RANDOX
QUALITY CONTROL

ACUSERA

Third Party Controls

Complete **QC** solutions for results you can **trust**

Contact us for more information on any of our products and services

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RANDOX

QUALITY CONTROL

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Welcome

Complete **QC** solutions for results you can **trust**

Patient health is reliant on accurate and timely diagnosis but this can only be facilitated through the use of high quality diagnostic testing solutions.

Given that over 70% of all medical decisions are based on laboratory test results it is extremely important accurate and reliable results are provided the first time. With over 30 years' experience in Quality Control the Acusera range is designed to help medical laboratories ensure just this. Our range of QC solutions are designed primarily with user convenience and patient safety in mind and includes true third party quality controls & calibrators, external quality assessment and interlaboratory data management.

With products and solutions available to suit all areas of laboratory medicine including routine chemistry, special chemistry, toxicology, serology, immunology, haemostasis and respiratory care; our customer base exceeds 100,000 laboratories in all four corners of the world.

Our continued focus on research and development allows us to not only review existing products but to rapidly bring new products to the market with the view to continually improve customer choice and support. We believe that by providing laboratories with appropriate knowledge and tools, we can help to improve patient health on a global scale.

"Revolutionising healthcare through continuously improving diagnostic solutions"

For more information about Randox and for our full range of products, please visit www.randoxqc.com, or contact your local Randox representative.

Introduction to Randox Acusera Quality Controls

Randox is one of the largest manufacturers of Quality Controls in the world, whether it is our own branded Acusera portfolio of controls and calibrators, or customised material for individual laboratories, research organisations, external quality assessment schemes and other diagnostic manufacturers.

With over 350 parameters available in our Acusera range, choice and flexibility is guaranteed. Principle control products include Clinical Chemistry, Immunoassay, Urine, Immunology/Proteins, Lipids, Cardiac, CSF, Therapeutic Drug Monitoring, Toxicology, Urine Chemistry, Urinalysis, Coagulation, Blood Gas, Tumour Markers, Maternal Screening, Antioxidants, Diabetes and a number of research based products.

A wide range of formats are available, providing greater flexibility and choice. Our product range includes liquid/lyophilised, assayed/unassayed and human/bovine materials.

Customers can even choose between multi-analyte controls or single analyte controls, depending on their laboratory needs. In addition to this, Randox can also offer the laboratory a tailor made quality control material, should there be something you wish to adjust or change. This could be anything from the number of analytes, vial sizes, concentrations or format we present current products in.

Randox also offers Acusera 24•7, an interlaboratory peer group reporting software package, designed to assist laboratories when managing and interpreting QC data. Online access anytime, anywhere to interactive charts, comprehensive reports and peer group statistics uniquely updated every 24 hours will improve error detection and enable real time performance monitoring across multiple platforms.

Material

The human based material used in the production of our Quality Controls is sourced from the United Kingdom Blood Transfusion Service. All donors are screened for infectious diseases using immunoassay techniques to detect antibodies and specific DNA tests to detect any viruses even at early stages of infection. This view to safety and quality is the trademark of Randox control manufacture.

Our lyophilised controls have no added preservatives or stabilisers which can cause interference problems. The excellent stability seen with Randox controls is achieved through superior manufacturing techniques and strict adherence to a regulated quality manufacturing regime. All Randox quality controls are filtered down to 0.2 microns to ensure minimal bacterial load and contamination.

The ideal quality control should not only have a matrix similar to real life patient samples but should also behave in the same manner as a patient sample, if a QC sample meets both these requirements then we can say it is commutable.

The value of a commutable control material is internationally recognised, ISO 15189 states that laboratories must;
"use quality control materials that react to the examining system in a manner as close as possible to patient samples".

In reality, it is not uncommon for a change in reagent batch to cause a shift in QC results that is not reflected in patient samples, this ultimately leads to a frequent need to re-assign control values which can be both time consuming and expensive. Randox controls are proven to be the most commutable on the market, meeting the requirements set out in ISO 15189 and eliminating the need to constantly re-assign target values when a reagent batch is changed or expires.

Value Assignment

Randox controls are the most accurately assigned controls available in the diagnostic industry! Our unique value assignment process employs over 28,000 laboratory participants worldwide ensuring the availability of data for a wide range of instruments and methods. This, coupled with unrivalled traceability to International Reference Laboratories, provides a product of unsurpassed accuracy and reliability.

For effective Internal Quality Control, an assayed serum should have an accurately assigned target value and range for each analyte; this will allow laboratories to reliably measure the accuracy and precision of the method in use.

The assigned value for each analyte is generally a consensus mean obtained from multiple laboratories. Obviously the more laboratories employed, the better; smaller numbers usually result in large standard deviations and subsequently unrealistic wide ranges. In fact, with some manufacturers, the ranges are often so wide that laboratories are unlikely to fall outside them regardless of their performance.

Consolidation

Randox is a world leading provider of multi-analyte, third party controls designed to help streamline QC in even the most demanding laboratories. **Our unique combination of analytes enables complete test menu consolidation and will ultimately reduce costs without compromising on quality or performance.** The use of fewer controls will decrease the time spent preparing multiple controls, increase storage space and simplify QC procedures in any lab.

Many manufacturers 'cut corners' in an attempt to keep costs low. This can result in unrealistic values and ultimately, controls that do not adequately cover the clinical range. The inclusion of analytes at clinically relevant concentrations in all Randox controls will eliminate the need to purchase additional low or high level controls at extra expense.

Third Party Controls

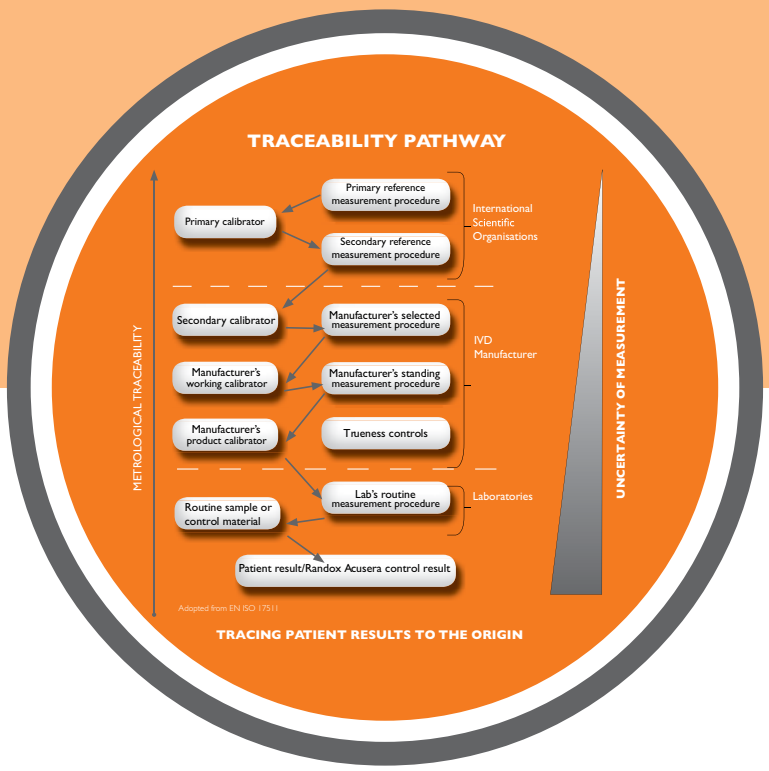
Our complete range of true third party controls is designed to provide unbiased performance assessment across a wide range of instruments and methods. By this we mean that our material has not been manufactured in line with, or optimised for use with any particular reagent, method or instrument and is therefore compatible for use on any analyser. **Also, when assigning targets and ranges, Randox uses totally independent laboratories, resulting in genuinely independent, multi-method and multi-analyser data.**

