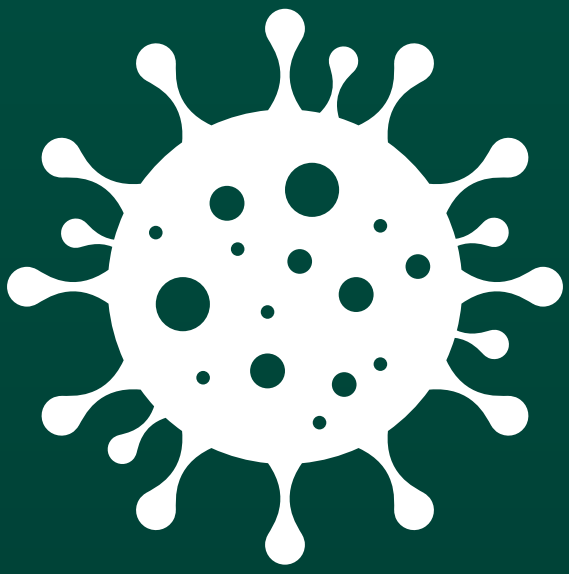
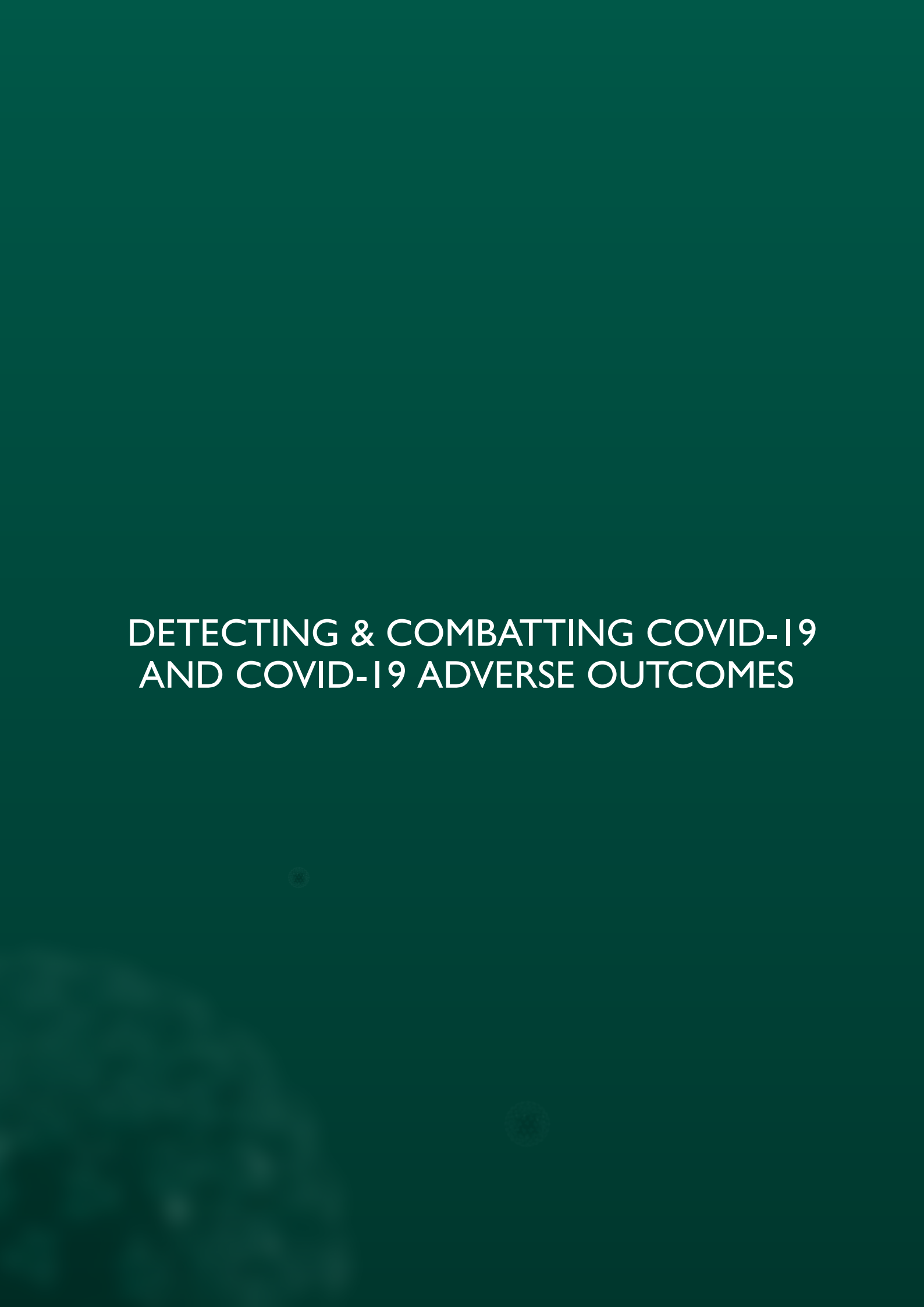
RANDOX

COVID-19



DETECTING & COMBATTING COVID-19 AND
COVID-19 ADVERSE OUTCOMES

DETECTING & COMBATTING COVID-19 AND COVID-19 ADVERSE OUTCOMES

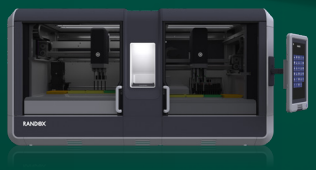


RANDOX | COVID-19 TESTING

The emergence of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (COVID-19) in Wuhan, China at the end of 2019 caused a global scale pandemic and is a major public health concern. The world health organisation (WHO) declared COVID-19 as the sixth public health emergency of international concern on 30th January 2020[1].

Randox has developed a pioneering test to diagnose COVID-19 using our patented Biochip Technology. Capable of conducting multiple tests simultaneously, the Randox Biochip has two tests for COVID-19, one specific and one confirmatory, as recommended by the WHO.

DISCOVERY



The Randox Discovery is an exciting and disruptive molecular & immunoassay diagnostic analyser capable of consolidating the normal workload of multiple laboratories into a single benchtop platform.

Why choose the Randox Discovery?

- The Discovery is an exciting and disruptive analyser capable of molecular & immunoassay testing
- Detection of up to 10 viral targets, including SARS-CoV-2 from a single patient sample via patented biochip technology via patented biochip technology
- Rapid turnaround of 3 hours for the first batch of results, with subsequent results available every hour
- Fully automated platform increasing operator walkaway time
- Simple and easy to use due to the intuitive user interface, guiding the operator through the entire testing process
- Consolidates the workflow of multiple laboratories into one benchtop platform

SARS-CoV-2 Array | 2-Plex Molecular Assay for SARS-CoV-2 and 1 other viral target

Suitable for use with the Randox Discovery, the SARS-CoV-2 Array comprises 2 strains of coronavirus including SARS-CoV-2 (COVID-19) and Sarbecovirus (confirmatory target), enabling the accurate reporting of COVID-19 positive patient samples.

Viral Targets		
SARS-CoV-2 (COVID-19)	Sarbecovirus (SARS, SARS like, SARS-CoV-2)	-

Cat Code	Analyser: RDC10000 2-Plex Array Lyo Cartridge: RDC1002/A 2-Plex Array Components: RDC10002/B
Sample Type	Nasopharangeal Swab
Sample Volume	Array Specific

Extended Coronavirus Assay | Hi-Plex Molecular Assay for SARS-CoV-2 and 9 other viral targets

Suitable for use with the Randox Discovery, the Extended Coronavirus Array comprises 6 strains of coronavirus including SARS-CoV-2. The wider panel delivers a more comprehensive respiratory screen allowing differentiation between COVID-19 and other respiratory viruses with similar symptoms, ultimately enabling effective treatment plan implementation.

Viral Targets		
SARS-CoV-2 (COVID-19)	Sarbecovirus (SARS, SARS like, SARS-CoV-2)	Influenza A
Coronavirus 229E/NL63	Adenovirus A/B/C/D/E	Influenza B
Coronavirus OC43/HKUI	Enterovirus A/B/C	Rhinovirus A/B
Middle East Respiratory Syndrome Coronavirus (MERS-CoV)	-	-

Cat Code	*In Development
Sample Type	Nasopharangeal Swab
Sample Volume	Array Specific

DISCOVERY

Discover The Power of Automation

Randox Discovery is comprised of three interconnected modules which each operate independently performing different aspects of the diagnostic testing process. Each module is separated by a physical barrier to prevent contamination and is accessible via a door. The workflow process runs from right to left and is compatible with lean working principles.

MODULE III
Biochip Hybridisation & Detection

Module III is responsible for hybridisation and subsequent detection using patented biochip technology. The detection camera uniquely moves between sample cartridges to detect biochip chemiluminescence.

MODULE II
Multiplex PCR

Module II is responsible for amplification of the extracted nucleic acid by End Point PCR. UV light is used to sterilise the module and reduce the risk of crossover contamination.

MODULE I
Nucleic Acid Extraction

Module I is responsible for DNA/RNA extraction. After extraction the sample is automatically transferred to Module II. Before transfer, Module I detects the presence of Module II cartridges using a unique vision system.

EVIDENCE INVESTIGATOR

The Evidence Investigator is a compact semi-automated benchtop analyser. Utilisng Randox Biochip Technology, the Evidence Investigator will detect SARS-CoV-2 and nine other viral targets in less than 5 hours.

Why choose the Evidence Investigator?

