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QCMD
Quality Control for Molecular Diagnostics

2020 EQA PROGRAMME CATALOGUE

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UKAS PROFICIENCY TESTING
4385

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

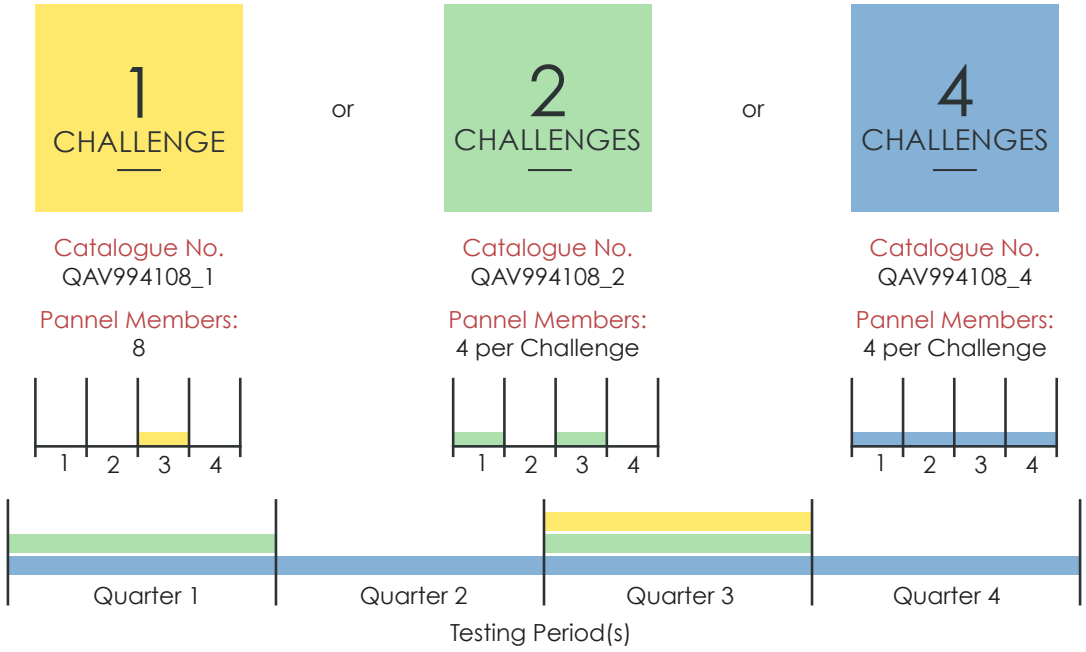
The aim of QCMD's External Quality Assessment (EQA) programmes are to help monitor and improve laboratory quality by assessing a laboratory's use of molecular diagnostic technologies within the routine clinical setting. The EQA schemes are both educational and regulatory in application and support continuous quality improvement, as well as assist laboratory accreditation / certification to ISO15189 or equivalent.

Who can participate?

The QCMD EQA programmes are open to any clinical laboratory conducting molecular based tests for the routine diagnosis of infectious diseases. QCMD will undertake to provide the EQA service to any laboratory from any country who wishes to take part in an EQA programme. The QCMD EQA service is offered directly or through one of QCMD many regional QA collaborators. To register or find out more go to www.QCMD.org

The EQA programme format

All individual QCMD EQA programmes have their own design specifications which are agreed annually by QCMD in conjunction with assigned scientific experts / expert groups. The distribution frequencies (number of challenges per year) within an EQA programme often vary in different countries due to regional regulatory requirements. In order to help laboratories meet their specific regional requirements the QCMD EQA programmes consist of between 1 and 4 challenges per year. Participants can select which EQA format is best for their laboratory.
Please note: if the EQA programme 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 programmes see the individual EQA specifications within the catalogue or visit the QCMD website.
For example, the HIVRNA, HBV, and HCV BBV viral load EQA programmes have a quantitative focus and participants will be able to choose either 1, 2 or 4 challenges per year. Other available formats include 1 single challenge; 2 challenges; 1 or 2 challenges.



QCMD EQA Reports & feedback

After close of the EQA results return phase, EQA participants receive an individual report. Individual reports provide laboratories with an overview of their performance within an EQA challenge in relation to their method type, the technology group they are within and where appropriate the consensus from the overall participants within the EQA programme.
On completion of the EQA programme, a supplementary report may be commissioned. The supplementary report will include any relevant additional information regarding the recent annual EQA distribution. The supplementary reports also include Scientific Expert commentary / feedback on the overall EQA results within that distribution. 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 and visit your profile area, download the QCMD participant manual at www.QCMD.org

EQA Groups

BLOODBORNE VIRUS

The Bloodborne Virus (BBV) group of QCMD External Quality Assessment (EQA) programmes consists of pathogens that are classically detected directly 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) and hepatitis D virus (HDV).

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

For the drug resistance BBV EQA programmes 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 programmes within this area focus on pathogens known to play a significant clinical role in CNS infection. The general aim of this group of EQA programmes is to assess the laboratories' ability in the detection and determination of the selected pathogen. Where appropriate pathogen load estimation is also evaluated.

EQA Groups

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 programmes covering a variety of pathogen types. The primary aims of these programmes 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 programmes 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.

EQA Groups

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 programmes 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 programmes 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 programmes is to assess the ability of laboratories in the detection of the selected pathogen and where appropriate quantitative estimation is also evaluated.

EQA Groups

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 programmes to address this growing need in the clinical setting. A range of programmes 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 programmes 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.

EQA Groups

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 programmes within this area focus on pathogens known to be the most common cause of STIs. The general aim of this group of EQA programmes 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 programmes 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 programmes is to assess the ability of laboratories in the detection of the selected pathogen and where appropriate quantitative estimation is also evaluated.

EQA Groups

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 programmes 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 programmes 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 programmes, some of which are outside the defined EQA groups listed above.