Instrument and reagent manufacturers often directly assign their own control values, meaning very few sets of results are used over very few reagent batches. The resulting target values are therefore not as accurate as an assayed control should be.

Stability

Product shelf-life and working stability are important considerations when choosing quality control material. **Our lyophilised controls generally have a shelf life of up to 4 years from the date of manufacture while our liquid controls are stable for up to 2 years, ensuring continuity of lot supply.**

Each individual control will have its own reconstituted or open vial stability claims and some parameters will have limitations, but we pride ourselves by not trying to mislead customers with false claims. The extended reconstituted and open vial stability of many Randox controls will help laboratories to minimise waste and ultimately reduce costs.



Traceability

Traceability refers to the property of a measured result or calibrator value to be related or traced back to a reference measurement procedure or reference material through a series of measurements with known uncertainties.

The values assigned to both calibrators and control materials are required by the European parliament and council directive 98/79/EC on in vitro diagnostic medical devices to be traceable to a recognised reference material or reference measurement procedure of higher order e.g. SI units.

The European standards EN/ISO 17511 and EN/ISO 18153 on traceability have set guidelines for diagnostic manufacturers to follow when assigning calibrator values and establishing traceability.

The adjacent traceability pathway has been established with reference to standards ISO17511 and ISO18153 and has been followed to establish traceability for Randox calibrators allowing patient results to be traced back to the source.

Commitment to Quality

Randox is committed to quality at every stage of the production process from research and development to customer support.This commitment has been recognised through official accreditation to both national and international standards including UKAS and ISO.

Accreditation to international standards ensures confidence in the quality and consistency of the products and services provided by Randox, and demonstrates compliance to internationally agreed standards.

UKAS

The United Kingdom Accreditation Service (UKAS) is the only national accreditation body recognised by the government to assess against internationally agreed standards.

In 2002, the systems and procedures within Randox Laboratories Ltd were accredited with UKAS approval to ISO/IEC 17043:2010 "Conformity assessment - General requirements for proficiency testing"

ISO 13485:2003

The International Organisation for Standardisation (ISO) is the largest developer and publisher of international standards in the world. In 2003, Randox was accredited with ISO 13485:2003 approval.

ISO 13485:2003 relates to the design/development, manufacture, service and distribution of in vitro diagnostic medical devices, in vitro diagnostic test kits, in vitro diagnostic reagents and in vitro diagnostic analysers.

ISO 13485:2003 highlights the requirements for a quality management system where an organisation needs to prove its ability to provide medical devices and other related services that consistently meet regulatory requirements.

FDA Cleared

Many of our quality controls and calibrators are FDA cleared and therefore appropriate for clinical use in the USA. In order for an IVD to be approved for sale in the USA it must not only be safe for use and effective but it must also satisfy the requirements set out in part 820 title 21 of the Code of Federal Regulations published by the FDA.

Canadian Medical Device Regulations from Health Canada

Many Randox products, including our quality controls and calibrators, are licensed for use in Canada. Before an IVD device can be sold in Canada, it must meet the requirements set out in the Therapeutic Products Directorate. Health Canada reviews all medical devices to assess their safety, effectiveness and quality before they are authorised for sale.

CE Mark

Many of our Quality Control (QC) products are CE certified and carry the CE mark. CE marking on a product indicates that the product complies with and has satisfied the essential requirements set out by the **In Vitro Diagnostic (IVD) Medical Devices Directive 98/79/EC**, it also demonstrates the fact the product is fit for its intended purpose.

The CE mark is also a declaration from the manufacturer that the product has met all legislation in relation to health and safety and where required has been assessed in accordance with this legislation.

CE marking is essential for products to be placed on the market and sold in the European Union (EU). It also ensures the free movement of product within the EFTA and EU.

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Section 4

Clinical Chemistry Controls

CLINICAL CHEMISTRY PRODUCT RANGE		
PRODUCT DESCRIPTION	SIZE	CAT. NO.
Liquid Assayed Chemistry Premium Plus Level 1	12 x 5 ml	LAL4213
Liquid Assayed Chemistry Premium Plus Level 2	12 x 5 ml	LAN4214
Liquid Assayed Chemistry Premium Plus Level 3	12 x 5 ml	LAE4215
Liquid Chemistry Premium Level 2	12 x 5 ml	LUN5048
Liquid Chemistry Premium Level 3	12 x 5 ml	LUE5049
Liquid Chemistry Premium Plus Level 1	12 x 5 ml	LUL5069
Liquid Chemistry Premium Plus Level 2	12 x 5 ml	LUN5070
Liquid Chemistry Premium Plus Level 3	12 x 5 ml	LUE5071
Liquid Chemistry Premium Plus Level 1	12 x 10 ml	LUL5093
Liquid Chemistry Premium Plus Level 2	12 x 10 ml	LUN5094
Liquid Chemistry Premium Plus Level 3	12 x 10 ml	LUE5095
Chemistry Premium Level 2	12 x 5 ml	HN5067
Chemistry Premium Level 3	12 x 5 ml	HE5068
Assayed Chemistry Premium Plus Level 2	20 x 5 ml	HN1530
Assayed Chemistry Premium Plus Level 3	20 x 5 ml	HE1532
Assayed Chemistry Premium Plus Level 2 & 3	2 x 5 x 5 ml	HS2611
Precision Chemistry Premium Plus Level 2	20 x 5 ml	UN1557
Precision Chemistry Premium Plus Level 3	20 x 5 ml	UE1558
Bovine Chemistry (Assayed) Level 1	20 x 5 ml	AL1027
Bovine Chemistry (Assayed) Level 2	20 x 5 ml	AN1026
Bovine Chemistry (Assayed) Level 3	20 x 5 ml	AE1032
Bovine Chemistry (Precision) Level 1	20 x 5 ml	SL1084
Bovine Chemistry (Precision) Level 2	20 x 5 ml	SN1085
Bovine Chemistry (Precision) Level 3	20 x 5 ml	SE1086
Clinical Chemistry Calibration Sera Level 2	20 x 5 ml	CAL2350
Clinical Chemistry Calibration Sera Level 3	20 x 5 ml	CAL2351
Aldolase Calibrator	3 x 1 ml	AD5000
Aldolase Control Level 2	3 x 1 ml	AD5001
Aldolase Control Level 3	3 x 1 ml	AD5002
Ammonia / Ethanol Control Level 1	6 x 2 ml	EA1366
Ammonia / Ethanol Control Level 2	6 x 2 ml	EA1367
Ammonia / Ethanol Control Level 3	6 x 2 ml	EA1368
Bilirubin Elevated Control	10 x 3 ml	BE454
Glycerol Control	3 x 5 ml	GY1369
Multi Calibrator	3 x 2 ml	MC1382
Multi Control Level 1	5 x 2 ml	MC1379
Multi Control Level 2	5 x 2 ml	MC1380
Multi Control Level 3	5 x 2 ml	MC1381
Glutamine Control Level 1	5 x 5 ml	GM1376
Glutamine Control Level 2	5 x 5 ml	GM1377
Glutamine Control Level 3	5 x 5 ml	GM1378
Glutamine Calibrator	3 x 5 ml	GM1375
Serum Diluent	20 x 5 ml	MS5007