- Detection of up to 10 viral targets from 54 patient samples simultaneously
- Comprises Sarbecovirus as a confirmatory target ensuring accurate diagnosis
- Availability of Hi-Plex and Lo-Plex testing options for SARS-CoV-2
- Target genes in line with WHO and CDC recommendations
- Medium to high throughput analyser capable of processing up to 540 results in <5 hours
- Evidence Investigator is suitable for use within a laboratory setting

Extended Coronavirus Assay | Hi-Plex Molecular Assay for SARS-CoV-2 and 9 other viral targets

Suitable for use with the Evidence Investigator from Randox, the Extended Coronavirus Array comprises 6 strains of coronavirus including SARS-CoV-2. The wider panel delivers a more comprehensive respiratory screen allowing differentiation between COVID-19 and other respiratory viruses with similar symptoms, ultimately enabling effective treatment plan implementation.

Viral Targets		
SARS-CoV-2 (COVID-19)	Sarbecovirus (SARS, SARS like, SARS-CoV-2)	Influenza A
Coronavirus 229E/NL63	Adenovirus A/B/C/D/E	Influenza B
Coronavirus OC43/HKUI	Enterovirus A/B/C	Rhinovirus A/B
Middle East Respiratory Syndrome Coronavirus (MERS-CoV)	-	-

Cat Code	EV4418
Sample Type	Nasopharyngeal Swab, Sputum, BAL
Sample Volume	5µl of nucleic acid

EVIDENCE INVESTIGATOR

SARS-CoV-2 Array | 2-Plex Molecular Assay for SARS-CoV-2 and 1 other viral target

Suitable for use with the Randox Evidence Investigator from Randox, the SARS-CoV-2 Array comprises of 2 strains of coronavirus including SARS-CoV-2 (COVID-19) and Sarbecovirus (confirmatory target), enabling the accurate reporting of COVID-19 positive patient samples.

Viral Targets		
SARS-CoV-2 (COVID-19)	Sarbecovirus (SARS, SARS like, SARS-CoV-2)	-

Cat Code	EV4432
Sample Type	Nasopharangeal Swab
Sample Volume	5µl of nucleic acid

SARS-CoV-2 IgG (RBD & NP) Array

The SARS-CoV-2 IgG (RBD & NP) Array utilises patented Biochip Technology to simultaneously detect IgG antibodies reactive to both leading COVID-19 diagnostic antigens Spike Receptor Binding Domain (RBD) and Nucleocapsid Protein (NP).

Antigen Targets		
Spike Receptor Binding Domain (RBD)	Nucleocapsid Protein (NP)	-

Cat Code	EV4447
Sample Type	Human Serum & Plasma
Sample Volume	10µl

VIVALYTIC

The new Viral Respiratory Infection Array (VRI) will be conducted on Vivalytic, a point of care platform brought to the market by Randox Laboratories and Bosch. The Vivalytic system is a fully-automated, cartridge-based platform capable of both Hi-Plex and Lo-Plex testing.

Why choose the Vivalytic?

- Detection of up to 10 viral targets, including SARS-CoV-2 in 2.5 hours
- Vivalytic is a POCT analyser, suitable for use in any setting
- Availability of Hi-Plex and Lo-Plex testing options for SARS-CoV-2
- 4 steps for optimised workflow, delivering an uncomplicated user experience
- Target genes in line with WHO and CDC recommendations
- No further peripherals such as a laptop are required, making the Vivalytic unique, space-saving and a hygienic solution for Molecular Diagnostic testing

Viral Respiratory Infection Array | Hi-Plex Molecular Assay for SARS-CoV-2 and 9 other viral targets

The Viral Respiratory Infection (VRI) array can identify SARS-CoV-2 (COVID-19) and differentiate it from nine other respiratory infections with similar symptoms, including influenza and all known coronaviruses.

Viral Targets		
SARS-CoV-2 (COVID-19)	Sarbecovirus (SARS, SARS like, SARS-CoV-2)	Influenza A
Coronavirus 229E/NL63	Adenovirus A/B/C/D/E	Influenza B
Coronavirus OC43/HKUI	Enterovirus A/B/C	Rhinovirus A/B
Middle East Respiratory Syndrome Coronavirus (MERS-CoV)	-	-

Cat Code	**Vivalytic analyser**: F09G300115 **VRI Cartridge**: F09G300382 (15 cartridges)
Sample Type	Nasopharyngeal swab
Sample Volume	300µl clinical sample

SARS-CoV-2 Rapid Tests

The new SARS-CoV-2 (COVID-19) is a rapid, real time PCR test cartridge, providing clear and concise results in a timely manner, direct at the point of care. This enables the patient to take the recommended safety precautions without delay.

Viral Targets		
SARS-CoV-2 (COVID-19)	-	-

Cat Code	F09G300411
Sample Type	Nasopharyngeal or Oropharyngeal Swab
Sample Volume	300µl Clinical Sample

SARS-CoV-2 Pooling Test

The SARS-CoV-2 RT-PCR pooling test can run up to 5 samples on-board the one cartridge. The SARS-CoV-2 pooling test has recently received CE marking.

Viral Targets		
SARS-CoV-2 (COVID-19)	-	-

Cat Code	F09G300587
Sample Type	Nasopharyngeal or Oropharyngeal Swab
Sample Volume	750µl Clinical Sample

CoV (COVID-19 2-plex)

The 2-plex test detects both SARS-CoV-2 and Sarbecovirus (confirmatory target), to report SARS-CoV-2 positive patient samples.

Viral Targets		
SARS-CoV-2 (COVID-19)	Sarbecovirus (SARS, SARS like, SARS-CoV-2)	-

Cat Code	F09G300599
Sample Type	Nasopharyngeal or Oropharyngeal Swab
Sample Volume	300µL Clinical Sample

MOLECULAR EXTRACTION KITS

Current strategies to prevent the spread of SARS-CoV-2 (COVID-19) include screening, quarantine of infected individuals and contact tracing, such strategies require accurate diagnostic tools. Randox have newly developed COVID-19 extraction kits which serve as an ideal molecular diagnostic tool in detecting SARS-CoV-2.

RNA extraction is a key pre-analytical step in RT-qPCR to certify the development and performance of any successful molecular diagnostic method and to ensure a reliable result. Nucleic acid extraction is essential to determine the unique characteristics of DNA, providing a comprehensive analysis for infectious disease testing.

MOLECULAR EXTRACTION KITS

Viral RNA Extraction Kit

The Randox extraction kit is designed for the optimal automated extraction of nucleic acid and purification of high-quality RNA.

Key Benefits of the Viral RNA Extraction Kit

- Efficient and automated purification of nucleic acid material
- Extraction from nasal-throat swabs following brief lysis steps
- Convenient room temperature storage
- Yields highly concentrated nucleic acids that are ready to use in downstream applications such as qualitative or quantitative PCR
- Available for use on any automated extraction platform
- Quick assay protocol

Cat Code	NAE10500
Sample Type	Nasopharyngeal or Oropharyngeal Swab
Sample Volume	200µl Clinical Sample

MOLECULAR EXTRACTION KITS

COVID-19 qPCR Assay

The Randox COVID-19 qPCR Assay is designed to provide detection of two pathogens, SARS-CoV-2 (ORF1ab) and Sarbecovirus (SARS, SARS like, SARS-CoV-2) (E-gene) in a multiplex format.

Key Benefits of the COVID-19 qPCR Assay

- Multiplex PCR assay accurately detecting both SARS-CoV-2 (ORF1ab) and Sarbecovirus (E-gene)
- Highly sensitive assay, LOD 750 copies / ml ensuring accurate & reliable results
- Rapid turnaround time & PCR run time of 75 minutes
- High throughput: 93 sample in 2.5 hours from extraction to analysis from automated nucleic acid isolation

Targets Detected	
Pathogen	**Gene**
SARS-CoV-2 (ORF1ab)	ORF1ab
Sarbecovirus (SARS, SARS like, SARS-CoV-2) (E-gene)	E-gene

Cat Code	CQP10457

QNOSTICS | INTERNAL QUALITY CONTROLS

Qnostics, a world leading manufacturer of QC solutions for molecular infectious disease testing has developed a range of products designed to support the validation, verification and performance monitoring of molecular assays used in the testing of SARS-CoV-2. Whole pathogen controls designed to monitor assay performance on a run to run basis. As true third party controls, assay drift is detected, monitored and managed helping to ensure accurate and reliable results.

Why choose Qnostics

- Qnostics controls contain the entire SARS-CoV-2 genome including CDC and WHO consensus sequences, meaning they are compatible with the majority of commercial and in-house assays.
- Whole pathogen controls are the ideal material for full-process validation, monitoring the testing process from extraction to amplification and detection ensuring ultimate quality assurance in laboratories.
- Quantified by digital PCR, ensuring reproducibility and metrological traceability enabling laboratories to meet their daily QC accreditation requirements.
- As third party controls, an independent, unbiased assessment of assay performance is ensured in line with ISO 15189:2012 regulatory requirements.
- Qnostics controls are manufactured under ISO 13485 guidelines to ensure quality and traceability.
- Negative control available containing human cells/nucleic acids and therefore can be used as part of assay validation.

SARS-CoV-2 Q Controls

Whole pathogen controls designed to monitor assay performance on a run to run basis. As true third party controls, assay drift is detected, monitored and managed helping to ensure accurate and reliable results.

Target Pathogen – SARS-CoV-2 (COVID-19)

Target – Whole Pathogen

Matrix – Transport Medium

Format – Liquid Frozen

Stability – 5 days opened vial stability

Regulatory Status – CE, RUO

Catalogue Number	Product Description	Pack Size
SCV2QC	SARS-CoV-2 Q Control	5 x 0.5 ml
TMNQC	Negative Q Control	5 x 0.5 ml

SARS-CoV-2 Analytical Q Panel

Designed to span the analytical measuring range of an assay, allowing assessment of linearity, Limit of Detection (LOD) and Limit of Quantitation (LOQ).