Viral EQA

ADENOVIRUS

ADVDNA20 **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	8 to 12	4 to 6
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 rangel	
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

B19DNA20 **QAV034116**

To assess the proficiency of laboratories in 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	

Viral EQA

BK VIRUS

BKDNA20 **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	8 to 12	4 to 6
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

CHIKV20 **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	QAV154174_1
Total Number of Challenges	1
Number of Panel Members	8 to 12
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	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 EQA

CMV DRUG RESISTANCE

CMVDR20 **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	4 to 7
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 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

CVRNA20 **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	8 to 12
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

Viral EQA

CYTOMEGALOVIRUS DRIED BLOOD SPOTS

CMVDBS20 **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 to 12
Distribution / Testing Period	Q2
	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

CMVWB20 **QAV124150**

To evaluate the ability of laboratories in the detection of CMV from whole blood samples.
To asses 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	8 to 12	4 to 6
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	

Viral EQA

DENGUE VIRUS

DENVRNA20 **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	8 to 12
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	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

EVRNA20 **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	8 to 12	4 to 6
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	

Viral EQA

ENTEROVIRUS TYPING

EVTP20 **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	5 to 10
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

EPSTEIN-BARR VIRUS

EBVDNA20 **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	8 to 12	4 to 6
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	

Viral EQA

EPSTEIN-BARR VIRUS WHOLE BLOOD

EBVWB20 **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	8 to 12	4 to 6
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

HBVDR20 **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	4 to 7
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 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

Viral EQA

HBV GENOTYPING

HBVGT20 **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 to 12
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

Viral EQA

HCV DRUG RESISTANCE

HCVDR20 **QAV134167**

The QCMD HCV Drug Resistance (HCVDR) programme 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 programme 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 programme 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 NS5a regions) using sequencing techniques.

Feature	Available Format(s)
Catalogue Number	QAV134167_1
Total Number of Challenges	1
Number of Panel Members	4 to 7
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 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

Viral EQA

HCV GENOTYPING

HCVGT20 **QAV034117**

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

Feature	Available Format(s)
Catalogue Number	QAV034117_1
Total Number of Challenges	1
Number of Panel Members	8 to 12
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 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 methodologites
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice
Accreditation/Regulatory Status	Accredited to ISO17043

HEPATITIS A VIRUS

HAVRNA20 **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 to 10	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	

Viral EQA

HEPATITIS B VIRUS

HBVDNA20 **QAV994110**

To assess the proficiency of laboratories in the detection snd quantittation 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

HCVRNA20 **QAV994112**

To assess the proficiency of laboratories in the detection and quantitation of hepatitis C virus (HCV) RNA. To assess the proficiency of laboratories in the detection and quantitation of different HCV 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		

Viral EQA

HEPATITIS D VIRUS

HDV20 **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 to 10
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 Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

HEPATITIS E VIRUS

HEVRNA20 **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 to 10
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

Viral EQA

HERPES SIMPLEX VIRUS 1& 2

HSVDNA20 **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	8 to 12	4 to 6
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	

HERPES SIMPLEX VIRUS DRUG RESISTANCE

HSVDR20 **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	4 to 7
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 accordingly
Panel Analysis type	Sequence Analysis
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

Viral EQA

HIV-1 (DNA)

HIVDNA20 **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 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	

HIV-1 (RNA)

HIVRNA20 **QAV994108**

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

Viral EQA

HIV-1 DRUG RESISTANCE

HIVDR20 **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	4 to 7
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 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-1 DRUG RESISTANCE (INTEGRASE)

HIVDRint20 **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	4 to 7
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 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

Viral EQA

HUMAN CYTOMEGALOVIRUS

CMVDNA20 **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	8 to 12	4 to 6
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

HHV6DNA20 **QAV084119**

To assess the proficiency of laboratories' molecular assays in the detection of various types of human herpes virus 6 (HHV6). To asses 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	8 to 12	4 to 6
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	

Viral EQA

HUMAN METAPNEUMOVIRUS

MPV20 **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 to 12
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)

HPVPRES20 **QAV094130**

Human Papilomavirus (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. To assess the proficiency of laboratories in the detection of different high risk Human Papiloma types with a PreservCyt matrix.

Feature	Available Format(s)	
Catalogue Number	QAV094130_1	QAV094130_2
Total Number of Challenges	1	2
Number of Panel Members	8 to 12	4 to 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 Analysis type	Qualitative	
Panel Testing	Evaluated by various molecular methodologies	
Storage / Shipment Conditions	15-30°C / Liquid Ambient	
Accreditation/Regulatory Status	Accredited to ISO17043	

Viral EQA

INFLUENZA A & B VIRUS

INFRNA20 **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	8 to 12	4 to 6
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

INFTP20 **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	5 to 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	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

Viral EQA

JC VIRUS

JCDNA20 **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	8 to 12	4 to 6
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

MM20 **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	8 to 12
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 Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

Viral EQA

MERS CORONAVIRUS

MERS20 QAV154181

To assess the proficency 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	6 to 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

NOROVIRUS

NVRNA20 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	8 to 12	4 to 6
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	

Viral EQA

PARAINFLUENZA VIRUS

PINFRNA20 **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	8 to 12
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

PEVRNA20 **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	8 to 12	4 to 6
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	

Viral EQA

RESPIRATORY SYNCYTIAL VIRUS

RSV20 **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 Samples	5 to 10	4 to 6
Distribution / Testing Period	Q1	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

RVRNA20 **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	8 to 12
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

Viral EQA

VARICELLA-ZOSTER VIRUS

VZVDNA20 **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	8 to 12	4 to 6
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	

WEST NILE VIRUS

WNVRNA20 **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	8 to 12
Distribution / Testing Period	Q2
	Specifications
ample 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

Viral EQA

ZIKA VIRUS

ZIKA20 **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	8 to 12
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	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

BACTERIAL 16S RIBOSOMAL RNA

B16SrRNA20 **QAB164183**

The detection of 16S rRNA by NAT and the bacterial identification by nucleic acid sequencing is an important method in clinical cases. The panel members within this EQA will resemble clinical samples and may include current clinically relevant species of Serratia, Escherichia, Staphylococcus, Enterococcus and Klebsiella.

