FRANCISELLA TULARENSIS

FRATUL22 - QAB214220

Tularemia is a severe zoonosis that can affect humans as well as animals. Reservoirs are lagomorphs or rodents, such as wild rabbits and field mice, and blood-sucking arthropods, like ticks and mosquitoes. The pathogen occurs in the northern hemisphere (in Europe, the number of human cases is approximately 800 annually, with Sweden and Finland reporting the highest notification rates). Hunters, people employed in the agriculture and forestry industries, and lab staff are at the highest risk for infection. The pathogens are transmitted through the skin or mucous membrane of infected animals. Transmission occurs when contaminated meat (rabbit) that hasn't been properly heated is eaten, when contaminated water is drunk, by breathing in contaminated dust and through arthropod bites (e.g. ticks).

As the disease is relatively rare and the symptoms non-specific, tularemia can easily be misdiagnosed. Laboratory confirmation of tularemia consists in detecting the bacteria in a biological sample or a specific antibody response. Cultivation of the bacterium is rarely used for the diagnosis as the bacteria are slow growing and require a BSL-3 laboratory. Molecular methods (i.e. PCR) are rapid and can allow identification of the subspecies. Serological methods are routinely used for diagnosis and are considered highly specific despite cross-reactions with Brucella, Yersinia, Proteus, Legionella and Mycoplasma species may occur.

The pilot EQA scheme will assess the proficiency of laboratories in the correct detection of Francisella tularensis.

Feature	Available format(s)
Catalogue Number	QAB214220_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium and/or Physiological Buffer
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient

HBV DRIED BLOOD SPOTS

HBVDBS22 - QAV214223

To assess the performance of laboratories in the detection of clinically relevant levels of hepatitis B virus (HBV) from dried blood spots.

Feature	Available format(s)
Catalogue Number	QAV214223_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Dried Blood Spots
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	2x50µl
Panel Sample Pre-treatment Requirement	Material extraction from dried blood spot
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	Ambient

HCV DRIED BLOOD SPOTS

HCVDBS22 - QAV214222

To assess the performance of laboratories in the detection of clinically relevant levels of hepatitis C virus (HCV) from dried blood spots.

Feature	Available format(s)
Catalogue Number	QAV214222_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Clinical material
Matrix Panel Format	Dried Blood Spots
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	2x50µl
Panel Sample Pre-treatment Requirement	Material extraction from dried blood spot
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	Ambient

HIV DRIED BLOOD SPOTS

HIVDBS22 - QAV214221

To assess the performance of laboratories in the detection of clinically relevant levels of human immunodeficiency virus (HIV) from dried blood spots.

Feature	Available format(s)
Catalogue Number	QAV214221_1
Total Number of Challenges	1
Number of Panel Members	8
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Dried Blood Spots
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	2x50µl
Panel Sample Pre-treatment Requirement	Material extraction from dried blood spot
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	Ambient

MALARIA

MALARIA22 - QAP214218

Malaria is considered the most important parasitic disease in humans. The pathogens of malaria are protozoans of the genus Plasmodium (Order: Haemospororida). The blood parasites are transmitted by female Anopheles mosquitoes.

Of the five human pathogenic Plasmodium species [Plasmodium falciparum (causative agent of Malaria tropica), Plasmodium ovale and Plasmodium vivax (causative agents of M. tertiana), Plasmodium malariae (causative agent of M. quartana) and in Southeast Asia Plasmodium knowlesi], P. falciparum causes the majority of malaria and almost all fatal cases.

Malaria occurs primarily in tropical and less frequently in subtropical areas. While P. falciparum dominates throughout Africa (90% in Africa, 45% in Asia and Oceania, 5% in Latin America), P. vivax is the second most prevalent malaria species in most of the Latin American and Asian malaria areas. The range of P. ovale is mainly restricted to West African regions with few foci outside the continent (except Latin America). P. malariae is found worldwide, but at a lower incidence compared to the other species. P. knowlesi is identified since 2004 as the causative agent of a focal, especially in Malaysia occurring malaria form. Due to the large number of imported cases in Europe, malaria (in particular caused by P. falciparum) is mainly a travel medicine issue.

In patients with fever of unknown cause and stay in a malaria area, acute malaria must be excluded, even if the stay was several years ago. The acute diagnosis is based on the detection of the pathogen in thin and thick blood films and / or the detection of Plasmodium-specific antigens or its DNA. Serological examinations are not suitable for acute diagnosis. Although microscopy is still the most routinely used method for malaria diagnosis by clinical laboratories, nucleic acid tests (NAT) have become increasingly popular, particularly in reference laboratories and specialised institutes.