Target Pathogen – SARS-CoV-2 (COVID-19)

Target – Whole Pathogen

Matrix – Transport Medium

Format – Liquid Frozen

Stability – 5 days opened vial stability

Regulatory Status – CE, RUO

Catalogue Number	Product Description	Pack Size
SCV2AQP	SARS-CoV-2 Analytical Q Panel	9 x 0.5 ml

SARS-CoV-2 Molecular Q Panel

Four individual levels including a negative are provided spanning the assays' clinical range. Molecular Q Panels may be used to support laboratory training and in the performance assessment and validation of molecular diagnostic assays.

Target Pathogen – SARS-CoV-2 (COVID-19)

Target – Whole Pathogen

Matrix – Transport Medium

Format – Liquid Frozen

Stability – 5 days opened vial stability

Regulatory Status – CE, RUO

Catalogue Number	Product Description	Pack Size
SCV2MQP	SARS-CoV-2 Molecular Q Panel	4 x 0.5 ml

Respiratory Target Multiplex (RTX)

A series of respiratory target multiplex controls are available, enabling the requirements for winter testing strategies to be met. The controls cover a range of viral and bacterial pathogens responsible for an array of respiratory diseases in various patient cohorts, whilst discriminating cold and flu from COVID-19.

RTX Plus Q Control

Target Pathogen – Influenza A (H1N1), Influenza B (Victoria), RSV A, Coronavirus (SARS-CoV-2)
Genotype – SARS-CoV-2
Target – Whole Pathogen
Matrix – Transport Medium
Format – Liquid Frozen
Stability – Single use. Once thawed use immediately.
Regulatory Status – RUO

Catalogue Number	Product Description	Pack Size
RTX1QC	RTX Plus Q Control	5 x 0.6ml

RTX2 Q Control

Target Pathogen –Parainfluenza 1, Adenovirus 1, *Mycoplasma pneumoniae*, Coronavirus (OC43)
Genotype – Type 16
Target – Whole Pathogen
Matrix – Transport Medium
Format – Liquid Frozen
Stability – Single use. Once thawed use immediately.
Regulatory Status – RUO

Catalogue Number	Product Description	Pack Size
RTX2QC	RTX2 Q Control	5 x 0.6ml

RTX3 Q Control

Target Pathogen – Parainfluenza 2, Metapneumovirus (A2), Enterovirus (A16), Coronavirus (229E)
Genotype – SARS-CoV-2
Target – Whole Pathogen
Matrix – Transport Medium
Format – Liquid Frozen
Stability – Single use. Once thawed use immediately.
Regulatory Status – RUO

Catalogue Number	Product Description	Pack Size
RTX3QC	RTX3 Q Control	5 x 0.6ml

RTX4 Q Control

Target Pathogen – Parainfluenza 3, Rhinovirus (16), *Legionella pneumophila*, Coronavirus (NL63)
Genotype – SARS-CoV-2
Target – Whole Pathogen
Matrix – Transport Medium
Format – Liquid Frozen
Stability – Single use. Once thawed use immediately.
Regulatory Status – RUO

Catalogue Number	Product Description	Pack Size
RTX4QC	RTX4 Q Control	5 x 0.6ml

RTX5 Q Control

[for paediatric testing]

Target Pathogen – Parainfluenza 4, Adenovirus (14), RSV B, Enterovirus (D68)
Genotype – Type 16
Target – Whole Pathogen
Matrix – Transport Medium
Format – Liquid Frozen
Stability – Single use. Once thawed use immediately.
Regulatory Status – RUO

Catalogue Number	Product Description	Pack Size
RTX5QC	RTX5 Q Control	5 x 0.6ml

QCMD | MOLECULAR EXTERNAL QUALITY ASSESSMENT

QCMD provide two EQA programmes for SARS-CoV-2. Each programme is designed to evaluate a laboratory's ability to detect SARS-CoV-2 using routine molecular methods and will provide an opportunity to assess performance against an international peer group.

Why choose QCMD?

- The availability of whole pathogen samples containing the entire viral genome, ensures compatibility with the majority of commercial & in-house assays targeting the CDC and WHO consensus sequences.
- EQA samples are designed to mimic the patient sample and assess the full testing process from extraction to amplification and detection.
- An individual report is received after each challenge, summarising laboratory performance in comparison to an international peer group.
- IT EQA Management System (ITEMS) provides an online tool to easily manage all EQA activities from programme registration to submission of results and provision of EQA reports.
- Samples containing SARS-CoV-2 are inactivated and not infectious ensuring safe handling of material.

QCMD 2020 SARS-CoV-2 EQA Study (SCV2)

The SARS-CoV-2 programme is designed to assess the ability of laboratories to detect SARS-CoV-2 at clinically relevant levels, near the Limit of Detection (LOD) and to assess the specificity of the assay in the presence of other coronaviruses. Two flexible participation options are available including; a single challenge format comprising 10 samples or a two-challenge format comprising 5 samples per challenge.

Sample NA Target Source – Cultured and/or clinical material

Target Range – Covers the clinical range

Matrix – Transport Medium

Sample Volume – 1 ml

Analysis Type – Qualitative

Format – Liquid Frozen

Feature	Available Format(s)	
Catalogue Number	QAV204215_1	QAV204215_2
Number of Challenges	1	2
Number of Samples per Challenge	10	5
Distribution / Testing Period	Q4	Q3 and Q4

QCMD 2020 Respiratory 1 Plus (RESP1plus)

The new RESP1plus EQA programme covers SARS-CoV-2 in addition to other respiratory pathogens including Influenza A, Influenza B and Respiratory Syncytial Virus (RSV) and is ideal for laboratories using multiplex and/or cartridge based molecular systems. The programme is designed to assess the ability of molecular workflows in the detection and differentiation of SARS-CoV-2 in combination with other respiratory pathogen targets.

Sample NA Target Source – Cultured and/or clinical material

Target Range – Covers the clinical range

Matrix – Transport Medium

Sample Volume – 1 ml

Analysis Type – Qualitative

Format – Liquid Frozen

Feature	Available Format(s)
Catalogue Number	QAV204216_1
Number of Challenges	1
Number of Samples per Challenge	10
Distribution / Testing Period	Q4

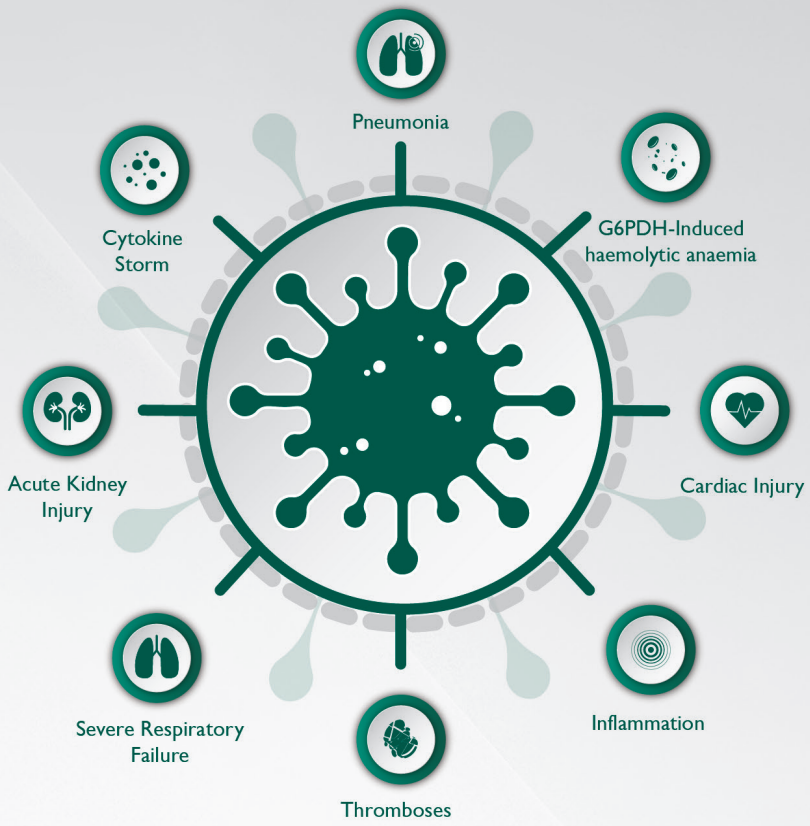
DIAGNOSTIC SOLUTIONS FOR COVID-19 ADVERSE OUTCOMES

Randox offers a comprehensive range of laboratory solutions including; diagnostics reagents, revolutionary Biochip technology and quality control designed to provide clinicians with valuable insights into disease severity ultimately helping to improve patient care.

Patients with comorbidities such as diabetes mellitus (DM), cardiovascular disease (CVD) and chronic kidney disease (CKD) are particularly susceptible to adverse outcomes due to COVID-19. The Randox portfolio may also be used to diagnose and monitor such at risk patients with underlying health concerns.