LIQUID ASSAYED CHEMISTRY PREMIUM PLUS

Analytes

CARDIAC
CK
Myoglobin
Troponin T

ELECTROPHORESIS
Albumin
α-1-Globulin
α-2-Globulin
β-Globulin
γ-Globulin

IMMUNOASSAY
AFP
CEA
Cortisol
DHEA Sulphate
Folate
Free T3
Free T4
FSH
hCG
Leutinising Hormone
Progesterone
Prolactin
PSA Total
Total T3
Total T4
Testosterone
TSH
T Uptake
Vitamin B12

LIPIDS
Apo A-1
Apo B
Cholesterol
HDL
LDL
LP(a)
Triglycerides

PROTEINS
α-1- Acid Glycoprotein
α-1-Antitrypsin
β-2-Microglobulin
Ceruloplasmin
Complement C3
Complement C4
CRP
Ferritin
Haptoglobin
IgA
IgE
IgG
IgM
Prealbumin
Protein Total
Transferrin

TRACE METALS
Copper
Zinc

DRUGS
Amikacin
Caffeine
Carbamazepine
Digoxin
Ethanol
Gentamicin
Lithium
Paracetamol
Phenobarbital
Phenytoin
Salicylate
Theophylline
Valproic Acid
Vancomycin

ROUTINE CHEMISTRY
Acid Phosphatase (Total)
Albumin
Alkaline Phosphatase
α-HBDH
ALT
Amylase
Amylase (Pancreatic)
AST
Bicarbonate
Bile Acids
Bilirubin Direct
Bilirubin Total
Calcium
Calcium Ionised
Chloride
Cholinesterase
Creatinine
D-3-Hydroxybutyrate
γGT
GLDH
Glucose
Iron
Lactate
LAP
LDH
Lipase
Magnesium
Osmolality
Phosphate Inorganic
Potassium
Sodium
TIBC
Urea
Uric Acid

With instrument specific target values provided for 100 analytes, the Acusera Liquid Assayed Chemistry Premium Plus control is the most comprehensive on the market. Our unique combination of proteins, lipids, immunoassays, cardiac markers, therapeutic drugs and routine chemistry analytes enables effective consolidation and cost savings. As a true third party control, target values are available for most major analysers.

- Liquid for ease of use
- Human based serum
- Assayed instrument specific target values and ranges
- High levels of CRP and other proteins eliminate the need for multiple controls
- Stable to expiry when stored at -20°C to -70°C
- Open vial stability of up to 7 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid Assayed Chemistry Premium Plus Level 1	12 x 5 ml	LAL4213
Liquid Assayed Chemistry Premium Plus Level 2	12 x 5 ml	LAN4214
Liquid Assayed Chemistry Premium Plus Level 3	12 x 5 ml	LAE4215

LIQUID CHEMISTRY PREMIUM - Precision Control

Analytes

CARDIAC
CK
Myoglobin
Troponin T

ELECTROPHORESIS
Albumin
α-1-globulin
α-2-globulin
β-1-globulin
γ-globulin

IMMUNOASSAY
AFP
CEA
Cortisol
Folate
Free T_3
Free T_4
hCG
Prolactin
Total T_3
Total T_4
TSH
Vitamin B12

LIPIDS
Apolipoprotein A-I
Apolipoprotein B
Cholesterol
Cholesterol (HDL)
Cholesterol (LDL)
LP(a)
Triglycerides

PROTEINS
α-1-Acid Glycoprotein
α-1-Antitrypsin
Ceruloplasmin
Complement C3
Complement C4
CRP
Ferritin
Haptoglobin
IgA
IgE
IgG
IgM
Prealbumin
Total Protein
Transferrin

TRACE METALS
Copper
Zinc

DRUGS
Carbamazepine
Digoxin
Ethanol
Gentamicin
Lithium
Paracetamol (Acetaminophen)
Phenobarbital
Phenytoin
Salicylate
Theophylline
Valproic Acid
Vancomycin

ROUTINE CHEMISTRY
Acid Phosphatase (Prostatic)
Acid Phosphatase (Total)
Albumin
Alkaline Phosphatase
ALT (GPT)
Amylase
Amylase (Pancreatic)
AST (GOT)
Bicarbonate
Bile Acids
Bilirubin (Direct)
Bilirubin (Total)
Cholinesterase
Calcium
Calcium (ionised)
Chloride
Creatinine
γGT
Glucose
GLDH
α-HBDH
D-3-Hydroxybutyrate
Iron
TIBC
LAP
LD (LDH)
Lipase
Lactate
Magnesium
Osmolality
Phosphate (Inorganic)
Potassium
Sodium
UIBC
Urea
Uric Acid (Urate)

A comprehensive chemistry control designed for use in the routine monitoring of precision. Suitable for use with all major instruments and methodologies, including protein electrophoresis. It contains 92 analytes, including routine chemistries, cardiac markers, proteins, immunoassay parameters, lipids and therapeutic drugs.