The aim of this EQA is to determine laboratories ability 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 to 10
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 Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

BORDETELLA PERTUSSIS

BPDNA20 **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	8 to 12
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

Bacterial EQA

BORRELIA BURGDORFERI SPP. (LYME DISEASE)

BbDNA20 **QAB114147**

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

Feature	Available Format(s)
Catalogue Number	QAB114147_1
Total Number of Challenges	1
Number of Panel Members	8 to 12
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 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

CPS20 **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 to 10
Distribution / Testing Period	Q2
	Specifications
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Transport Medium
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

Bacterial EQA

CHLAMYDIA TRACHOMATIS

CTDNA20 **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	8 to 12	4 to 6
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 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

CTNG20 **QAB174191**

To assess 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	8 to 12	4 to 6
Distribution / Testing Period	Q3	Q1 & Q3
	Specifications	
ample 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 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	

Bacterial EQA

CHLAMYDOPHILA PNEUMONIAE

CP20 **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 to 10
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

CDDNA20 **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 programme 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	8 to 12	4 to 6
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	

Bacterial EQA

DIARRHEAGENIC ESCHERICHIA COLI

E.COLI20 **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 to 12
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 Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

EXTENDED SPECTRUM ß-LACTAMASE AND CARBAPENEMASE

ESBL20 **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 to 12
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 Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

Bacterial EQA

GROUP B STREPTOCOCCUS

GBS20 **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 to 12
Distribution / Testing Period	Q4
	Specifications
Sample NA Target Source	Cultured material and/or Clinical material
Panel Member Target Range	Covering clinical range
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

HELICOBACTER PYLORI

H.PYLORI20 **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	5 to 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 Analysis type	Qualitative. Quantitative for information purposes only
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

Bacterial EQA

LEGIONELLA PNEUMOPHILA

LPDNA20 **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	8 to 12
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 Analysis type	0.5 ml
Panel Testing	Qualitative
Storage / Shipment Conditions	Evaluated by various molecular methodologies
Accreditation/Regulatory Status	<-20°C / Frozen on Dry-ice
Storage / Shipment Condition	Accredited to ISO17043

METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS TYPING (EPIDEMIOLOGY AND OUTBREAK STUDIES)

MRSATP20 **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 to 12
Distribution / Testing Period	Q2
	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

Bacterial EQA

METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS

MRSADNA20 **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	8 to 12
Distribution / Testing Period	Q2
	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	1.2 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

MTBDNA20 **QAB014129**

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

Feature	Available Format(s)	
Catalogue Number	QAB014129_1	QAB014129_2
Total Number of Challenges	1	2
Number of Panel Members	8 to 12	4 to 6
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	

Bacterial EQA

MYCOPLASMA PNEUMONIAE

MP20 **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 to 10
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

MYCOPLASMA SPP. (CELL CONTAMINATION)

MYCO20 **QAB144168**

To evaluate current laboratory approaches for the molecular detection of Mycoplasma species.

Feature	Available Format(s)
Catalogue Number	QAB144168_1
Total Number of Challenges	1
Number of Panel Members	8 to 12
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 Analysis type	Qualitative & Quantitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

Bacterial EQA

NEISSERIA GONORRHOEAE

NGDNA20 **QAB034126**

To assess 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	8 to 12	4 to 6
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 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

SASPA20 **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 to 12
Distribution / Testing Period	Q2
	Specifications
Sample NA Target Source	Cultured and/or Clinical material
Matrix Panel Format	Microbiological Medium and/or Transport Medium
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

Bacterial EQA

SYPHILIS

SYPH20 **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	5 to 10
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 Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

VANCOMYCIN RESISTANT ENTEROCOCCI

VRE20 **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	8 to 12
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 Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

Fungal EQA

ASPERGILLUS SPP.

ASPDNA20 **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 to 12
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 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

CANDIDA SPP.

CANDNA20 **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	8 to 12
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
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

Fungal EQA

DERMATOPHYTOSIS

DERMA20 **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 to 10
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 Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

PNEUMOCYSTIS JIROVECII PNEUMONIA (PCP)

PCPDNA20 **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	8 to 12
Distribution / Testing Period	Q3
	Specifications
Sample NA Target Source	Clinical material
Matrix Panel Format	Physiological Buffer
Panel Member Target Range	Covering clinical range
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

Parasitic EQA

TOXOPLASMA GONDII

TGDNA20 **QAP044123**

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

Feature	Available Format(s)	
Catalogue Number	QAP044123_1	QAP044123_2
Total Number of Challenges	1	2
Number of Panel Members	8 to 12	4 to 6
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	

MPP EQA

BACTERIAL GASTROENTERITIS

GASTROB20 **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.
He 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	8 to 12	4 to 6
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 Analysis type	Qualitative.	
Panel Testing	Evaluated by various molecular methodologies	
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice	

MALDI-TOF

MALDI20 **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	8 to 12
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 Analysis type	Typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

MPP EQA

PARASITIC GASTROENTERITIS

GASTROP20 **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	8 to 12	4 to 6
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 Analysis type	Qualitative	
Panel Testing	Evaluated by various molecular methodologies	
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice	

RESPIRATORY I

RESPI20 **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	8 to 12	4 to 6
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	

MPP EQA

RESPIRATORY II

RESPII20 **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	8 to 12	4 to 6
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	