Diagnostic Testing in SARS-CoV-2 Adverse Outcomes

1 in 6 will experience complications that could be life-threatening



How Randox Can Help

Clinical Chemistry Testing

G6PDH · Ferritin · Cystatin C · ALT · AST · Lp(a) · Creatinine · LDH

CRP · Albumin · Bilirubin

Clinical Chemistry Internal & External Quality Control

Haematology · Blood Gas · Cardiac Markers · Coagulation · Procalcitonin

Immunoassay Testing

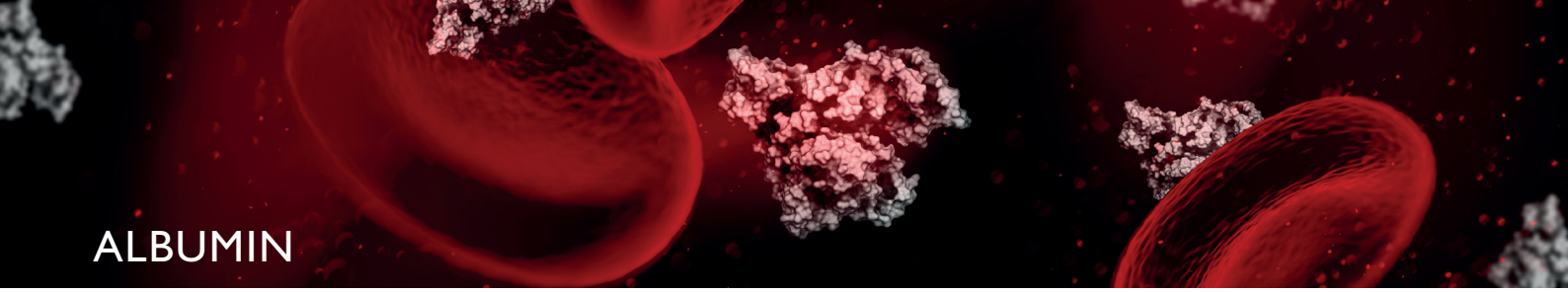
Cytokine Array · Respiratory Array

70% of medical decisions depend on laboratory results

CLINICAL CHEMISTRY | REAGENTS

Our extensive test menu comprises 114 diagnostic assays, including several unique and superior performance assays, as well as a range of biomarkers designed to assist laboratories when screening for a variety of COVID-19 adverse outcomes. Randox Reagents are internationally recognised as being of the highest quality, producing accurate and precise results.

ALBUMIN | ALANINE AMINOTRANSFERASE (ALT) ASPARTATE AMINOTRANSFERASE (AST) | BILIRUBIN (VANADATE OXIDATION) | CREATININE (ENZYMATIC) | CRP | CYSTATIN C | FERRITIN | G6PDH | LACTATE DEHYDROGENASE (LDH) LIPOPROTEIN(A) [LP(A)]



ALBUMIN

Hypoalbuminemia status has been associated with the critically ill and mortality across several clinical settings. Hypoalbuminemia can potentially lead to the early recognition of severe disease associated with COVID-19 and can assist clinicians in making informed decisions for their patients [1].

Key Benefits of the Randox Albumin Assay

- **Exceptional measuring range** of 2.87 - 75.5g/l for the comfortable detection of clinically important results.
- **Excellent within run precision** of <1.97% CV.
- **Stable to expiry date** when stored at +15°C - +25°C.
- **Liquid ready-to-use format** for convenience and ease-of-use.
- **Calibrator and controls available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox albumin assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
AB362	6 x 100ml (S)
AB3800	9 x 51ml
AB8000	4 x 68ml
AB8301	4 x 20ml

(S) indicates standard included in kit

ALANINE AMINOTRANSFERASE (ALT)

Elevated liver function tests are a common complication in COVID-19 patients with levels increasing 2-fold in severe COVID-19 patients compared to non-severe patients [2]. ALT showed statistically significant elevations in severe COVID-19 compared to mild cases. Increased ALT and aspartate aminotransferase (AST) concentrations were also observed in COVID-19 patients on admission [3].

Key Benefits of the Randox ALT Assay

- **Excellent correlation** coefficient of at least r=0.98 when compared against commercially available methods.
- **Excellent within run precision** of < 5.9% CV.
- **Wide measuring range** of 4.25 - 666U/l for the comfortable detection of clinically important results.
- **Stable to expiry date** when store at +2°C to +8°C.
- **Dedicated calibrator and control available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox ALT assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
AL1205	10 x 10ml
AL7930	R1 7 x 100ml R2 3 x 60ml ♦
AL3801	R1 6 x 51ml R2 6 x 14ml ♦
AL8006	R1 6 x 56ml R2 6 x 20ml ♦
AL8304	R1 4 x 20ml R2 4 x 7ml ♦

♦ indicates liquid option

ASPARTATE AMINOTRANSFERASE (AST)

The diagnosis of liver disease in COVID-19 patients can be challenging for the clinician. There is often uncertainty as to whether there was a pre-existing undiagnosed liver disease. Also, many medications utilised to treat moderate and severe disease have their own profiles of liver toxicity. Elevations of AST is the most common abnormality in patients presenting with COVID-19. It was identified that AST is more frequently elevated in comparison to ALT [2]. AST showed statistically significant elevations in severe COVID-19 in comparison to mild cases [3].

Key Benefits of the Randox AST Assay

- **Exceptional correlation** coefficient of at least r=0.999 when compared to commercially available methods.
- **Excellent within run precision** of < 4.8% CV.
- **Wide measuring range** of 4.42 - 657U/l for the comfortable detection of clinically important results.
- **Stable to expiry date** when stored at +2°C to +8°C.
- **Calibrator and controls available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox AST assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
AS3876	6 x 20ml
AS3804	R1 6 x 51ml R2 6 x 14ml ♦
AS101	R1 1 x 100ml R2 1 x 100ml ♦
AS8005	R1 6 x 56ml R2 6 x 20ml ♦
AS8306	R1 4 x 20ml R2 4 x 7ml ♦

♦ indicates liquid option

BILIRUBIN (VANADATE OXIDATION)

It has been established that bilirubin levels are significantly elevated in COVID-19 patients [4]. Patients with abnormal liver function tests were at a significantly higher risk of progressing to a severe disease, such as pneumonia. The presence of abnormal liver function tests became more pronounced during hospitalisation within two weeks, with total bilirubin levels elevated 3 times the upper normal limit [5].

Key Benefits of the Randox Vanadate Oxidation Bilirubin Assay

- **The vanadate oxidation method does not suffer from interference from non-conjugated bilirubin** unlike the diazo method.
- **Both direct and total bilirubin assays available**, offering choice and flexibility.
- **The vanadate oxidation method eliminates the pre-step**, increasing testing efficiency.
- **Liquid ready-to-use format** for convenience and ease-of-use.
- **Calibrator and controls available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox vanadate oxidation bilirubin assay on a variety of clinical chemistry analysers.

Direct Bilirubin		Total Bilirubin	
Catalogue Number	Size	Catalogue Number	Size
BR97665	R1 4 x 14ml R2 4 x 6ml	BR9766	R1 4 x 68ml R2 4 x 25ml
BR8133	R1 4 x 52.2ml R2 4 x 20ml	BR4061	R1 4 x 20ml R2 4 x 8ml
BR4060	R1 4 x 20ml R2 4 x 20ml	BR8132	R1 4 x 52.2ml R2 4 x 20ml
BR8308	R1 4 x 20ml R2 4 x 8ml	BR8377	R1 4 x 20ml R2 4 x 8ml
BR8376	R1 4 x 20ml R2 4 x 8ml	-	-

CREATININE (ENZYMATIC)

Acute kidney injury (AKI) is a common complication in COVID-19 patients [6]. The analysis of creatinine in COVID-19 patients on hospital admission and after 2 to 4 days highlighted impaired renal function and is the leading cause of death in these patients [7]. The National Institute of Care Excellence (NICE), have set out four guidelines for AKI in hospitalised COVID-19 patients, suspected or confirmed, and highlights the importance of creatinine testing [8].

Key Benefits of the Randox Enzymatic Creatinine Assay

- **The enzymatic method offers a superior specificity** when compared to the traditional Jaffe method.
- **Excellent within run precision** of < 2.18% CV.
- **Exceptional correlation** coefficient of at least r=0.99 when compared to commercially available methods.
- **Limited interference** from Bilirubin, Haemoglobin, Intralipid® and Triglycerides, for truly accurate results and ensuring it is suitable for use with paediatric samples
- **Calibrator and controls available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox enzymatic creatinine assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
CR2336	R1 4 x 50ml R2 4 x 10ml (S)
CR2337	R1 4 x 100ml R2 4 x 20ml (S)
CR4037	R1 4 x 50ml R2 4 x 19.5ml ♦
CR8122	R1 4 x 65ml R2 4 x 32.3ml ♦
CR8317	R1 4 x 20ml R2 4 x 9.5ml ♦

♦ indicates liquid option
(S) indicates standard included in kit

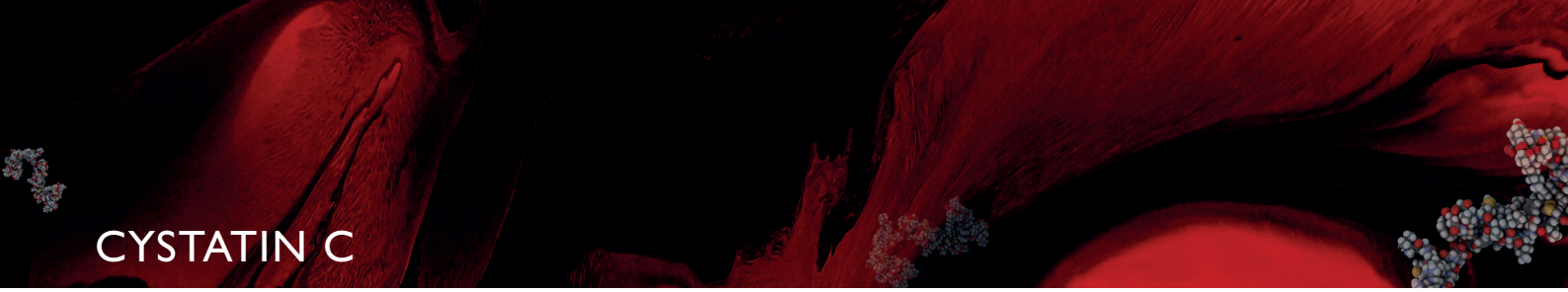
C-REACTIVE PROTEIN (CRP)

In COVID-19 patients, CRP testing has proved to perform well in discriminating disease severity and predicting adverse outcomes [9]. CRP levels positively correlate with lung lesions, reflecting disease severity, and should be considered a key indicator in disease monitoring [10]. CRP levels are associated with computed tomography (CT) scores and COVID-19 disease development, with CRP levels increasing in the initial stage of severe COVID-19, prior to the CT findings [11]. Elevated CRP levels have been identified in 86% of patients admitted to hospital. CRP measurements are useful in diagnosis, assessing prognosis and monitoring for clinical improvements or deterioration [12].