- Liquid for ease of use
- Human based serum
- Stable to expiry date at -20°C to -70°C
- Open vial stability of 7 days at 2°C to 8°C
- Typical values provided for all analytes

Description	Size	Cat. No.
Liquid Chemistry Premium Level 2	12 x 5 ml	LUN5048
Liquid Chemistry Premium Level 3	12 x 5 ml	LUE5049

LIQUID CHEMISTRY PREMIUM PLUS - Precision Control

Analytes

CARDIAC
CK
CK-MB
Myoglobin
Troponin T

ELECTROPHORESIS
Albumin
α-1-globulin
α-2-globulin
β-1-globulin
γ-globulin

IMMUNOASSAY
AFP
CEA
Cortisol
DHEA Sulphate
Folate
Free T_3
Free T_4
FSH
Growth Hormone (GH)
hCG
LH
Progesterone
Prolactin
Total T_3
Total T_4
Testosterone
TSH
T uptake
Vitamin B12

LIPIDS
Apolipoprotein A-1
Apolipoprotein B
Cholesterol
HDL Cholesterol
LDL Cholesterol
LP(a)
Triglycerides

PROTEINS
α-1-Acid Glycoprotein
α-1-Antitrypsin
β-2-Microglobulin
Ceruloplasmin
Complement C_3
Complement C_4
CRP
Ferritin
Haptoglobin
IgA
IgE
IgG
IgM
Prealbumin
Total Protein
Transferrin

TRACE METALS
Copper
Zinc

DRUGS
Amikacin
Caffeine
Carbamazepine
Digoxin
Ethanol
Gentamicin
Lithium
Paracetamol (Acetaminophen)
Phenobarbital
Phenytoin
Salicylate
Theophylline
Valproic Acid
Vancomycin

ROUTINE CHEMISTRY
Acid Phosphatase (Prostatic)
Acid Phosphatase (Total)
Albumin
Alkaline Phosphatase
ALT (GPT)
Amylase
Amylase (Pancreatic)
AST (GOT)
Bicarbonate
Bile Acids
Bilirubin (Direct)
Bilirubin (Total)
Cholinesterase
Calcium
Calcium (Ionised)
Chloride
Creatinine
γGT
Glucose
GLDH
α-HBDH
D-3-Hydroxybutyrate
Iron
TIBC
LAP
LD (LDH)
Lipase
Lactate
Magnesium
Osmolality
Phosphate (Inorganic)
Potassium
Sodium
UIBC
Urea
Uric Acid (Urate)

Multi-analyte chemistry control designed for use in the routine monitoring of precision. The most comprehensive chemistry control available covering more than 100 analytes, including routine chemistries, cardiac markers, lipids, therapeutic drugs, proteins, immunoassay parameters and an electrophoretic protein breakdown.

- Liquid for ease of use
- Human based serum
- High levels of CRP and other proteins eliminate the need for separate controls
- Stable to expiry date at -20°C -70°C
- Open vial stability of 7 days at 2°C to 8°C
- Typical values provided for all analytes

Description	Size	Cat. No.
Liquid Chemistry Premium Plus Level 1	12 x 5 ml	LUL5069
Liquid Chemistry Premium Plus Level 2	12 x 5 ml	LUN5070
Liquid Chemistry Premium Plus Level 3	12 x 5 ml	LUE5071
Liquid Chemistry Premium Plus Level 1	12 x 10 ml	LUL5093
Liquid Chemistry Premium Plus Level 2	12 x 10 ml	LUN5094
Liquid Chemistry Premium Plus Level 3	12 x 10 ml	LUE5095

CHEMISTRY PREMIUM CONTROL

Analytes			
CARDIAC	**DRUGS**	Bilirubin (Total)	Lipase
CK	Lithium	Calcium	Magnesium
		Chloride	Phosphate (Inorganic)
LIPIDS	**ROUTINE CHEMISTRY**	Cholinesterase	Potassium
Cholesterol	Acid Phosphatase (Prostatic)	Creatinine	Sodium
Triglycerides	Acid Phosphatase (Total)	γGT	TIBC
	Albumin	Glucose	UIBC
PROTEINS	Alkaline Phosphatase (ALP)	GLDH	Urea
IgA	ALT (GPT)	α-HBDH	Uric Acid (Urate)
IgG	Amylase	Iron	
IgM	Amylase (Pancreatic)	Lactate	
Total Protein	AST	LAP	
Transferrin	Bilirubin (Direct)	LD (LDH)	

A multi-analyte, assayed control designed for use in the routine monitoring of both accuracy and precision. Temperature specific target values and ranges are provided for the most common methods. The control contains 40 analytes, including routine chemistries and proteins.

- Lyophilised for enhanced stability
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Chemistry Premium Level 2	12 x 5 ml	HN5067
Chemistry Premium Level 3	12 x 5 ml	HE5068
Serum Diluent	20 x 5 ml	MS5007

ASSAYED CHEMISTRY PREMIUM PLUS CONTROL

Analytes

CARDIAC
CK

ELECTROPHORESIS
Albumin
α-1-globulin
α-2-globulin
β-1-globulin
γ-globulin

IMMUNOASSAY
Cortisol
Folate
PSA
TSH
Total T_3
Free T_4
Total T_4
Vitamin B12

LIPIDS
Apolipoprotein A-1
Apolipoprotein B
Cholesterol
HDL Cholesterol
NEFA
Triglycerides

PROTEINS
IgA
IgG
IgM
Total Protein
Transferrin

TRACE METALS
Copper
Zinc

DRUGS
Digoxin
Gentamicin
Lithium
Paracetamol (Acetaminophen)
Salicylate
Theophylline
Tobramycin

ROUTINE CHEMISTRY
Acid Phosphatase (Prostatic)
Acid Phosphatase (Total)
Acid Phosphatase (Non-Prostatic)
Albumin
Alkaline Phosphatase (ALP)
ALT (GPT)
Amylase
Amylase (Pancreatic)
AST (GOT)
Bicarbonate
Bile Acids
Bilirubin (Direct)
Bilirubin (Total)
Cholinesterase
Calcium
Chloride
Creatinine
Glucose
γGT
GLDH
α-HBDH
D-3-Hydroxybutyrate
Iron
TIBC
LAP
LD (LDH)
Lipase (Colorimetric)
Lipase (Turbidimetric)
Lactate
Magnesium
Osmolality
Phosphate (Inorganic)
Potassium
Sodium
Urea
Uric Acid (Urate)

A comprehensive assayed chemistry control designed for use in the routine monitoring of both accuracy and precision. This product contains method, instrument and temperature specific target values and ranges for 70 analytes on a wide range of analysers. Electrophoresis targets are also provided as a % breakdown of total protein.