The pilot EQA scheme will assess the proficiency of laboratories in the correct detection and identification of Plasmodium species causing human malaria.

Feature	Available format(s)
Catalogue Number	QAP214218_1
Total Number of Challenges	1
Number of Panel Members	10
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Whole Blood
Panel Member Target Range	Covering clinical range
Panel Member Sample Volume	Lyophilised
Panel Sample Pre-treatment Requirement	Reconstitution of lyophilised material
Panel Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Lyophilised Ambient

VIRAL METAGENOMICS NGS

NGSMETA_22 - QAV204213

Viral metagenomics has been proposed as an unbiased method with unique clinical opportunities to identify the composition of clinical specimens without introduction of selection bias due to processing methods. The techniques used in these protocols are however complex and analysis methods require standardisation. This EQA pilot study aims to assess performance of existing metagenomics protocols as currently implemented by participating laboratories. Samples will be provided which will mimic cerebrospinal fluid samples containing known viral pathogens including enterovirus, herpes simplex virus and influenza virus.

Performance will be assessed based on the qualitative identification of viruses present in the samples, at the family, genus, species and subtype levels.

Feature	Available format(s)
Catalogue Number	QAV204213_1
Total Number of Challenges	1
Number of Panel Members	5
Distribution / Testing Period	Q4

Specifications	
Sample NA Target Source	Cultured material
Matrix Panel Format	Synthetic CSF + human cell lines
Panel Member Sample Volume	1.0ml
Panel Sample Pre-Treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis Type	Sequence analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

APPENDIX I: SUMMARY SPECIFICATIONS AND DISTRIBUTION SCHEDULE

TARGET PATHOGEN							PAGE NUMBER
SCHEME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	SCHEME TYPE
Adenovirus							**Page 13**
ADVDNA22	QAV054133_1 QAV054133_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Arthropod-borne viruses							**Page 57**
ARBO22	QAM194206_1	1	10	Q4	Ambient	Qualitative	Multi-Pathogen / Syndromic EQA
Aspergillus spp.							**Page 54**
ASPDNA22	QAF104140_1	1	8	Q3	Dry-ice	Qualitative	Fungal EQA
Atypical mycobacterium							**Page 41**
NTM22	QAB194208_1	1	10	Q2	Ambient	Qualitative	Bacterial EQA
B19 virus							**Page 13**
B19DNA22	QAV034116_1 QAV034116_2	1 2	8 4	Q3 Q1, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Babesia							**Page 66**
BABESIA22	QAP214219_1	1	10	Q4	Ambient	Qualitative	Pilot Study
Bacterial 16S Ribosomal RNA							**Page 41**
B16SrRNA22	QAB164183_1	1	8	Q4	Dry-ice	Typing	Bacterial EQA
Bacterial Gastroenteritis							**Page 58**
GastroB22	QAB124153_1 QAB124153_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
BK virus (BKV)							**Page 14**
BKDNA22	QAV144166_1 QAV144166_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Bordetella pertussis							**Page 42**
BPDNA22	QAB094132_1	1	10	Q2	Dry-ice	Qualitative	Bacterial EQA
Borrelia burgdorferi spp. (Lyme Disease)							**Page 42**
BbDNA22	QAB114147_1	1	10	Q3	Dry-ice	Qualitative	Bacterial EQA
Candida spp.							**Page 54**
CANDNA22	QAF124151_1	1	10	Q3	Dry-ice	Qualitative	Fungal EQA
Central Nervous System I (viral Meningitis and Encephalitis)							**Page 58**
CNSI22	QAV174195_1 QAV174195_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA

APPENDIX I: SUMMARY SPECIFICATIONS AND DISTRIBUTION SCHEDULE

TARGET PATHOGEN							PAGE NUMBER
SCHEME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	SCHEME TYPE
Central Nervous System II (Non-viral Meningitis and Encephalitis)							**Page 59**
CNSII22	QAM174196_1 QAM174196_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Chagas							**Page 67**
CHAGAS22	QAP214217_1	1	10	Q4	Ambient	Qualitative	Pilot Study
Chikungunya virus (CHIKV)							**Page 14**
CHIKV22	QAV154175_1	1	10	Q4	Ambient	Qualitative	Viral EQA
Chlamydia psittaci							**Page 43**
CPS22	QAB134165_1	1	8	Q2	Dry-ice	Qualitative	Bacterial EQA
Chlamydia trachomatis							**Page 43**
CTDNA22	QAB004101_1 QAB004101_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Bacterial EQA
Chlamydia trachomatis and Neisseria gonorrhoeae							**Page 44**
CTNg22	QAB174191_1 QAB174191_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Bacterial EQA
Chlamydophila pneumoniae							**Page 44**
CP22	QAB084107_1	1	5	Q2	Dry-ice	Qualitative	Bacterial EQA
Clostridium difficile (CD)							**Page 45**
CDDNA22	QAB084125_1 QAB084125_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Bacterial EQA
Coronavirus (CoV)							**Page 15**
CVRNA22	QAV064137_1	1	10	Q2	Dry-ice	Qualitative	Viral EQA
Cytomegalovirus (CMV) Dried Blood Spots							**Page 16**
CMVDBS22	QAV064127_1	1	8	Q4	Ambient	Qualitative	Viral EQA
Cytomegalovirus (CMV) Drug Resistance							**Page 15**
CMVDR22	QAV144169_1	1	5	Q2	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Cytomegalovirus (CMV)							**Page 28**
CMVDNA22	QAV014120_1 QAV014120_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA

APPENDIX I: SUMMARY SPECIFICATIONS AND DISTRIBUTION SCHEDULE

TARGET PATHOGEN							PAGE NUMBER
SCHEME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	SCHEME TYPE
Cytomegalovirus (CMV) Whole Blood							**Page 16**
CMVWB22	QAV124150_1 QAV124150_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Dengue virus (DENV)							**Page 17**
DENVRNA22	QAV114148_1	1	10	Q4	Ambient	Qualitative	Viral EQA
Dermatophytosis							**Page 55**
DERMA22	QAF164187_1	1	8	Q3	Dry-ice	Qualitative	Fungal EQA
Diarrheagenic Escherichia coli							**Page 45**
E.COLI22	QAB154179_1	1	8	Q4	Dry-ice	Typing	Bacterial EQA
Enterovirus (EV)							**Page 17**
EVRNA22	QAV984104_1 QAV984104_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Enterovirus Typing (EV)							**Page 18**
EVTP22	QAV164185_1	1	8	Q1	Dry-ice	Typing	Viral EQA
Epstein-Barr virus (EBV)							**Page 18**
EBVDNA22	QAV024121_1 QAV024121_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Epstein-Barr virus (EBV) Whole Blood							**Page 19**
EBVWB22	QAV134161_1 QAV134161_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Extended Spectrum ß-lactamase and Carbapenemase							**Page 46**
ESBL22	QAB134162_1	1	8	Q3	Dry-ice	Typing	Bacterial EQA
Group B Streptococcus							**Page 46**
GBS22	QAB174200_1	1	8	Q4	Dry-ice	Qualitative	Bacterial EQA
Francisella tularensis							**Page 68**
FRATUL22	QAB214220_1	1	10	Q4	Ambient	Qualitative	Pilot Study
Helicobacter pylori							**Page 47**
H.PYLORI22	QAB164190_1	1	10	Q3	Dry-ice	Qualitative	Bacterial EQA
Hepatitis A virus (HAV)							**Page 22**
HAVRNA22	QAV124156_1 QAV124156_2	1 2	8 4	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA

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Hepatitis B virus (HBV)							**Page 23**
HBVDNA22	QAV994110_1 QAV994110_2 QAV994110_4	1 2 4	8 4 4	Q1, Q1, Q3 Q1, Q2, Q3, Q4	Dry-ice	Qualitative & Quantitative	Viral EQA
Hepatitis B virus (HBV) – Dried Blood Spots							**Page 69**
HBVDBS22	QAV214223_1	1	8	Q4	Ambient	Qualitative	Pilot Study
Hepatitis B virus (HBV) Drug Resistance							**Page 19**
HBVDR22	QAV124160_1	1	5	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Hepatitis B virus (HBV) Genotyping							**Page 20**
HBVGT22	QAV064118_1	1	8	Q1	Dry-ice	Typing	Viral EQA
Hepatitis C virus (HCV)							**Page 23**
HCVRNA22	QAV994112_1 QAV994112_2 QAV994112_4	1 2 4	8 4 4	Q1, Q1, Q3 Q1, Q2, Q3, Q4	Dry-ice	Qualitative & Quantitative	Viral EQA
Hepatitis C virus (HCV) – Dried Blood Spots							**Page 69**
HCVDBS22	QAV214222_1	1	8	Q4	Ambient	Qualitative	Pilot Study
Hepatitis C virus (HCV) Drug Resistance							**Page 21**
HCVDR22	QAV134167_1	1	5	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Hepatitis C virus (HCV) Genotyping							**Page 22**
HCVGT22	QAV034117_1	1	8	Q1	Dry-ice	Typing	Viral EQA
Hepatitis D virus (HDV)							**Page 24**
HDV22	QAV144170_1	1	8	Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Hepatitis E virus (HEV)							**Page 24**
HEVRNA22	QAV124157_1	1	8	Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Herpes simplex virus 1 & 2 (HSV)							**Page 25**
HSVDNA22	QAV994105_1 QAV994105_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA

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Herpes simplex virus Drug Resistance							**Page 25**
HSVDR22	QAV164184_1	1	5	Q1	Dry-ice	Drug Resistance/ Sequencing	Viral EQA
Human herpes virus 6 (HHV6)							**Page 29**
HHV6DNA22	QAV084119_1 QAV084119_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Human Immunodeficiency virus type 1 (HIV-1) – DNA							**Page 26**
HIVDNA22	QAV034114_1 QAV034114_2	1 2	8 4	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Human Immunodeficiency virus type 1 (HIV-1) – Drug Resistance							**Page 27**
HIVDR22	QAV024131_1	1	5	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Human Immunodeficiency virus type 1 (HIV-1) – Drug Resistance (Integrase)							**Page 27**
HIVDRint22	QAV114146_1	1	5	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Human Immunodeficiency virus type 1 (HIV-1) – Dried Blood Spots							**Page 70**
HIVDBS22	QAV214221_1	1	8	Q4	Ambient	Qualitative	Pilot Study
Human Immunodeficiency virus type 1 (HIV-1) – RNA							**Page 26**
HIVRNA22	QAV994108_1 QAV994108_2 QAV994108_4	1 2 4	8 4 4	Q3 Q1, Q3 Q1, Q2, Q3,Q4	Dry-ice	Qualitative & Quantitative	Viral EQA
HIV-2							**Page 28**
HIV2_22	QAV204212_1 QAV204212_2	1 2	8 4	Q3 Q1, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Human metapneumovirus (MPV)							**Page 29**
MPV22	QAV054135_1	1	8	Q2	Dry-ice	Qualitative	Viral EQA
Human Papillomavirus (HPV) – PreservCyt							**Page 30**
HPVPRES22	QAV094130_1 QAV094130_2	1 2	12 6	Q4 Q2, Q4	Ambient / Specialist	Qualitative	Viral EQA
Human Papillomavirus (Surepath)							**Page 31**
HPVSURE22	QAV184204_1	1	12	Q4	Ambient	Qualitative	Viral EQA
Influenza A & B virus (FLU)							**Page 32**
INFRNA22	QAV054134_1 QAV054134_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Viral EQA

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Influenza Typing							**Page 32**
INFTP22	QAV064138_1	1	8	Q4	Dry-ice	Typing	Viral EQA
JC virus (JCV)							**Page 33**
JCDNA22	QAV074106_1 QAV074106_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Legionella pneumophila							**Page 47**
LPDNA22	QAB044122_1	1	10	Q1	Dry-ice	Qualitative	Bacterial EQA
Malaria							**Page 71**
MALARIA22	QAP214218_1	1	10	Q4	Ambient	Qualitative	Pilot Study
MALDI-TOF							**Page 59**
MALDI22	QAB124155_1	1	10	Q3	Dry-ice	Typing	Multi-Pathogen / Syndromic EQA
Measles / Mumps							**Page 33**
MM22	QAV144171_1	1	10	Q3	Dry-ice	Qualitative	Viral EQA
MERS coronavirus (MERS-CoV)							**Page 34**
MERS22	QAV154181_1	1	8	Q2	Dry-ice	Qualitative	Viral EQA
Methicillin Resistant Staphylococcus aureus (MRSA)							**Page 48**
MRSADNA22	QAB064124_1	1	10	Q4	Ambient	Qualitative	Bacterial EQA
Methicillin Resistant Staphylococcus aureus (MRSA) – Typing							**Page 48**
MRSATP22	QAB074128_1	1	8	Q4	Ambient	Typing	Bacterial EQA
Mycobacterium tuberculosis (MTB)							**Page 49**
MTBDNA22	QAB014129_1 QAB014129_2	1 2	10 5	Q4 Q2, Q4	Ambient	Qualitative	Bacterial EQA
Mycobacterium tuberculosis Drug Resistance							**Page 49**
MTBDR22	QAB194209_1	1	8	Q4	Ambient	Typing	Bacterial EQA
Mycoplasma genitalium							**Page 50**
MG22	QAB184205_1	1	10	Q3	Dry-ice	Qualitative	Bacterial EQA