Key Benefits of the Randox CRP Assay

- **Limited interference** conjugate and free bilirubin, haemoglobin, Intralipid® and triglycerides.
- **Wide measuring range** of 2.88 - 220mg/l for the comfortable detection of clinically important results.
- **Liquid ready-to-use format** for convenience and ease-of-use.
- **Stable to expiry date** when stored at +2°C to +8°C.
- **Dedicated CRP calibrator and control** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox CRP assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
CP7950	R1 7 x 20ml R2 2 x 12ml
CP9742	R1 6 x 66ml R2 6 x 13ml
CP3826	R1 6 x 20ml R2 3 x 9ml
CP2714	100T



CYSTATIN C

Acute kidney injury (AKI) presents with elevated levels of Cystatin C in those with severe COVID-19 in comparison to those with mild COVID-19. Cystatin C can be utilised to determine the extent of kidney damage as well as distinguishing those with severe and mild COVID-19 [13].

Key Benefits of the Randox Cystatin C Assay

- **Exceptional correlation** coefficient of r=1.00 when compared against commercially available methods.
- **Excellent within run precision** of < 4.2% CV.
- **Wide measuring range** of 0.4 - 10mg/l for the comfortable detection of clinically important results.
- **Stable to expiry date** when stored at +2°C to +8°C.
- **Dedicated cystatin C calibrator and controls available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox cystatin C assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
CYS4004	R1 2 x 17.6ml R2 2 x 6.1ml

FERRITIN

As an acute phase reactant, ferritin levels increase during inflammation and infection. Several studies have indicated that elevated ferritin levels were confirmed in the majority of hospitalised patients with COVID-19, approximately 60%. In critically ill COVID-19 patients, significantly elevated ferritin concentrations were recorded, which could be attributed to a cytokine storm and secondary haemophagocytic lymphohistiocytosis (a hyperinflammatory syndrome associated with multiorgan failure) [14].

Key Benefits of the Randox Ferritin Assay

- **Excellent correlation** coefficient of r=0.99 when compared against commercially available methods.
- **Limited interference** from bilirubin, haemoglobin and triglycerides.
- **Wide measuring range** of 5.08 - 443ng/ml for the comfortable detection of clinically important results.
- **Stable to expiry date** when stored at +2°C to +8°C.
- **Calibrator and controls available** for a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox ferritin assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
FN3452	R1 1 x 40ml R2 1 x 20ml
FN3453	R1 4 x 40ml R2 4 x 20ml
FN3888	R1 3 x 20ml R2 3 x 11ml
FN8037	R1 4 x 16.2ml R2 4 x 10.2ml

G6PDH

Chloroquine, an anti-malaria drug, has been selected to aid in treating those with COVID-19 following preliminary research and a limited study in Australia which highlighted that chloroquine showed promise in eradicating the virus. Moreover, Chinese research highlighted the efficacy and safety of chloroquine in treating pneumonia in COVID-19 patients [15]. It is believed that COVID-19 is expected to spread to areas where G6PDH deficiency is more common, however, serious consideration must be given to treatment decisions using chloroquine as chloroquine-induced haemolysis is the result of decreased G6PDH activity [16].

Key Benefits of the Randox G6PDH Assay

- **Exceptional correlation** coefficient of r=0.9903 when compared against commercially available methods.
- **Excellent measuring range** of 154 - 4303U/l for the comfortable detection of clinically important results.
- **Excellent within run precision** of < 4.65% CV.
- **Excellent reconstituted stability** of 4 weeks when stored at +2°C to +8°C.
- **Dedicated cystatin C calibrator and controls available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox G6PDH assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
PD410	R1 1 x 100ml R2 1 x 2ml
PD2616	750T Screen Tests

LACTATE DEHYDROGENASE (LDH)

LDH levels are associated with worse outcomes in COVID-19 patients. Elevated LDH levels in COVID-19 patients are associated with a 6-fold increased risk of developing severe disease and a 16-fold increased risk of mortality [17].

Key Benefits of the Randox LDH Assay

- **Excellent within run precision** of < 4% CV.
- **Exceptional correlation** coefficient of r=0.98 when compared against commercially available methods.
- **L-P and P-L assays available** offering choice and flexibility.
- **Stable to expiry date** when stored at +2°C to +8°C.
- **Calibrator and controls available** offering a complete testing package.
- **Applications available** detailing instrument-specific settings for the convenient use of the Randox LDH assays on a variety of clinical chemistry analysers.

Ordering Information L-P

Catalogue Number	Size
LD3842	R1 6 x 20ml R2 3 x 18ml
LD8052	R1 4 x 68ml R2 4 x 37.2ml

Ordering Information P-L

Catalogue Number	Size
LD401	20 x 3ml
LD3818	R1 6 x 20ml R2 3 x 11ml ♦
LD8051	R1 4 x 20ml R2 4 x 7ml ♦
LD8322	R1 4 x 20ml R2 4 x 7ml ♦

♦ indicates liquid option

LIPOPROTEIN(A) [LP(A)]

Lp(a) has been identified to play a role in COVID-19. Those with either baseline elevated Lp(a) or those whose Lp(a) levels increased following infection from COVID-19, or both, may be at a significantly increased risk of developing thromboses. Elevated Lp(a) levels may cause acute destabilisation of pre-existing but quiescent, atherosclerotic plaques, which could induce an acute myocardial infarction and stroke [18].

Key Benefits of the Randox Lp(a) Assay

The Randox Lp(a) assay is **calibrated in nmol/l and traceable to the WHO/IFCC reference material (IFCC SRM 2B)** and provides an acceptable bias compared with the Northwest Lipid Metabolism Diabetes Research Laboratory (NLMDRKL) gold standard method.

Dedicated five-point calibrator with available, with accuracy-based assigned target values (in nmol/l), accurately reflecting the heterogeneity of the apo(a) isoform. Dedicated Lp(a) control is available, offering a complete testing package.

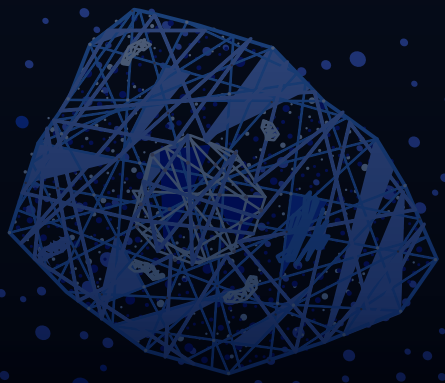
Excellent within run precision of < 2.54% CV.

Excellent within run precision of < 2.54% CV.

Liquid ready-to-use for convenience and ease-of-use.

Applications available detailing instrument-specific settings for the convenient use of the Randox Lp(a) assay on a variety of clinical chemistry analysers.

Catalogue Number	Size
LP2757	R1 1 x 30ml R2 1 x 15ml
LP3403	R1 1 x 10ml R2 1 x 6ml
LP8054	R1 2 x 8.7ml R2 2 x 5.8ml



IMMUNOASSAY| CYTOKINE ARRAY

Randox offer testing solutions for a comprehensive range of cytokines, cytokine receptors and growth factors designed to assist with COVID-19 risk stratification, monitoring of treatment efficacy and recovery. Utilising the patented Biochip technology, up to 12 cytokines and growth factors may be detected simultaneously from a single patient sample.

Cytokines play a vital role in the immune system and are known to be involved in the body's response to a variety of inflammatory and infectious diseases. The over stimulation of these cytokines in response to infection is referred to as a 'cytokine storm' and strongly correlates with poor disease outcomes.

Cytokine storms are a common complication of SARS-CoV-2 infection triggering viral sepsis, where viral replication and excessive, uncontrolled systemic inflammation may lead to pneumonitis, acute respiratory distress syndrome (ARDS), respiratory failure, shock, multiple organ failure, secondary bacterial pneumonia, and potentially death.

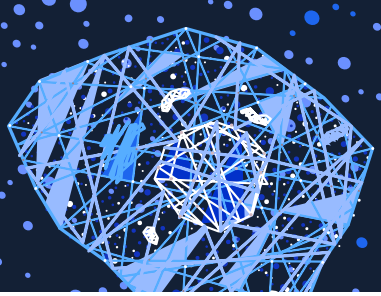
Why choose Randox Cytokine Arrays?