RESPIRATORY III

RESPIII20 **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	8 to 12	4 to 6
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	

MPP EQA

SEXUALLY TRANSMITTED INFECTIONS I

STI_I20 **QAB154177**

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

Feature	Available Format(s)	
Catalogue Number	QAB154177_1	QAB154177_2
Total Number of Challenges	1	2
Number of Panel Members	8 to 12	4 to 6
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 Analysis type	Qualitative	
Panel Testing	Evaluated by various molecular methodologies	
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice	

SEXUALLY TRANSMITTED INFECTIONS II

STI_II20 **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	8 to 12	4 to 6
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 Analysis type	Qualitative	
Panel Testing	Evaluated by various molecular methodologies	
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice	

MPP EQA

VIRAL GASTROENTERITIS

GASTROV20 **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	8 to 12	4 to 6
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 Analysis type	Qualitative	
Panel Testing	Evaluated by various molecular methodologies	
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice	

EQA Pilot Studies

ARTHROPOD-BORNE VIRUSES

ARBO20 **QAM194206**

The World Health Organization (WHO) defines arboviruses (arthropod-borne viruses) as a group of viruses which are maintained in nature principally, or to an important extent, through biological transmission between susceptible vertebrate hosts by blood feeding arthropods including mosquitoes, ticks, and flies. The term 'arbovirus' is therefore an informal term with no taxonomic significance, referring to the biological-ecological similarities of these heterogenous viruses.
Over 600 different arboviruses are catalogued, of which more than 100 are known to cause human disease, with clinical signs such as acute self-limiting fever (with or without rash), muscle and joint pain, haemorrhagic fever and/or neurological illness. Arboviruses are distributed worldwide and represent one third of all emerging infectious diseases in the last decade causing many outbreaks (e.g. yellow fever virus which emerged in both hemispheres; Japanese encephalitis virus or Rift Valley fever virus which emerged in specific regions).
Due to the often overlapping geographical distributions and unspecific clinical symptoms molecular syndrome-based approaches are very important for an early-differential diagnosis and control in local populations as well as in international travellers returning from affected regions.
The ARBO pilot 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	QAF104140_1
Total Number of Challenges	1
Number of Panel Members	8 to 12
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	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

EQA Pilot Studies

ATYPICAL MYCOBACTERIUM

NTM20 **QAB194208**

Atypical mycobacterium or non-tuberculous mycobacteria (NTM) are a growing clinical concern, these bacteria can infect both immune-competent and compromised hosts, with the incidence and prevalence increasing of NTM lung disease worldwide these pathogens are rapidly becoming a major public health issue. Mycobacterium avium is the most common pathogen, followed by M. abscessus and M. kansasii. Diagnosis to allow correct detection and identification of these pathogens is key to clinical decision making as treatments can be long, have toxicogenic implication and vary from species to species. Many NTM strains are resistant to standard mycobacterium tuberculosis (MTB) treatments. If an NTM strain is incorrectly identified as MTB, this can cause delays in appropriate treatment by several weeks or months.
The Atypical mycobacterium EQA pilot study aims to determine laboratories ability to detect and differentiate NTM using their routine molecular diagnostic procedures.

Feature	Available Format(s)
Catalogue Number	QAB194208_1
Total Number of Challenges	1
Number of Panel Members	8 to 12
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 Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient

CENTRAL NERVOUS SYSTEM I (VIRAL MENINGITIS AND ENCEPHALITIS)

CNSI20 **QAV174195**

The central nervous system I (viral meningitis and encephalitis) EQA pilot study 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	8 to 12	4 to 6
Distribution / Testing Period	Q4	Q2 & Q4
	Specifications	
Sample NA Target Source	Cultured material and/or Clinical material	
Panel Member Target Range	Covering clinical range	
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	

EQA Pilot Studies

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

CNSII20 **QAM174196**

The central nervous system II (non-viral meningitis and encephalitis) EQA pilot study will focus on the molecular detection and determination of various Listeria spp, Neisseria meningitidis, Streptococcus pneumoniae, Streptococcus agalactiae, Escherichia coli K1, 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	8 to 12	4 to 6
Distribution / Testing Period	Q4	Q2 & Q4
	Specifications	
Sample NA Target Source	Cultured material and/or Clinical material	
Panel Member Target Range	Covering clinical range	
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	

HUMAN PAPILLOMAVIRUS (SUREPATH)

HPVSURE20 **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	8 to 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

EQA Pilot Studies

MYCOBACTERIUM TUBERCULOSIS DRUG RESISTANCE

MTBDR20 **QAB194209**

Mycobacterium tuberculosis (MTB) is a global health concern, this pathogen primarily causes lung infections however can cause infections in other body parts including the brain, spine and kidneys. MTB is in the top ten cause of death worldwide, and the number one cause of death for HIV positive individuals. MTB is treatable and curable this requires that the full course of treatment is adhered to and completed. Drug resistance emerges when anti-MTB medicines are used inappropriately. Prescription by health care providers may be inappropriate or support is not provided to high risk individuals to ensure regiments are maintained. Poor quality drugs may be used in some endemic regions which all contribute to propensity of resistance to develop. A strain of MTB is defined as multidrug resistant if it harbours resistance to at least rifampicin and isoniazid. A further class of extensively drug resistant strains are emerging which are resistant to any fluoroquinolone and to at least one of the three injectable drugs kanamycin, capreomycin and amikacin, therefore this increases the risk that adequate treatment options may not be available. Appropriate diagnostics are key to driving clinical decision making, detection of drug resistant strains. The mycobacterium tuberculosis drug resistance EQA pilot study aims to determine laboratories ability 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	6 to 10
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 Analysis type	Molecular typing
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	2-8°C / Liquid Ambient

EQA Pilot Studies

MYCOPLASMA GENITALIUM

MG20 **QAB184205**

Mycoplasma genitalium is a small pathogenic bacterium which causes urethritis in both men and women, and is significantly associated with cervicitis, pelvic inflammatory disease (PID), preterm birth and spontaneous abortion as well as increased risk of infertility in women. M. genitalium has also been identified as a co-factor in the increased risk of HIV transmission. Infection with M. genitalium is fairly common however the rising incidence of macrolide resistance and more recently the emergence of multi-drug resistant strains, including quinolone resistance is becoming an increasing concern.
The aim of the Mycoplasma genitalium EQA pilot study is to assess laboratories ability to detect Mycoplasma genitalium using routine molecular diagnostic platform and procedures.