- Lyophilised for enhanced stability
- Human based serum
- Typical Osmolality values: Level 2 is 300 mOsm/kg, Level 3 is 370 mOsm/kg
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Assayed Chemistry Premium Plus Level 2	20 x 5 ml	HN1530
Assayed Chemistry Premium Plus Level 3	20 x 5 ml	HE1532
Assayed Chemistry Premium Plus Level 2 & 3	2 x 5 x 5 ml	HS2611
Serum Diluent	20 x 5 ml	MS5007

PRECISION CHEMISTRY PREMIUM PLUS CONTROL

Analytes

CARDIAC
CK
Myoglobin
Troponin I

IMMUNOASSAY
AFP
CEA
Cortisol
Folate
Free T_3
Free T_4
hCG
Prolactin
PSA
Total T_3
Total T_4
TSH
Vitamin B12

LIPIDS
Apolipoprotein A-I
Apolipoprotein B
Cholesterol
HDL Cholesterol
NEFA
Triglycerides

PROTEINS
Alpha-1-Acid Glycoprotein
Alpha-1-Antitrypsin
Ceruloplasmin
Complement C_3
Complement C_4
CRP
Ferritin
Haptoglobin
IgA
IgE
IgG
IgM
Prealbumin
Total Protein
Transferrin

TRACE METALS
Copper
Zinc

DRUGS
Carbamazepine
Digoxin
Gentamicin
Lithium
Paracetamol (Acetaminophen)
Phenobarbital
Phenytoin
Salicylate
Theophylline
Tobramycin
Valproic Acid
Vancomycin

ROUTINE CHEMISTRY
Acid Phosphatase (Prostatic)
Acid Phosphatase (Total)
Albumin
Alkaline Phosphatase (ALP)
ALT (GPT)
Amylase
Amylase (Pancreatic)
AST (GOT)
Bicarbonate
Bile Acids
Bilirubin (Direct)
Bilirubin (Total)
Cholinesterase
Calcium
Chloride
Creatinine
γGT
Glucose
GLDH
α-HBDH
D-3-Hydroxybutyrate
Iron
TIBC
LAP
LD (LDH)
Lipase
Lactate
Magnesium
Osmolality
Phosphate (Inorganic)
Potassium
Sodium
UIBC
Urea
Uric Acid (Urate)

Multi-analyte control designed for use in the routine monitoring of precision. Contains 86 analytes, including a wide range of proteins, lipids and immunoassay parameters, with additional analytes present at measurable levels.

- Lyophilised for enhanced stability
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Precision Chemistry Premium Plus Level 2	20 x 5 ml	UN1557
Precision Chemistry Premium Plus Level 3	20 x 5 ml	UE1558
Serum Diluent	20 x 5 ml	MS5007

BOVINE CHEMISTRY ASSAYED CONTROL

Analytes

CARDIAC	PROTEINS	Albumin	GLDH
CK	Total Protein	Alkaline Phosphatase (ALP)	α-HBDH
		ALT (GPT)	D-3-Hydroxybutyrate
IMMUNOASSAY	TRACE METALS	Amylase	Iron
Cortisol	Copper	AST (GOT)	Lactate
PSA	Zinc	Bicarbonate	LD (LDH)
Total T_3		Bile Acids	Lipase
Free T_4	DRUGS	Bilirubin (Direct)	Magnesium
Total T_4	Lithium	Bilirubin (Total)	Osmolality
		Calcium	Phosphate (Inorganic)
LIPIDS	ROUTINE CHEMISTRY	Chloride	Potassium
Cholesterol	Acid Phosphatase (Prostatic)	Creatinine	Sodium
NEFA	Acid Phosphatase (Total)	Glucose	TIBC
Triglycerides	Acid Phosphatase (Non-Prostatic)	γGT	Urea
			Uric Acid (Urate)

A comprehensive bovine based, assayed serum designed for use in the routine monitoring of accuracy and precision. This product contains method, instrument and temperature specific values for 45 analytes and is especially suited to veterinary laboratories, due to the inclusion of commonly used veterinary parameters such as NEFA, Bile Acids, Lactate and D-3-Hydroxybutyrate.

- Lyophilised for enhanced stability
- Bovine based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Bovine Chemistry Assayed Level 1	**20 x 5 ml**	**AL1027**
Bovine Chemistry Assayed Level 2	**20 x 5 ml**	**AN1026**
Bovine Chemistry Assayed Level 3	**20 x 5 ml**	**AE1032**
Serum Diluent	**20 x 5 ml**	**MS5007**

BOVINE CHEMISTRY PRECISION CONTROL

Analytes

CARDIAC	PROTEINS	ALT (GPT)	Iron
CK	Total Protein	Amylase	Lactate
		AST (GOT)	LD (LDH)
IMMUNOASSAY	TRACE METALS	Bicarbonate	Lipase
Cortisol	Copper	Bile Acids	Magnesium
PSA	Zinc	Bilirubin (Direct)	Osmolality
Total T_3		Bilirubin (Total)	Phosphate (Inorganic)
Free T_4	DRUGS	Calcium	Potassium
Total T_4	Lithium	Chloride	Sodium
		Creatinine	TIBC
LIPIDS	ROUTINE CHEMISTRY	Glucose	Urea
Cholesterol	Acid Phosphatase (Prostatic)	γGT	Uric Acid (Urate)
NEFA	Acid Phosphatase (Total)	GLDH	
Total Lipids	Albumin	α-HBDH	
Triglycerides	Alkaline Phosphatase (ALP)	D-3-Hydroxybutyrate	

A comprehensive bovine based serum designed for use in the routine monitoring of precision. Contains 45 analytes including commonly used veterinary parameters such as NEFA, Bile Acids, Lactate and D-3-Hydroxybutyrate.

- Lyophilised for enhanced stability
- Bovine based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Bovine Chemistry Precision Level 1	**20 x 5 ml**	**SL1084**
Bovine Chemistry Precision Level 2	**20 x 5 ml**	**SN1085**
Bovine Chemistry Precision Level 3	**20 x 5 ml**	**SE1086**
Serum Diluent	**20 x 5 ml**	**MS5007**

CLINICAL CHEMISTRY CALIBRATION SERUM

Analytes

CARDIAC
CK

LIPIDS
Cholesterol
Triglycerides

PROTEINS
Total Protein

DRUGS
Lithium

TRACE METALS
Copper
Zinc

DRUGS
Lithium

ROUTINE CHEMISTRY
Acid Phosphatase (Non-Prostatic)
Acid Phosphatase (Prostatic)
Acid Phosphatase (Total)
Albumin
Alkaline Phosphatase (ALP)
ALT (GPT)
Amylase (Pancreatic)
Amylase (Total)
AST
Bicarbonate
Bile Acids
Bilirubin (Direct)
Bilirubin (Total)
Calcium
Chloride
Cholinesterase
Creatinine
D-3-Hydroxybutyrate
γGT
GLDH
Glucose
α-HBDH
Iron
Lactate
LDH
LAP
Lipase
Magnesium
Osmolality
Phosphate (Inorganic)
Potassium
Sodium
TIBC
Urea
Uric Acid (Urate)

Multi-analyte calibrator designed for use in the calibration of commonly used clinical chemistry parameters. Method, instrument and temperature specific values are provided for 42 analytes on a wide range of clinical analysers.

- Lyophilised for enhanced stability
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Clinical Chemistry Calibration Serum Level 2	20 x 5 ml	CAL2350
Clinical Chemistry Calibration Serum Level 3	20 x 5 ml	CAL2351

ALDOLASE CONTROL & CALIBRATOR

Dedicated Aldolase control specifically designed to monitor the accuracy and precision of aldolase assays on a wide range of clinical chemistry instruments.