- **Simultaneous detection** of up to 12 cytokines and growth factors from a single patient sample
- **Fully automated and semi-automated solutions** available to suit all laboratory throughputs
- **Comprehensive test menu** comprising 26 cytokines, cytokine receptors and growth factors
- Suitable for use with **serum and plasma** samples
- **Excellent analytical performance**
- **Quality controls available** offering a complete testing package

CYTOKINE ARRAY 1 | PARAMETERS

Parameters		
Interleukin-1 Alpha (IL-1α)	Interleukin-6 (IL-6)	Epidermal Growth Factor (EGF)
Interleukin-1 Beta (IL-1β)	Interleukin-1 Beta (IL-18)	Monocyte Chemotactic Protein (MCP-1)
Interleukin-2 (IL-2)	Interleukin-10 (IL-10)	Tumour Necrosis Factor Alpha (TNFα)
Interleukin-4 (IL-4)	Interferon Gamma (IFNα)	Vascular Endothelial Growth Factor (VEGF)

Catalogue Number	Size
EV3513	54 Biochips
EV3623	54 Biochips (High Sensitivity)



CYTOKINE ARRAY III | PARAMETER

Parameters		
Interleukin-5 (IL-5)	Granulocyte Macrophage	Macrophage Inflammatory Protein-1 Alpha (MIP-1 α)
Interleukin-15 (IL-15)	Colony Stimulating Factor (GM-CSF)	-

Catalogue Number	Size
EV3678	54 Biochips

CYTOKINE ARRAY IV | PARAMETERS

Parameters		
Matrix Metalloproteinase-9 (MMP-9)	Soluble Interleukin-6 Receptor (sIL-6R)	Soluble Tumour Necrosis Factor II (sTNFR II)
Soluble Interleukin-2 Receptor Alpha (sIL-2Rα)	Soluble Tumour Necrosis Factor I (sTNFR I)	-

Catalogue Number	Size
EV3661	54 Biochips

CYTOKINE ARRAY V | PARAMETERS

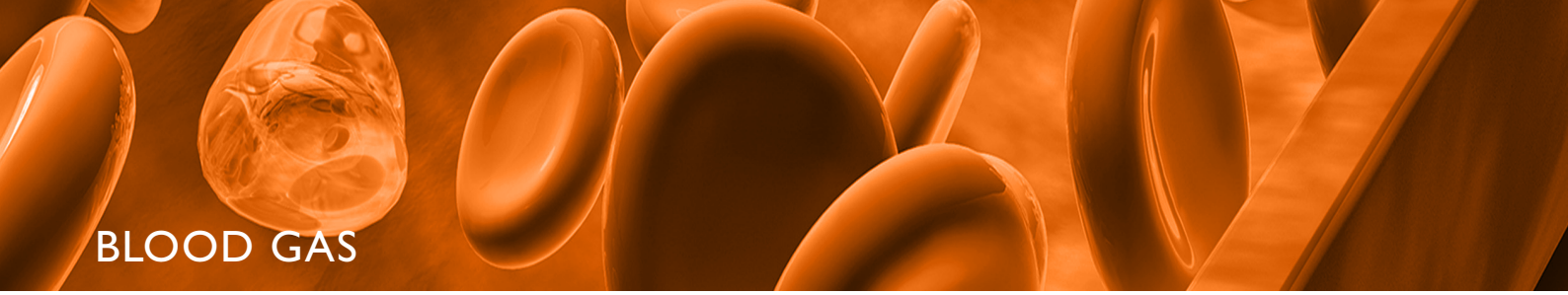
Parameters		
Interleukin -3 (IL-3)	Interleukin-12 p70 (IL-12p70)	Interleukin-23 (IL-23)
Interleukin-7 (IL-7)	Interleukin-13 (IL-13)	-

Catalogue Number	Size
EV3666	54 Biochips

ACUSERA | QUALITY CONTROL

Randox Acusera offer a range of internal quality control solutions designed to ensure the accuracy and reliability of patient testing.

BLOOD GAS | CARDIAC MARKERS | COAGULATION | HAEMATOLOGY | IMMUNOASSAY SPECIALITY I | IMMUNOASSAY SPECIALITY II | SARS-CoV-2 ANTIBODY CONTROL



BLOOD GAS

Key Benefits of the Acusera Blood Gas Quality Control

- 10 parameters with **assayed assigned target values**
- **Liquid ready-to-use format** for convenience and ease-of-use
- **Stable to expiry date** when stored at +2°C to +8°C
- **3 levels,** covering the full blood gas range
- **Suitable for POCT**

Parameters		
pCO2	Potassium	Lactate
pO2	pH	Sodium
Calcium	Total CO2	-
Glucose	Chloride	-

Catalogue Number	Description	Size
BG5001	Level 1	30 x 1.8ml
BG5002	Level 2	30 x 1.8ml
BG5003	Level 3	30 x 1.8ml

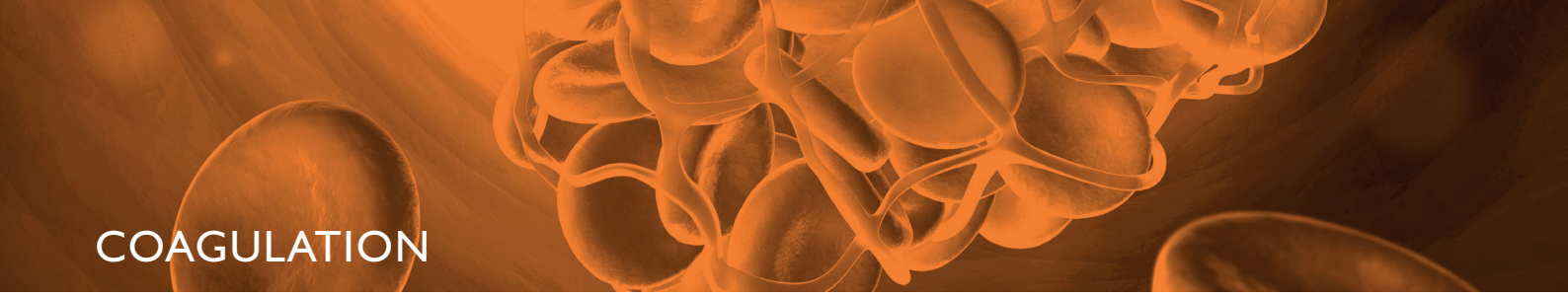
CARDIAC MARKERS

Key Benefits of the Acusera Cardiac Quality Control

- 7 cardiac markers with **assayed assigned target values**
- **Cut off levels for Troponin I and T** in line with internationally recommended levels
- **Lyophilised format** for enhanced stability
- **Stable to expiry date** when stored at +2°C to +8°C
- **Reconstituted stability** of 5 days when stored at +2°C to +8°C or 4 weeks when stored at -20°C

Parameters		
CK Total	Troponin T	Troponin I
CK-MB (Mass)	CK-MB (Activity)	-
Myoglobin	Homocysteine	-

Catalogue Number	Description	Size
CQ3100	Tri-Level	3 x 1ml
CQ3259	Tri-Level	3 x 2ml



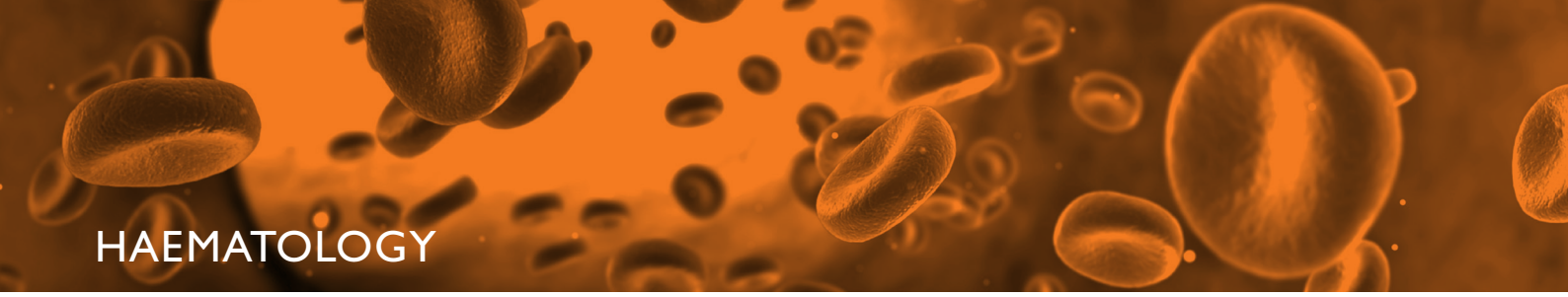
COAGULATION

Key Benefits of the Acusera Coagulation Quality Control

- **16 parameters** including a variety of factor assays, basic coagulation and thrombophilia
- **Assay assigned target values** are provided
- **100% human plasma**
- **Lyophilised format** for enhanced stability
- **Stable to expiry date** when stored at +2°C to +8°C
- **Reconstituted stability** of 5 days when stored at +2°C to +8°C or 4 weeks when stored at -20°C

Parameters		
Prothrombin Time	Factor V	Factor XII
Activated Partial Thromboplastin Time	Factor VII	Plasminogen
Thrombin Time	Factor VIII	Protein C
Fibrinogen	Factor IX	Protein S
Antithrombin III	Factor X	-
Factor II	Factor XI	-

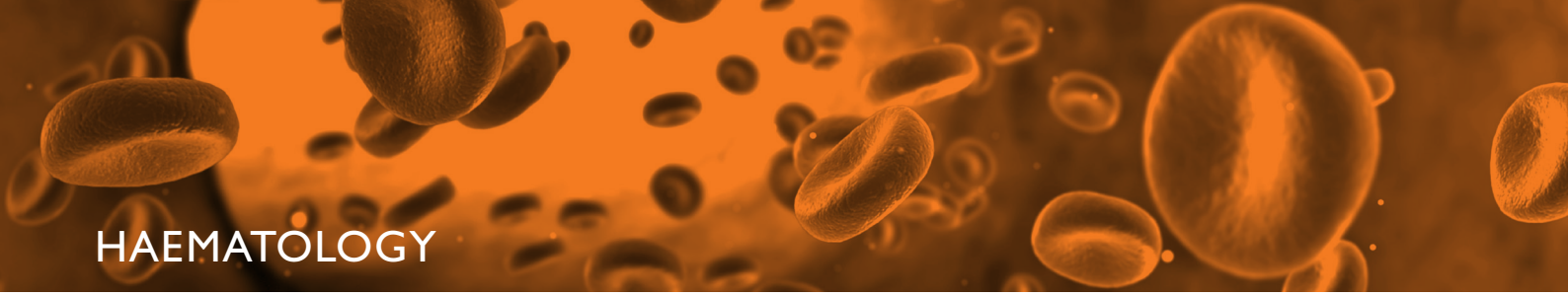
Catalogue Number	Description	Size
CG5021	Level 1	12 x 1ml
CG5022	Level 2	12 x 1ml
CG5023	Level 3	12 x 1ml