Feature	Available Format(s)
Catalogue Number	QAB184205_1
Total Number of Challenges	1
Number of Panel Members	6 to 10
Distribution / Testing Period	Q3
	Specifications
Sample NA Target Source	Cultured material and/or Clinical material
Panel Member Target Range	Covering clinical range
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

EQA Pilot Studies

SEPSIS

SEPSIS20 **QAB164178**

Sepsis is a common and potentially life-threatening condition triggered by infection. Sepsis develops due to the overproduction of immune responses such as inflammation, swelling and even blood clotting. Severe sepsis is the most common reason for admission to intensive care. Mortality related to sepsis remains high and despite improving healthcare outcomes it is the second leading cause of death in non-coronary intensive care. In addition, patients who survive severe sepsis can often be left with physical and cognitive impairment and have a 50% increased risk of mortality in the 5 years after sepsis. There are many risk factors associated with the development of severe sepsis, including patient's predisposition to infection, chronic disease including immunodeficiency diseases, cancer as well as immunosuppressive treatment. In recent years the inappropriate use of antimicrobial drugs has also been a major concern and has been related to an increase in reported sepsis mortality. The reasons for this include the antimicrobial resistance in nosocomial infections. As a result, there has been a growing interest in the development of rapid diagnostics for the early identification of bloodstream infections to allow a more targeted approach to therapy, particularly in critically ill patients. Blood culture has always been considered as the gold standard for the diagnosis and identification of bloodstream infections. However, blood culture lacks sensitivity and the delay in the time to patient result reporting has a negative impact on patient treatment.
The molecular detection of sepsis increases the speed of diagnosis and improves sensitivity leading to more widespread clinical use. However, molecular methods are still susceptible to sensitivity issues and the risk of false positive results, which can have an impact on the clinical decision making process.
This EQA pilot study may consist 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	8 to 12
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 Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

EQA Pilot Studies

TORQUE TENO VIRUS

TTV20 **QAV184203**

Torque teno virus (TTV) is the most abundant component of the human virome and is almost endemic worldwide. TTV has been classed as an orphan virus, where it is able to establish chronic infections without causing overt pathology. TTV viremia is increased in immunosuppressed hosts, and has been shown to induce immune responses and cytokine production and secretion. Therefore, it has been suggested the measurement of TTV viral load following treatment could be useful to gauge the efficacy of immunosuppression.
The aim of the Torque Teno Virus (TTV) EQA pilot study 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 to 10
Distribution / Testing Period	Q4
	Specifications
Sample NA Target Source	Cultured and/or Clinical material
Panel Member Target Range	Covering clinical range
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

TRANSPLANTATION (VIRAL)

TRANS20 **QAM174198**

The viral transplant EQA pilot study 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	8 to 12	4 to 6
Distribution / Testing Period	Q4	Q2 & Q4
	Specifications	
Sample NA Target Source	Cultured and/or Clinical material	
Panel Member Target Range	Covering clinical range	
Panel Analysis type	Qualitative & Quantitative	
Panel Testing	Evaluated by various molecular methodologies	
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice	

EQA Pilot Studies

TRICHOMONAS VAGINALIS

TV20 **QAP184202**

Trichomonas vaginalis is the most common pathogenic parasitic infection in humans, residing in the genital tract and responsible for the sexually transmitted infection trichomoniasis. Although trichomoniasis can be asymptomatic, inflammation of the genitals is one of the main symptoms and may increase the risk of transmission of HIV. Trichomoniasis can be treated effectively with antibiotics however, rare complications can occur during pregnancy, including premature birth and low birth weight.
The aim of the Trichomonas vaginalis EQA pilot study is to assess laboratories ability to detect Trichomonas vaginalis using routine molecular diagnostic platform and procedures.

Feature	Available Format(s)
Catalogue Number	QAP184202_1
Total Number of Challenges	1
Number of Panel Members	6 to 10
Distribution / Testing Period	Q3
	Specifications
Sample NA Target Source	Cultured and/or Clinical material
Panel Member Target Range	Covering clinical range
Panel Analysis type	Qualitative
Panel Testing	Evaluated by various molecular methodologies
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

EQA Pilot Studies

YELLOW FEVER VIRUS

YFV20 **QAV194207**

Yellow fever (YF) remains an important public health problem for people in endemic regions in Africa, Central and South America and is considered as an emerging disease. The real incidence of yellow fever virus (YFV) infections worldwide is unknown due to the non-specific nature of the symptoms leading to misdiagnoses, together with insufficient reporting and ground-surveillance, and it is estimated to be over 200,000 cases per year.
Large epidemics of YF occur when infected people import the virus into densely populated regions with high mosquito rate and where most people have little or no immunity, due to lack of vaccination. In these conditions, infected mosquitoes transmit the virus from person to person. Preparedness in the face of such potential disease occurrences is important. The World Health Organization (WHO) recommends that every at-risk country have at least one national laboratory where basic YF blood tests can be performed.
Molecular methods for the detection of the viral genome offer a rapid, sensitive, and highly specific alternative for early serological diagnosis during the viraemic phase of infection.
This pilot EQA scheme will assess the proficiency of laboratories in the detection of yellow fever virus and 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 to 12
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	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