- Lyophilised for enhanced stability
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C

Description	Size	Cat. No.
Aldolase Calibrator	3 x 1 ml	AD5000
Aldolase Control Level 2	3 x 1 ml	AD5001
Aldolase Control Level 3	3 x 1 ml	AD5002

AMMONIA / ETHANOL CONTROL

Analytes	
Ammonia	Ethanol

A liquid ready to use control designed to monitor both the accuracy and precision of Ammonia and Ethanol assays.

- Liquid ready-to-use
- Aqueous material
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Ammonia / Ethanol Control Level 1	6 x 2 ml	EA1366
Ammonia / Ethanol Control Level 2	6 x 2 ml	EA1367
Ammonia / Ethanol Control Level 3	6 x 2 ml	EA1368

BILIRUBIN (ELEVATED) CONTROL

Analytes	
Total Bilirubin	Direct Bilirubin

A bovine based serum control designed for use in the routine monitoring of both accuracy and precision. This product is suitable for monitoring paediatric bilirubin levels and contains method specific target values and ranges.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C

Description	Size	Cat. No.
Bilirubin Elevated Control	10 x 3 ml	BE454

GLYCEROL CONTROL

Dedicated Glycerol control designed for use in the routine monitoring of both accuracy and precision.

- Lyophilised for enhanced stability
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
Glycerol Control	3 x 5 ml	GY1369

MULTI CONTROL & CALIBRATOR

Analytes	
Ammonia	Glutamate
Glucose	Lactate

A multi-analyte control designed for use in the routine monitoring of accuracy and precision.

- Liquid ready-to-use
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Once opened stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
Multi Calibrator	3 x 2 ml	MC1382
Multi Control Level 1	5 x 2 ml	MC1379
Multi Control Level 2	5 x 2 ml	MC1380
Multi Control Level 3	5 x 2 ml	MC1381

*FOR BIOTECHNOLOGY INDUSTRIAL USE. Not for use in diagnostic procedures.

GLUTAMINE CONTROL

A dedicated control designed for use in the quality control of the Randox Glutamine assay.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
Glutamine Control Level 1	5 x 5 ml	GM1376
Glutamine Control Level 2	5 x 5 ml	GM1377
Glutamine Control Level 3	5 x 5 ml	GM1378
Glutamine Calibrator	3 x 5 ml	GM1375

*FOR BIOTECHNOLOGY INDUSTRIAL USE. Not for use in diagnostic procedures.

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Section 5

Immunoassay Controls

IMMUNOASSAY PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Immunoassay Control Premium Level 1	12 x 5 ml	IA2638
Immunoassay Control Premium Level 2	12 x 5 ml	IA2639
Immunoassay Control Premium Level 3	12 x 5 ml	IA2640
Immunoassay Control Premium Tri-Level	4 x 3 x 5 ml	IA2633
Liquid Immunoassay Control Premium Level 1	12 x 5 ml	LIA3105
Liquid Immunoassay Control Premium Level 2	12 x 5 ml	LIA3106
Liquid Immunoassay Control Premium Level 3	12 x 5 ml	LIA3107
Liquid Immunoassay Control Premium Tri-Level	4 x 3 x 5 ml	LIA3108
Immunoassay Control Premium Plus Level 1	12 x 5 ml	IA3109
Immunoassay Control Premium Plus Level 2	12 x 5 ml	IA3110
Immunoassay Control Premium Plus Level 3	12 x 5 ml	IA3111
Immunoassay Control Premium Plus Tri-Level	4 x 3 x 5 ml	IA3112
Liquid Immunoassay Control Premium Plus Level 1	12 x 5 ml	LIA5142
Liquid Immunoassay Control Premium Plus Level 2	12 x 5 ml	LIA5143
Liquid Immunoassay Control Premium Plus Level 3	12 x 5 ml	LIA5144
Immunoassay Speciality I Control Level 1	5 x 2 ml	IAS3113
Immunoassay Speciality I Control Level 2	5 x 2 ml	IAS3114
Immunoassay Speciality I Control Level 3	5 x 2 ml	IAS3115
Immunoassay Speciality II Control Level 1	5 x 1 ml	IAS3117
Immunoassay Speciality II Control Level 2	5 x 1 ml	IAS3118
Immunoassay Speciality II Control Level 3	5 x 1 ml	IAS3119
Tumour Marker Control Level 2	3 x 2 ml	TU5002
Tumour Marker Control Level 3	3 x 2 ml	TU5003
Liquid Tumour Marker Control Level 1	6 x 3 ml	TU5085
Liquid Tumour Marker Control Level 2	6 x 3 ml	TU5086
Liquid Tumour Marker Control Level 3	6 x 3 ml	TU5087
Maternal Screening Control Level 1	3 x 1 ml	MSS5024
Maternal Screening Control Level 2	3 x 1 ml	MSS5025
Maternal Screening Control Level 3	3 x 1 ml	MSS5026

IMMUNOASSAY PREMIUM CONTROL

Analytes			
17-OH-Progesterone	Estriol	Paracetamol (Acetaminophen)	Theophylline
ACTH	Ethosuximide	Phenobarbital	Thyroglobulin
AFP	Ferritin	Phenytoin	Total T_3
Aldosterone	Folate	Primidone	Total T_4
Amikacin	Free T_3	Progesterone	Tobramycin
β-2-Microglobulin	Free T_4	Prolactin	TSH
Carbamazepine	FSH	PSA (Free)	T Uptake
CEA	Gentamicin	PSA (Total)	Valproic Acid
C Peptide	Growth Hormone (GH)	PTH	Vancomycin
hCG	IgE	Salicylate	Vitamin B12
Cortisol	Insulin	SHBG	1-25-$(OH)_2$-vitamin D*
DHEA-Sulphate	LH	Testosterone	25-OH-vitamin D
Digoxin	Oestradiol	Testosterone (Free)*	

A comprehensive control designed for use in the routine monitoring of both accuracy and precision. Assayed, instrument specific target values and ranges are provided for 51 analytes, including fertility and thyroid hormones, steroid hormones, kidney function tests, therapeutic drugs and vitamins.