HAEMATOLOGY

Key Benefits of the Acusera Haematology Quality Control

- 45 parameters, covering the full commonly tested blood profile in a single control with **assayed assigned target values**
- **True third party solution** for Sysmex haematology analysers with 5-part differential technology
- **Barcoded samples** enabling quick and easy recognition and increased productivity
- **Stable to expiry date when stored** at +2°C to +8°C
- **Liquid ready-to-use format** for convenience and ease-of-use

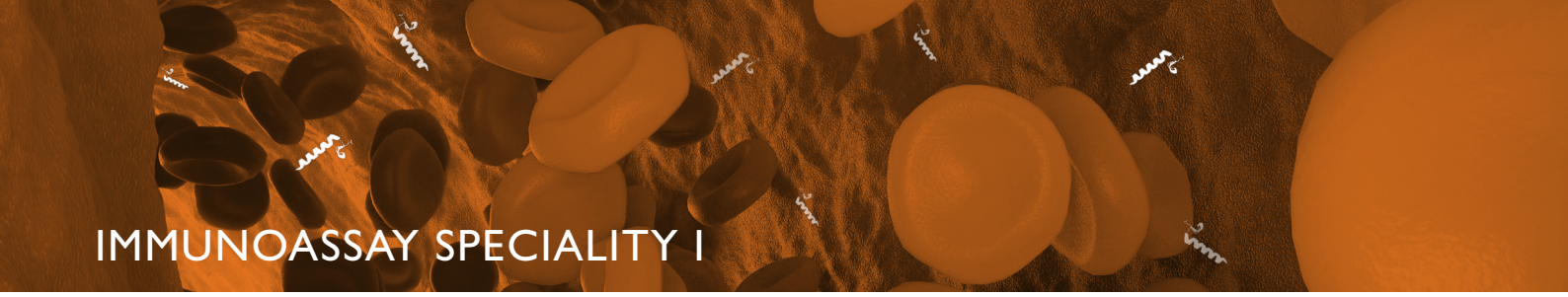


HAEMATOLOGY

Parameters		
Basophils (BASO)*	% Immature Granulocytes (%IG)	Nucleated Red Blood Cells (NRBC)*
% Basophils (% BASO)	Immature Myeloid Information (IMI)	% Nucleated Red Blood Cells (%NRBC)
BASO-X	Immature Platelet Fraction (IPF)	Platelet Distribution Width (PDW)
BASO –Y	Lymphocytes (LYMPH)	Platelet Large Cell Ratio (P-LCR)
DIFF-X	% Lymphocytes (% LYMPH)	Plateletcrit (PCT)
DIFF-Y	Mean Corpuscular Volume (MCV)	Platelets (PLT)
Eosinophils (EOS)	Mean Corpuscular Haemoglobin (MCH)	Platelets Optical Count (PLT-0)
% Eosinophils (%EOS)	Mean Corpuscular Haemoglobin Concentration (MCHC)	Red Blood Cells (RBC)
FSC-X	Mean Platelet Volume (MPV)	Red Blood Cell X (RBC-X)
Haematocrit (HCT)	Monocytes (MONO)	Red Blood Cell Y (RBC-Y)
Haemoglobin (HGB)	% Monocytes (% MONO)	Red Blood Cell Distribution Width CV (RDW-CV)
Haemopioetic Progenitor Cell (HPC)	Neutrophils (NEUT)	Red Blood Cell Distribution Width SD (RDW-SD)
IMIDC	% Neutrophils (% NEUT)	Red Blood Cells Optical Count (RBC-O)
IMIRF	Nucleated Red Blood Cells X (NRBC-X)	White Blood Cells Differential (WBC-D)
Immature Granulocytes (IG)	Nucleated Red Blood Cells Y (NRBC-Y)	White Blood Cells (WBC)

*Pilot Programme

Catalogue Number	Description	Size
HM5162	Tri-Level	3 x 2 x 4.5ml



IMMUNOASSAY SPECIALITY I

Key Benefits of the Acusera Immunoassay Speciality I Quality Control

- 10 parameters, including procalcitonin, with **assayed assigned target values**
- **Lyophilised format** for enhanced stability
- **100% human serum**
- **Stable to expiry date** when stored at +2°C to +8°C
- **Reconstituted stability** of 5 days when stored at +2°C to +8°C or 4 weeks when stored at -20°C

Parameters		
1-25-(OH)2-Vitamin D	Insulin Like Growth Factor I	Anti-Thyroglobulin (Anti-TG)
25-OH-Vitamin D	Osteocalcin	Anti-Thyroperoxidase (Anti-TPO)
C-Peptide	Procalcitonin	-
Insulin	Parathyroid Hormone (PTH)	-

Catalogue Number	Description	Size
IAS3113	Level 1	5 x 2ml
IAS3114	Level 2	5 x 2ml
IAS3115	Level 3	5 x 2ml

IMMUNOASSAY SPECIALITY II

Key Benefits of the Acusera Immunoassay Speciality II Quality Control

- 4 parameters with **assayed assigned target values**
- **Lyophilised format** for enhanced stability
- **100% human serum**
- **Stable to expiry date** when stored at +2°C to +8°C
- **Reconstituted stability** of 5 days when stored at +2°C to +8°C or 4 weeks when stored at -20°C

Parameters	
Calcitonin	Procalcitonin
Gastrin	Renin

Catalogue Number	Description	Size
IAS3117	Level 1	5 x 1ml
IAS3118	Level 2	5 x 1ml
IAS3119	Level 3	5 x 1ml

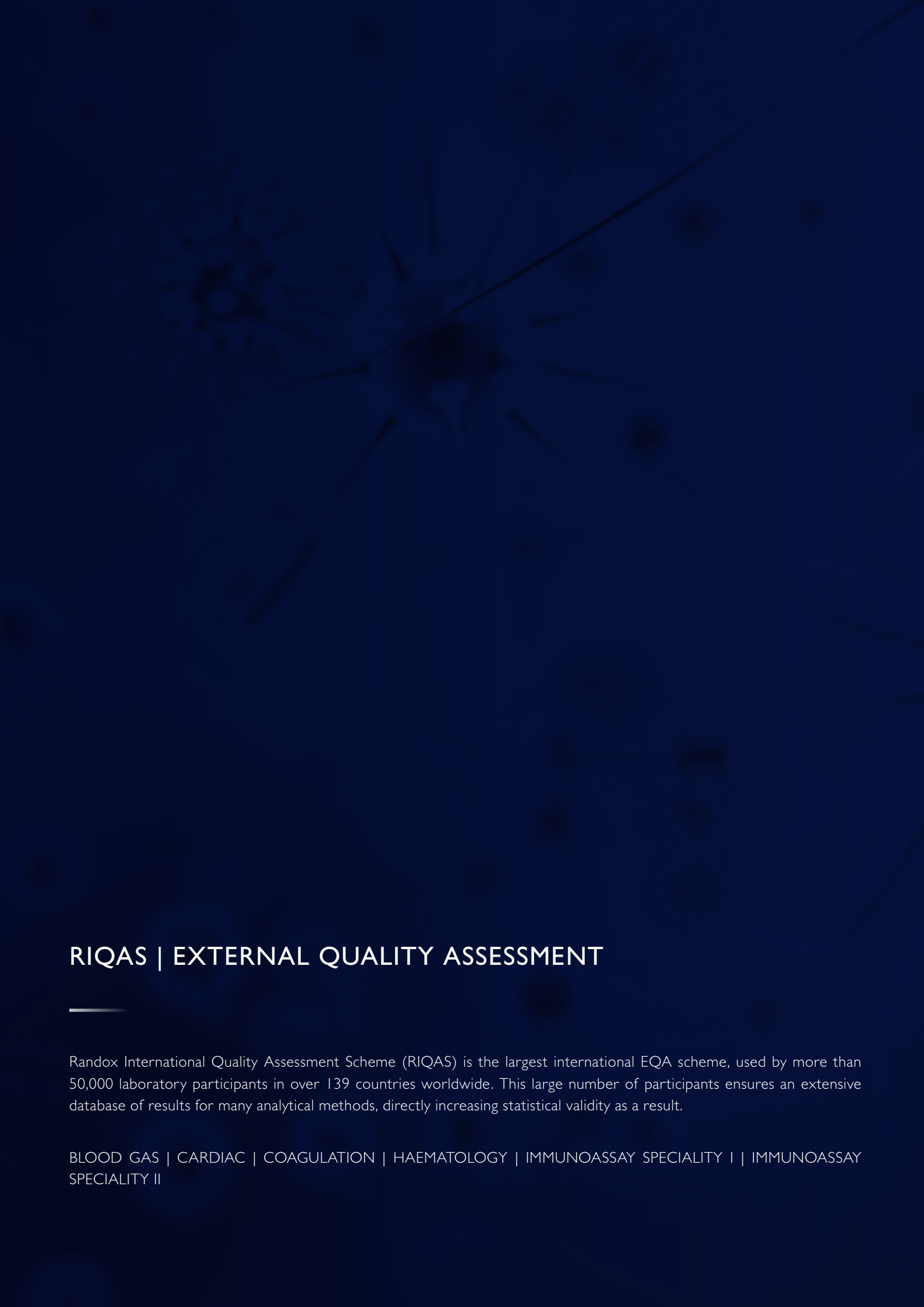
SARS-COV-2 ANTIBODY CONTROL

Key Benefits of the Acusera SARS-CoV-2 Antibody Control

- **Liquid ready-to-use format** for convenience and ease-of-use
- **100% human plasma**
- **True third party control** ensuring unbiased performance assessment
- **Open vial stability of 30 days** at +2°C to +8°C
- **Suitable for use with Anti SARS-CoV-2 assays**
- **Control is CE marked**