New Pilot Studies 2020

HIV-2

HIV2_20 **QAV204212**

Human Immunodeficiency virus type 2 (HIV-2) is one of the two major types of human Immunodeficiency virus, the other being the more common HIV type 1.
HIV-2 is genetically distinct from HIV-1, it is most commonly found in areas of West Africa, however the number cases in Europe, Americas and India are increasingly reported. As the asymptomatic phase of infection is longer in HIV-2 and lower vial loads are usually reported, accurate diagnostic methods are required to ensure appropriate diagnosis. Unlike serological methods where combined assays will detect both HIV-1 and HIV-2. Molecular diagnosis of HIV-2 relies on specifically validated methods. This new pilot study assesses the proficiency of laboratories in detection and quantitation of human immunodeficiency virus type 2 (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 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	

New Pilot Studies 2020

VIRAL METAGENOMICS NGS

NGSMETA_20 **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
Total Number of Challenges	1
Number of Panel Members	4 to 7
Distribution / Testing Period	Q4
	Specifications
Sample NA Target Source	Clinical material
Matrix Panel Format	Synthetic CSF + human cell lines
Panel Sample Pre-Treatment Requirement	Ready for analysis. Treat as clinical samples and analyse accordingly
Panel Analysis Type	Sequence Analysis
Storage / Shipment Conditions	<-20°C / Frozen on Dry-ice

APPENDIX

TARGET PATHOGEN							PAGE NUMBER
PROGRAMME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	PROGRAMME TYPE
Adenovirus							**Pg 8**
ADVDNA20	QAV054133_1 QAV054133_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Arthropod-borne viruses							**Pg 51**
ARBO20	QAM194206_1	1	8 to 12	Q2	Ambient	Qualitative	Pilot Study
***Aspergillus* spp.**							**Pg 43**
ASPDNA20	QAF104140_1	1	8 to 12	Q3	Dry-ice	Qualitative	Fungal EQA
Atypical mycobacterium							**Pg 52**
NTM20	QAB194208_1	1	8 to 12	Q2	Ambient	Qualitative	Pilot Study
B19 virus							**Pg 08**
B19DNA20	QAV034116_1 QAV034116_2	1 2	8 4	Q3 Q1, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Bacterial 16S Ribosomal RNA							**Pg 32**
B16SrRNA20	QAB164183_1	1	8 to 10	Q4	Dry-ice	Typing	Bacterial EQA
Bacterial Gastroenteritis							**Pg 46**
GastroB20	QAB124153_1 QAB124153_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
BK virus (BKV)							**Pg 09**
BKDNA20	QAV144166_1 QAV144166_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Bordetella pertussis							**Pg 32**
BPDNA20	QAB094132_1	1	8 to 12	Q2	Dry-ice	Qualitative	Bacterial EQA
***Borrelia burgdorferi* spp. (Lyme Disease)**							**Pg 33**
BbDNA20	QAB114147_1	1	8 to 12	Q3	Dry-ice	Qualitative	Bacterial EQA
***Candida* spp.**							**Pg 43**
CANDNA20	QAF124151_1	1	8 to 12	Q3	Dry-ice	Qualitative	Fungal EQA
Central Nervous System I (viral Meningitis and Encephalitis)							**Pg 52**
CNSI20	QAV174195_1 QAV174195_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Pilot Study
Central Nervous System II (Non-viral Meningitis and Encephalitis)							**Pg 53**
CNSII20	QAM174196_1 QAM174196_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Pilot Study
Chikungunya virus (CHIKV)							**Pg 09**
CHIKV20	QAV154175_1	1	8 to 12	Q2	Ambient	Qualitative	Viral EQA
Chlamydia psittaci							**Pg 33**
CPS20	QAB134165_1	1	8 to 10	Q2	Dry-ice	Qualitative	Bacterial EQA
Chlamydia trachomatis							**Pg 34**
CTDNA20	QAB004101_1 QAB004101_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Bacterial EQA

TARGET PATHOGEN							PAGE NUMBER
PROGRAMME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	PROGRAMME TYPE
Chlamydia trachomatis* and *Neisseria gonorrhoeae							**Pg 34**
CTNg20	QAB174191_1 QAB174191_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Chlamydophila pneumoniae							**Pg 35**
CP20	QAB084107_1	1	5 to 10	Q2	Dry-ice	Qualitative	Bacterial EQA
***Clostridium difficile* (CD)**							**Pg 35**
CDDNA20	QAB084125_1 QAB084125_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Bacterial EQA
Coronavirus (CoV)							**Pg 10**
CVRNA20	QAV064137_1	1	8 to 12	Q2	Dry-ice	Qualitative	Viral EQA
Cytomegalovirus (CMV) Dried Blood Spots							**Pg 11**
CMVDBS20	QAV064127_1	1	8 to 12	Q2	Ambient	Qualitative	Viral EQA
Cytomegalovirus (CMV) Drug Resistance							**Pg 10**
CMVDR20	QAV144169_1	1	4 to 7	Q2	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Cytomegalovirus (CMV)							**Pg 23**
CMVDNA20	QAV014120_1 QAV014120_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Cytomegalovirus (CMV) Whole Blood							**Pg 11**
CMVWB20	QAV124150_1 QAV124150_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Dengue virus (DENV)							**Pg 12**
DENVRNA20	QAV114148_1	1	8 to 12	Q2	Ambient	Qualitative	Viral EQA
Dermatophytosis							**Pg 44**
DERMA20	QAF164187_1	1	8 to 10	Q3	Dry-ice	Qualitative	Fungal EQA
Diarrheagenic *Escherichia coli*							**Pg 36**
E.COLI20	QAB154179_1	1	8 to 12	Q4	Dry-ice	Qualitative	Bacterial EQA
Enterovirus (EV)							**Pg 12**
EVRNA20	QAV984104_1 QAV984104_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Enterovirus Typing (EV)							**Pg 13**
EVTP20	QAV164185_1	1	5 to 10	Q1	Dry-ice	Typing	Viral EQA
Epstein-Barr virus (EBV)							**Pg 13**
EBVDNA20	QAV024121_1 QAV024121_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Epstein-Barr virus (EBV) Whole Blood							**Pg 14**
EBVWB20	QAV134161_1 QAV134161_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Extended Spectrum ß-lactamase and Carbapenemase							**Pg 36**
ESBL20	QAB134162_1	1	8 to 12	Q3	Dry-ice	Typing	Bacterial EQA
Group B *Streptococcus*							**Pg 37**
GBS20	QAB174200_1	1	8 to 12	Q4	Dry-ice	Qualitative	Bacterial EQA