- Lyophilised for enhanced stability
- 100% human serum
- Ferritin and Vitamin B12 levels suitable for Anaemia monitoring
- TSH levels around 0.11 µU/ml in the level 1 control
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C, or up to 4 weeks at -20°C

Description	Size	Cat. No.
Immunoassay Premium Level 1	12 x 5 ml	IA2638
Immunoassay Premium Level 2	12 x 5 ml	IA2639
Immunoassay Premium Level 3	12 x 5 ml	IA2640
Immunoassay Premium Tri-level	4 x 3 x 5 ml	IA2633

*No claims are made regarding values or stability

LIQUID IMMUNOASSAY PREMIUM CONTROL

Analytes			
17-OH-Progesterone	Estriol*	LH	SHBG
AFP	Ethosuximide	Oestradiol	Testosterone
Aldosterone	Ferritin	Paracetamol (Acetaminophen)	Theophylline
Amikacin	Folate	Phenobarbital*	Tobramycin
β-2-Microglobulin*	Free T_3	Phenytoin	Total T_3
Carbamazepine	Free T_4	Primidone	Total T_4
CEA	FSH	Progesterone	TSH
hCG	Gentamicin	Prolactin	T Uptake
Cortisol	Growth Hormone (GH)	PSA (Free)	Valproic Acid
DHEA-Sulphate	IgE	PSA (Total)	Vancomycin
Digoxin	Insulin	Salicylate	Vitamin B12

A comprehensive control designed for use in the routine monitoring of accuracy and precision. Assayed values are available for multiple instruments covering 44 analytes, including fertility and thyroid hormones, steroid hormones, kidney function tests, therapeutic drugs and vitamins. Compatible for use on most immunoassay systems.

- Liquid for ease of use
- 100% human serum
- Stable to expiry date at -20°C to 70°C
- Open vial stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid Immunoassay Premium Level 1	12 x 5 ml	LIA3105
Liquid Immunoassay Premium Level 2	12 x 5 ml	LIA3106
Liquid Immunoassay Premium Level 3	12 x 5 ml	LIA3107
Liquid Immunoassay Premium Tri-Level	4 x 3 x 5 ml	LIA3108

*For international use only. Not available for diagnostic use in the United States.

IMMUNOASSAY PREMIUM PLUS CONTROL

Analytes			
17-OH-Progesterone	Digoxin	Oestradiol	Testosterone (Free)*
ACTH	Estriol	Paracetamol (Acetaminophen)	Theophylline
Aldosterone	Ethosuximide	Parathyroid Hormone (PTH)	Thyroglobulin
AFP	Ferritin	Phenobarbital	Thyroid Stimulating Hormone (TSH)
Amikacin	Folate	Phenytoin	Tobramycin
β – 2 – Microglobulin	Free T_3	Primidone	Total T_3
CA15-3	Free T_4	Progesterone	Total T_4
CA19-9	FSH	Prolactin	Valproic Acid
CA125	Gentamicin	PSA (Free)	Vancomycin
Carbamazepine	Growth Hormone (GH)	PSA (Total)	Vitamin B12
Carcinoembryonic Antigen (CEA)	Human Chorionic Gonadotrophin (hCG)	Salicylate	1-25-$(OH)_2$-Vitamin D*
Cortisol	IgE	SHBG	25-OH -Vitamin D
C Peptide	Insulin	T Uptake	
DHEA-Sulphate	Leuteinising Hormone (LH)	Testosterone	

A comprehensive control designed for use in the routine monitoring of both accuracy and precision. Assayed instrument specific target values and ranges are provided for 54 analytes, including fertility and thyroid hormones, steroid hormones, tumour markers, kidney function tests, therapeutic drugs and vitamins. Compatible for use on a wide range of immunoassay analysers.

- Lyophilised for enhanced stability
- 100% human serum
- Ferritin and Vitamin B12 levels suitable for Anaemia monitoring
- TSH targets are around 0.11 µU/ml in Level 1 control
- Contains routinely run tumour markers: AFP / CA15-3 / CA19-9 / CA-125 / CEA / PSA / Free-PSA
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Immunoassay Premium Plus Level 1	12 x 5 ml	IA3109
Immunoassay Premium Plus Level 2	12 x 5 ml	IA3110
Immunoassay Premium Plus Level 3	12 x 5 ml	IA3111
Immunoassay Premium Plus Tri-Level	4 x 3 x 5 ml	IA3112

*No claims are made regarding values or stability

LIQUID IMMUNOASSAY PREMIUM PLUS CONTROL - Precision Control

Analytes			
25-OH-Vitamin D	DHEA-S	LH	Theophylline
17-OH-Progesterone	Digoxin	NT-proBNP	Thyroglobulin
ACTH	Ferritin	Oestradiol	Tobramycin
AFP	Folate	Paracetamol	Total Beta hCG
Aldosterone	FSH	Phenobarbital	Total T3
Androstenedione	Free T3	Phenytoin	Total T4
C-Peptide	Free T4	Progesterone	Anti-TPO
Beta-2-microglobulin	Gentamicin	Prolactin	Troponin I
CA125	Growth Hormone	PSA Free	Troponin T
CA15-3	hCG	PSA Total	TSH
CA19-9	Homocysteine	PTH	Valproic Acid
Carbamazepine	IgE	SHBG	Vancomycin
CEA	IGF-1	T Uptake	Vitamin B12
Cortisol	Insulin	Testosterone	

Combining over 50 analytes including routine tumour markers, cardiac markers, therapeutic drugs, hormones and Vitamin D our Liquid Immunoassay Premium Plus control is designed to significantly reduce the number of individual controls required whilst remaining easy and convenient to use. As a true third party control it is ideal for monitoring precision on a wide range of immunoassay platforms.

- Liquid for ease of use
- 100% human serum
- Contains routinely run tumour markers: AFP / CA15-3 / CA19-9 / CA-125 / CEA / PSA / Free-PSA
- Stable to expiry date at -20°C to - 70°C
- Open vial stability of up to 7 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid Immunoassay Premium Plus Level 1	12 x 5 ml	LIA5142
Liquid Immunoassay Premium Plus Level 2	12 x 5 ml	LIA5143
Liquid Immunoassay Premium Plus Level 3	12 x 5 ml	LIA5144

IMMUNOASSAY SPECIALITY I CONTROL

Analytes		
1-25-$(OH)_2$-Vitamin D 25-OH-Vitamin D C Peptide Insulin	Insulin Like Growth Factor 1(IGF 1) Osteocalcin Procalcitonin Parathyroid Hormone (PTH)	Anti-Thyroglobulin (Anti-TG) Anti-Thyroperoxidase (Anti-TPO)

A multi-analyte control designed for use in the routine monitoring of both accuracy and precision. Assayed target values and ranges are provided for 10 more complex, specialised parameters to complement the routine immunoassay control.

- Lyophilised for enhanced stability
- 100% human serum
- Assayed target values and ranges for a wide range of immunoassay systems
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of up to 5 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Immunoassay Speciality I Level 1	5 x 2 ml	IAS3113
Immunoassay Speciality I Level 2	5 x 2 ml	IAS3114
Immunoassay Speciality I Level 3	5 x 2 ml	IAS3115

IMMUNOASSAY SPECIALITY II CONTROL

Analytes	
Calcitonin Gastrin	Procalcitonin Renin

A multi-analyte control designed for use in the routine monitoring of both accuracy and precision. Assayed target values and ranges are provided for 4 specialised parameters.