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Mycoplasma pneumoniae							**Page 50**
MP22	QAB174192_1	1	5	Q2	Dry-ice	Qualitative	Bacterial EQA
NGDNA22							**Page 51**
NGDNA22	QAB034126_1 QAB034126_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Bacterial EQA
Norovirus (NV)							**Page 34**
NVRNA22	QAV084139_1 QAV084139_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Viral EQA
Parainfluenza virus (PIV)							**Page 35**
PINFRNA22	QAV064136_1	1	10	Q2	Dry-ice	Qualitative	Viral EQA
Parasitic Gastroenteritis							**Page 60**
GastroP22	QAP124154_1 QAP124154_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Parechovirus (HPeV)							**Page 35**
PeVRNA22	QAV114145_1 QAV114145_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Pneumocystis jirovecii pneumonia (PCP)							**Page 55**
PCPDNA22	QAF114144_1	1	10	Q3	Dry-ice	Qualitative & Quantitative	Fungal EQA
Respiratory I							**Page 60**
RESPI22	QAV164188_1 QAV164188_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA

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Respiratory I Plus							**Page 61**
RESPIplus22	QAM204216_1	1	10	Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Respiratory II							**Page 61**
RESPII22	QAV164189_1 QAV164189_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Respiratory III							**Page 62**
RESPIII22	QAM174193_1 QAM174193_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Respiratory syncytial virus (RSV)							**Page 36**
RSV22	QAV054142_1 QAV054142_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Viral EQA
Rhinovirus (RV)							**Page 36**
RVRNA22	QAV064143_1	1	10	Q2	Dry-ice	Qualitative	Viral EQA
SARS-CoV-2							**Page 37**
SCV2_22	QAV204215_1A QAV204215_1B QAV204215_1C QAV204215_1D	1 1 1 1	5 5 5 5	Q1 Q2 Q3 Q4	Dry-ice	Qualitative	Viral EQA
SARS-CoV-2 Antigen Testing							**Page 37**
SCV2Ag22	QAS214224_1A QAS214224_1B QAS214224_1C QAS214224_1D	1 1 1 1	5 5 5 5	Q1 Q2 Q3 Q4	Ambient	Qualitative	Viral EQA
Sepsis							**Page 63**
SEPSIS22	QAB164178_1	1	10	Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Sexually Transmitted Infections I							**Page 63**
STI_I22	QAB154177_1 QAB154177_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Sexually Transmitted Infections II							**Page 64**
STI_II22	QAM174201_1 QAM174201_2	1 2	10 5	Q3 Q2, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Staphylococcus aureus spa							**Page 52**
SASPA22	QAB134164_1	1	6	Q4	Ambient	Typing	Bacterial EQA

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Syphilis							**Page 52**
SYPH22	QAB154180_1	1	8	Q4	Dry-ice	Qualitative	Bacterial EQA
Torque teno virus (TTV)							**Page 38**
TTV22	QAV184203_1	1	6	Q4	Dry-ice	Qualitative	Viral EQA
Toxoplasma gondii							**Page 56**
TGDNA22	QAP044123_1 QAP044123_2	1 2	10 5	Q4 Q2, Q4	Ambient	Qualitative	Parasitic EQA
Transplantation (viral)							**Page 64**
TRANS22	QAM174198_1 QAM174198_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative & Quantitative	Multi-Pathogen / Syndromic EQA
Trichomonas vaginalis							**Page 56**
TV22	QAP184202_1	1	8	Q3	Dry-ice	Qualitative	Parasitic EQA
Vancomycin Resistant Enterococci (VRE)							**Page 53**
VRE22	QAB134163_1	1	10	Q3	Dry-ice	Typing	Bacterial EQA
Varicella-Zoster virus (VZV)							**Page 38**
VZVDNA22	QAV034103_1 QAV034103_2	1 2	10 5	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Viral Gastroenteritis							**Page 65**
GastroV22	QAV124152_1 QAV124152_2	1 2	10 5	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Viral Metagenomics NGS							**Page 72**
NGSmeta_22	QAV204213_1	1	5	Q4	Dry-ice	Sequencing	Pilot Study
West Nile virus (WNV)							**Page 39**
WNVRNA22	QAV104141_1	1	10	Q4	Ambient	Qualitative	Viral EQA
Yellow Fever Virus							**Page 39**
YFV22	QAV194207_1	1	8	Q4	Ambient	Qualitative	Viral EQA
Zika Virus							**Page 40**
ZIKA22	QAV164186_1	1	10	Q4	Ambient	Qualitative	Viral EQA

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