TARGET PATHOGEN							PAGE NUMBER
PROGRAMME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	PROGRAMME TYPE
Helicobacter pylori							**Pg 37**
H.PYLORI20	QAB164190_1	1	5 to 10	Q3	Dry-ice	Qualitative	Bacterial EQA
Hepatitis A virus (HAV)							**Pg 17**
HAVRNA20	QAV124156_1 QAV124156_2	1 2	8 to 10 4	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Hepatitis B virus (HBV)							**Pg 18**
HBVDNA20	QAV994110_1 QAV994110_2 QAV994110_4	1 2 4	8 4 4	Q3 Q1, Q3 Q1, Q2, Q3, Q4	Dry-ice	Qualitative & Quantitative	Viral EQA
Hepatitis B virus (HBV) Drug Resistance							**Pg 14**
HBVDR20	QAV124160_1	1	4 to 7	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Hepatitis B virus (HBV) Genotyping							**Pg 15**
HBVGT20	QAV064118_1	1	8 to 12	Q1	Dry-ice	Typing	Viral EQA
Hepatitis C virus (HCV)							**Pg 18**
HCVRNA20	QAV994112_1 QAV994112_2 QAV994112_4	1 2 4	8 4 4	Q3 Q1, Q3 Q1, Q2, Q3, Q4	Dry-ice	Qualitative & Quantitative	Viral EQA
Hepatitis C virus (HCV) Drug Resistance							**Pg 16**
HCVDR20	QAV134167_1	1	4 to 7	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Hepatitis C virus (HCV) Genotyping							**Pg 17**
HCVGT20	QAV034117_1	1	8 to 12	Q1	Dry-ice	Typing	Viral EQA
Hepatitis D virus (HDV)							**Pg 19**
HDV20	QAV144170_1	1	8 to 10	Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Hepatitis E virus (HEV)							**Pg 19**
HEVRNA20	QAV124157_1	1	8 to 10	Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Herpes simplex virus 1 & 2 (HSV)							**Pg 20**
HSVDNA20	QAV994105_1 QAV994105_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Herpes simplex virus Drug Resistance							**Pg 20**
HSVDR20	QAV164184_1	1	4 to 7	Q1	Dry-ice	Sequence Analysis	Viral EQA
Human herpes virus 6 (HHV6)							**Pg 23**
HHV6DNA20	QAV084119_1 QAV084119_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Human Immunodeficiency virus type 1 (HIV-1) – DNA							**Pg 21**
HIVDNA20	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							**Pg 22**
HIVDR20	QAV024131_1	1	4 to 7	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA
Human Immunodeficiency virus type 1 (HIV-1) – Drug Resistance (Integrase)							**Pg 22**
HIVDRint19	QAV114146_1	1	4 to 7	Q3	Dry-ice	Drug Resistance / Sequencing	Viral EQA

TARGET PATHOGEN							PAGE NUMBER
PROGRAMME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	PROGRAMME TYPE
Human Immunodeficiency virus type 1 (HIV-1) – RNA							**Pg 21**
HIVRNA20	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							**Pg 60**
HIV2_20	QAV204212_1 QAV204212_2	1 2	8 4	Q3 Q1, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Human metapneumovirus (MPV)							**Pg 24**
MPV20	QAV054135_1	1	8 to 12	Q2	Dry-ice	Qualitative	Viral EQA
Human Papillomavirus (HPV) – PreservCyt							**Pg 24**
HPVPRES20	QAV094130_1 QAV094130_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Ambient / Specialist	Qualitative	Viral EQA
Human Papillomavirus (Surepath)							**Pg 53**
HPVSURE20	QAV184204_1	1	8 to 12	Q4	Ambient	Qualitative	Pilot Study
Influenza A & B virus (FLU)							**Pg 25**
INFRNA20	QAV054134_1 QAV054134_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Viral EQA
Influenza Typing							**Pg 25**
INFTP20	QAV064138_1	1	5 to 10	Q4	Dry-ice	Typing	Viral EQA
JC virus (JCV)							**Pg 26**
JCDNA20	QAV074106_1 QAV074106_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative & Quantitative	Viral EQA
Legionella pneumophila							**Pg 38**
LPDNA20	QAB044122_1	1	8 to 12	Q1	Dry-ice	Qualitative	Bacterial EQA
MALDI-TOF							**Pg 46**
MALDI20	QAB124155_1	1	8 to 12	Q3	Dry-ice	Typing	Multi-Pathogen / Syndromic EQA
Measles / Mumps							**Pg 26**
MM20	QAV144171_1	1	8 to 12	Q3	Dry-ice	Qualitative	Viral EQA
MERS coronavirus (MERS-CoV)							**Pg 27**
MERS20	QAV154181_1	1	6 to 10	Q2	Dry-ice	Qualitative	Viral EQA
Methicillin Resistant *Staphylococcus aureus* (MRSA)							**Pg 39**
MRSADNA20	QAB064124_1	1	8 to 12	Q2	Ambient	Qualitative	Bacterial EQA
Methicillin Resistant *Staphylococcus aureus* (MRSA) – Typing							**Pg 38**
MRSATP20	QAB074128_1	1	8 to 12	Q2	Ambient	Typing	Bacterial EQA
***Mycobacterium tuberculosis* (MTB)**							**Pg 39**
MTBDNA20	QAB014129_1 QAB014129_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Ambient	Qualitative	Bacterial EQA
***Mycobacterium tuberculosis* Drug Resistance**							**Pg 54**
MTBDR20	QAB194209_1	1	6 to 10	Q4	Ambient	Typing	Pilot Study
Mycoplasma genitalium							**Pg 55**
MG20	QAB184205_1	1	6 to 10	Q3	Dry-ice	Qualitative	Pilot Study
Mycoplasma pneumoniae							**Pg 40**
MP20	QAB174192_1	1	5 to 10	Q2	Dry-ice	Qualitative	Bacterial EQA