Analytes
Anti SARS-CoV-2

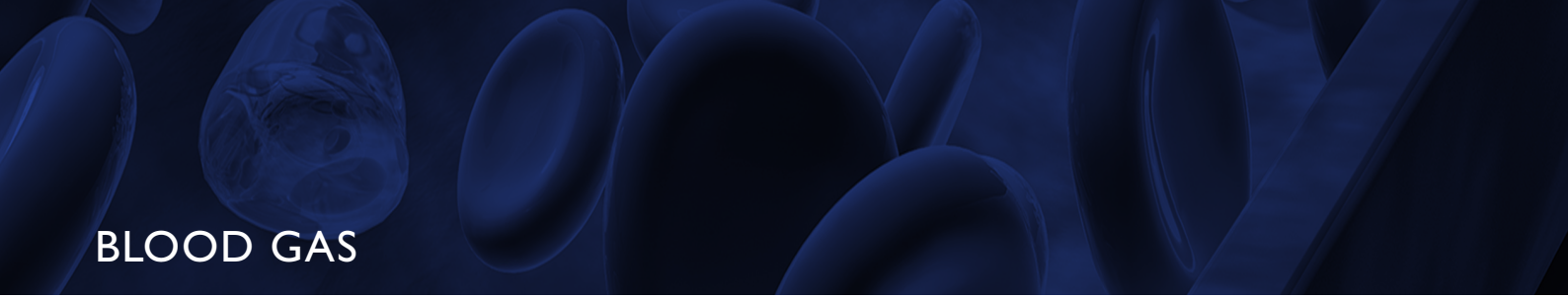
Catalogue Number	Size
COV10460	2 x 2 x 4 ml



RIQAS | EXTERNAL QUALITY ASSESSMENT

Randox International Quality Assessment Scheme (RIQAS) is the largest international EQA scheme, used by more than 50,000 laboratory participants in over 139 countries worldwide. This large number of participants ensures an extensive database of results for many analytical methods, directly increasing statistical validity as a result.

BLOOD GAS | CARDIAC | COAGULATION | HAEMATOLOGY | IMMUNOASSAY SPECIALITY I | IMMUNOASSAY SPECIALITY II



BLOOD GAS

RIQAS, accepted by national and international accreditation bodies worldwide, including ISO 17043:2010, offer a range of external quality assessment (EQA) solutions designed to ensure accurate instrument performance across the entire analytical range.

Key Benefits of the RIQAS Blood Gas Programme

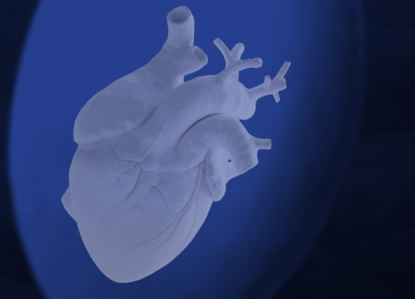
- Monitor the performance of **11 blood gas parameters**
- **Accredited to ISO/IEC 17043**
- **Monthly reporting**
- Submit results and view reports online via **RIQAS.Net**
- **Suitable for POCT**

Parameters		
Bicarbonate*	pCO_2	Na+
Ca++	pO_2	pH
Glucose	Cl-	tCO2*
Lactate	K+	-

*Pilot Programme

Catalogue Number	Size	Frequency	Cycle Start	Parameters
RQ9134*	12 x 1.8ml	Monthly (1 x 12 month cycle)	January	11
RQ9134/A**	12 x 1.8ml	Monthly (1 x 12 month cycle)	January	11

*For the first registered instrument
**For all subsequent instruments



Key Benefits of the RIQAS Cardiac Programme

- **Accredited to ISO/IEC 17043**
- **Lyophilised format** for enhanced stability
- **Flexible options available** with bi-weekly or monthly reporting
- Submit results and view reports online via **RIQAS.Net**
- **Register up to five instruments** at no extra cost

Parameters		
CK, Total	Homocysteine	Troponin I
CK-MB activity units	Myoglobin	Troponin T
CK-MB mass units	-	-

Catalogue Number	Size	Frequency	Cycle Start	Parameters
RQ9127/A	12 x 1ml	Bi-weekly reporting (2 x 6 monthly cycles)	March / September	2 (Choose from 7)
RQ9127/B	12 x 1ml	Bi-weekly reporting (2 x 6 monthly cycles)	March / September	7
RQ9186	12 x 1ml	Monthly	March	7

COAGULATION

Key Benefits of the RIQAS Coagulation Programme

- **Accredited to ISO/IEC 17043**
- **Lyophilised format** for enhanced stability
- **Monthly reporting**
- Submit results and view reports online via **RIQAS.Net**
- **Register up to five instruments** at no extra cost

5 Routine Parameters		
Activated Partial Thromboplastin Time (aPTT)	Fibrinogen	Thrombin Time (TT)
Antithrombin III (ATIII)	Prothrombin Time (PT)	-

17 Routine Parameters		
Activated Partial Thromboplastin Time (aPTT)	Factor VII	Plasminogen
Antithrombin III (ATIII)	Factor VIII	Protein C
D-Dimer (Pilot)	Factor X	Protein S
Factor II	Factor XI	Prothrombin Time (PT)
Factor IX	Factor XII	Thrombin Time (TT)
Factor V	Fibrinogen	-

Catalogue Number	Size	Frequency	Cycle Start	Parameters
RQ9135/A	12 x 1ml	Monthly	January	5
RQ9135/B	12 x 1ml	Monthly	January	17

HAEMATOLOGY

Key Benefits of the RIQAS Haematology Programme

- **Accredited to ISO/IEC 17043**
- **Liquid ready-to-use format** for convenience and ease-of-use
- **Flexible options available** with bi-weekly or monthly reporting
- Submit results and view reports online via **RIQAS.Net**
- **Register up to five instruments** at no extra cost

Parameters		
Haemoglobin (Hb)	Mean Platelet Volume	Platelets (PLT)
Mean Cell Volume (MCV)	Plateletcrit	Total White Blood Cell Count (WBC)
Mean Cell Haemoglobin Concentration (MCHC)	Haematocrit (HCT)	Red Cell Dist. Width
Red Blood Cell Count (RBC)	Mean Cell Haemoglobin (MCH)	-

Catalogue Number	Size	Frequency	Cycle Start	Parameters
RQ9118	6 x 2ml Primary tubes	Bi-weekly (2 x 6 monthly cycles)	March / September	11
RQ9140	12 x 2ml	Monthly	March / September	11

IMMUNOASSAY SPECIALITY I

Key Benefits of the RIQAS Immunoassay Speciality I Programme

- **100% human serum**
- **Lyophilised format** for enhanced stability
- **Monthly reporting**
- Submit results and view reports online via **RIQAS.Net**
- **Register up to five instruments** at no extra cost

Parameters		
1-25-OH-Vitamin D*	C-peptide	Osteocalcin
25-OH-Vitamin D	IGF-1	Procalcitonin
Anti-TG	Insulin	PTH
Anti-TPO	-	-

* Pilot Programme

Catalogue Number	Size	Frequency	Cycle Start	Parameters
RQ9141	12 x 2ml	Monthly	January	10

IMMUNOASSAY SPECIALITY II

Key Benefits of the RIQAS Immunoassay Speciality II Programme

- **100% human serum**
- **Lyophilised format** for enhanced stability
- **Monthly reporting**
- Submit results and view reports online via **RIQAS.Net**
- **Register up to five instruments** at no extra cost

Parameters		
Calcitonin	Procalcitonin	Renin, direct concentration
Gastrin	Plasma Renin Activity	

Catalogue Number	Size	Frequency	Cycle Start	Parameters
RQ9142	12 x 1ml	Monthly	January	5


rx
series

RX SERIES

OFFERING THE WORLD'S LARGEST CLINICAL CHEMISTRY TEST MENU

Renowned for quality and reliability, the RX series leads the way with the world's most extensive dedicated clinical chemistry test menu comprising routine chemistries, specific proteins, lipids, therapeutic drugs, drugs of abuse, antioxidants, veterinary and diabetes testing. Guaranteeing real cost savings through consolidation of routine and specialised tests onto a single platform. The RX series analysers deliver excellence in patient care, offering unrivalled precision with excellent reagent CV ranges, providing laboratories with the upmost reliability, analyser uptime and accuracy of patient results.

With our extensive test menu and versatile range of analysers, the RX series presents the ultimate in performance, functionality and efficiency with testing capabilities to suit all laboratory sizes and types. Renowned for robust hardware and intuitive software, the RX series continues to revolutionise testing in a variety of laboratory types including; Clinical Laboratories, University & Research Institutes, Veterinary Laboratories and Food & Wine Testing Laboratories.

RX MISANO

The RX misano has been developed with the user in mind by incorporating a responsive touch-screen display. The sleek ergonomic design boasts intuitive user-friendly software allowing for test menu personalisation and ease of use. The RX misano is capable of high standard, precise results at a competitive price per test.

RX MONACO

The RX monaco is a fully automated solution for low to mid volume clinical chemistry testing offering the ultimate in convenience, performance and confidence. At optimal configuration, the RX monaco performs 170 tests per hour providing cost effective, high quality testing.

RX DAYTONA+

The RX daytona+ is a fully automated, benchtop, clinical chemistry analyser capable of performing high quality testing, with a combined throughput of 450 tests per hour, for accurate results you can trust. The most versatile analyser in its class, the RX daytona+ combines robust hardware and intuitive software with the world leading RX series test menu for unrivaled performance, with direct HbA1c testing capabilities.

RX IMOLA

The RX imola is a cost effective system that delivers consistent high quality results. Capable of handling the workload of a medium to high throughout laboratory and a combined throughput of 560 tests per hour, the RX imola provides rapid, comprehensive testing on a small footprint analyser when it matters most, with direct HbA1c testing capabilities.

RX MODENA

Capable of performing up to 1,200 tests per hour, with direct HbA1c testing capabilities, the RX modena consolidates all your assay requirements onto one intuitive platform. The RX modena boasts icon based, interactive touch-screen technology adding a modern flair to your laboratory.

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