TARGET PATHOGEN							PAGE NUMBER
PROGRAMME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	PROGRAMME TYPE
***Mycoplasma* spp. (cell contamination)**							**Pg 40**
MYCO20	QAB144168_1	1	8 to 12	Q4	Dry-ice	Qualitative & Quantitative	Bacterial EQA
Neisseria gonorrhoeae							**Pg 41**
NgDNA20	QAB034126_1 QAB034126_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Bacterial EQA
Norovirus (NV)							**Pg 27**
NVRNA20	QAV084139_1 QAV084139_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Viral EQA
Parainfluenza virus (PIV)							**Pg 28**
PINFRNA20	QAV064136_1	1	8 to 12	Q2	Dry-ice	Qualitative	Viral EQA
Parasitic Gastroenteritis							**Pg 47**
GastroP20	QAP124154_1 QAP124154_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Parechovirus (HPeV)							**Pg 28**
PeVRNA20	QAV114145_1 QAV114145_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
***Pneumocystis jirovecii pneumonia* (PCP)**							**Pg 44**
PCPDNA20	QAF114144_1	1	8 to 12	Q3	Dry-ice	Qualitative & Quantitative	Fungal EQA
Respiratory I							**Pg 47**
RESPI20	QAV164188_1 QAV164188_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Respiratory II							**Pg 48**
RESPII20	QAV164189_1 QAV164189_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Respiratory III							**Pg 48**
RESPIII20	QAM174193_1 QAM174193_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Respiratory syncytial virus (RSV)							**Pg 28**
RSV20	QAV054142_1 QAV054142_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Viral EQA
Rhinovirus (RV)							**Pg 29**
RVRNA20	QAV064143_1	1	8 to 12	Q2	Dry-ice	Qualitative	Viral EQA
Sepsis							**Pg 56**
SEPSIS20	QAB164178_1	1	8 to 12	Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Sexually Transmitted Infections I							**Pg 49**
STI_I20	QAB154177_1 QAB154177_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Sexually Transmitted Infections II							**Pg 49**
STI_II20	QAM174201_1 QAM174201_2	1 2	8 to 12 4 to 6	Q3 Q2, Q3	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA

TARGET PATHOGEN							PAGE NUMBER
PROGRAMME CODE	CATALOGUE NUMBER	NO. OF CHALLENGES	PANEL MEMBERS PER CHALLENGE	DISTRIBUTION DATE(S)/ TESTING PERIOD	SHIPPING CONDITIONS	ANALYSIS TYPE	PROGRAMME TYPE
Staphylococcus aureus spa							**Pg 41**
SASPA20	QAB134164_1	1	6 to 12	Q2	Ambient	Typing	Bacterial EQA
Syphilis							**Pg 42**
SYPH20	QAB154180_1	1	5 to 10	Q4	Dry-ice	Qualitative	Bacterial EQA
Torque teno virus (TTV)							**Pg 57**
TTV20	QAV184203_1	1	6 to 10	Q4	Dry-ice	Qualitative	Pilot Study
Toxoplasma gondii							**Pg 45**
TGDNA20	QAP044123_1 QAP044123_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Ambient	Qualitative	Parasitic EQA
Transplantation (viral)							**Pg 57**
TRANS20	QAM174198_1 QAM174198_2	1 2	8 to 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative & Quantitative	Pilot Study
Trichomonas vaginalis							**Pg 58**
TV20	QAP184202_1	1	6 to 10	Q3	Dry-ice	Qualitative	Pilot Study
Vancomycin Resistant Enterococci (VRE)							**Pg 42**
VRE20	QAB134163_1	1	8 to 12	Q3	Dry-ice	Typing	Bacterial EQA
Varicella-Zoster virus (VZV)							**Pg 30**
VZVDNA20	QAV034103_1 QAV034103_2	1 2	8 to 12 4 to 6	Q3 Q1, Q3	Dry-ice	Qualitative	Viral EQA
Viral Gastroenteritis							**Pg 50**
GastroV20	QAV124152_1 QAV124152_2	1 2	8 10 12 4 to 6	Q4 Q2, Q4	Dry-ice	Qualitative	Multi-Pathogen / Syndromic EQA
Viral Metagenomics NGS							**Pg xx**
NGSmeta_20	QAV204213_1	1	4 to 7	Q4	Dry-ice	Sequencing	Viral EQA
West Nile virus (WNV)							**Pg 30**
WNVRNA20	QAV104141_1	1	8 to 12	Q2	Ambient	Qualitative	Viral EQA
Yellow Fever Virus							**Pg 59**
YFV20	QAV194207_1	1	8 to 12	Q2	Ambient	Qualitative	Pilot Study
Zika Virus							**Pg 31**
ZIKA20	QAV164186_1	1	8 to 12	Q2	Ambient	Qualitative	Viral EQA