- Lyophilised for enhanced stability
- 100% human serum
- Assayed target values and ranges for a wide range of immunoassay systems
- Stable to expiry date at 2°C to 8°C
- Reconstitutued stability of 5 days at 2°C to 8°C for Renin, Procalcitonin 1 day at 2°C to 8°C and for Gastrin and Calcitonin 8 hours at 2°C to 8°C. Stable for 28 days at -20°C

Description	Size	Cat. No.
Immunoassay Speciality II Level 1	5 x 1 ml	IAS3117
Immunoassay Speciality II Level 2	5 x 1 ml	IAS3118
Immunoassay Speciality II Level 3	5 x 1 ml	IAS3119

TUMOUR MARKER CONTROL

Analytes		
AFP	CA125	Human Chorionic Gonadotrophin (hCG)
β-2-microglobulin	Calcitonin	Neuron Specific Enolase (NSE)
CA 15-3	CEA	PSA (Free)
CA 19-9	Cyfra 21	PSA (Total)
CA 72-4	Ferritin	Thyroglobulin

Multi-analyte control designed for use in the routine monitoring of both accuracy and precision. Assayed target values and ranges are provided for 15 routine and specialised tumour markers. Compatible for use on a wide range of clinical chemistry and immunoassay systems.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 14 days at 2°C to 8°C

Description	Size	Cat. No.
Tumour Marker Control Level 2	**3 x 2 ml**	**TU5002**
Tumour Marker Control Level 3	**3 x 2 ml**	**TU5003**

LIQUID TUMOUR MARKER CONTROL

Analytes	
AFP	Cyfra 21-1
Beta-2-Microglobulin	Ferritin
CA15-3	Neuron Specific Enolase (NSE)
CA19-9	PSA (Free)
CA72-4	PSA (Total)
CA125	Thyroglobulin
CA27-29	Total Beta hCG
CEA	

Multi-analyte control designed for use in the routine monitoring of both accuracy and precision. Assayed target values and ranges are provided for 15 routine and esoteric tumour markers. Compatible for use on a wide range of clinical chemistry and immunoassay systems.

- Liquid ready-to-use
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid Tumour Marker Control Level 1	**6 x 3 ml**	**TU5085**
Liquid Tumour Marker Control Level 2	**6 x 3 ml**	**TU5086**
Liquid Tumour Marker Control Level 3	**6 x 3 ml**	**TU5087**

MATERNAL SCREENING CONTROL

Analytes	
AFP	PAPP-A
Free β hCG	Total hCG
Inhibin A	Unconjugated Estriol

Multi-analyte control designed for use in the routine monitoring of accuracy and precision. Assayed target values and ranges are provided for 6 parameters used in both first and second trimester screening for Down's syndrome and Spina Bifida. Compatible for use on a wide range of clinical chemistry and immunoassay systems.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
Maternal Screening Control Level 1	3 x 1 ml	MSS5024
Maternal Screening Control Level 2	3 x 1 ml	MSS5025
Maternal Screening Control Level 3	3 x 1 ml	MSS5026

Immunology/Protein Controls

IMMUNOLOGY/ PROTEIN PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Specific Protein Control Level 1	3 x 1 ml	PS2682
Specific Protein Control Level 2	3 x 1 ml	PS2683
Specific Protein Control Level 3	3 x 1 ml	PS2684
Liquid CRP Control Level 2	10 x 1 ml	CP2480
Liquid CRP Control Level 3	10 x 1 ml	CP2481
High Sensitivity CRP Control Level 1	10 x 1 ml	CP2476
High Sensitivity CRP Control Level 2	10 x 1 ml	CP2477
CRP Calibrator	3 x 1 ml	CP2179
High Sensitivity CRP Calibrator Series	6 x 2 ml	CP2478
CRP Calibrator Series	6 x 2 ml	CP2479
CRP Full Range Calibrator	6 x 1 ml	CP2499
Canine CRP Control Level 2	3 x 1 ml	CP2803
Canine CRP Control Level 3	3 x 1 ml	CP2804
Cystatin C Normal Control	3 x 2 ml	CYS5019
Cystatin C Elevated Control	3 x 2 ml	CYS5020
Cystatin C Calibrator	5 x 2 ml	CYS2699
Aso Standard	5 x 1 ml	LO2306
β-2-Microglobulin Calibrator	3 x 1 ml	BM1362
Immunoglobulin Calibrator (Rx Series)	3 x 1 ml	IT3861
IgE Calibrator Series	6 x 1 ml	IE2492
High Sensitivity IgG Control Level 1	5 x 2 ml	IT3982
High Sensitivity IgG Control Level 2	5 x 2 ml	IT3983
High Sensitivity IgG Control Level 3	5 x 2 ml	IT3984
High Sensitivity IgG Calibrator	3 x 1 ml	IT3899
Rheumatoid Factor Calibrator Series	5 x 1 ml	RF2301
Specific Protein Calibrator (Liquid)	5 x 1 ml	IT2691
Specific Protein Calibrator (Liquid)	5 x 1 ml	IT2692
CSF Control Level 2	10 x 3 ml	CF1500
CSF Control Level 3	10 x 3 ml	CF1501

SPECIFIC PROTEIN CONTROL

Analytes			
AFP	β-2-Microglobulin	IgA	Lambda Light Chain (Free)
Albumin	Ceruloplasmin	IgE	Prealbumin (Transthyretin)
α-1-Antitrypsin	Complement C_3	IgG	RF
α-1-Acid Glycoprotein	Complement C_4	IgM	RBP
α-2-Macroglobulin	CRP	Kappa Light Chain	Total Protein
ASO	Ferritin	Kappa Light Chain (Free)	Transferrin
Anti-thrombin III	Haptoglobin	Lambda Light Chain	

A multi-analyte control designed for use in the routine monitoring of both precision and accuracy. Assayed target values are provided for 27 analytes, including immunoglobulins, complement proteins, inflammatory proteins as well as carrier and storage proteins. Method specific target values and ranges are available for both immunoturbidimetric and nephelometric assays.

- Liquid ready-to-use
- 100% human serum
- Contains both Total & Free Kappa and Lambda Light Chains
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Specific Protein Control Level 1	3 x 1 ml	PS2682
Specific Protein Control Level 2	3 x 1 ml	PS2683
Specific Protein Control Level 3	3 x 1 ml	PS2684

CRP CONTROLS & CALIBRATOR

Dedicated controls designed for use in the routine monitoring of both accuracy and precision. Suitable for use with traditional and high sensitivity CRP assays. These controls are standardised to BCR/CAP/IFCC CRM470.

- Liquid ready-to-use
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid CRP Control Level 2	10 x 1 ml	CP2480
Liquid CRP Control Level 3	10 x 1 ml	CP2481
High Sensitivity CRP Control Level 1	10 x 1 ml	CP2476
High Sensitivity CRP Control Level 2	10 x 1 ml	CP2477
CRP Calibrator	3 x 1 ml	CP2179
High Sensitivity CRP Calibrator Series	6 x 2 ml	CP2478
CRP Calibrator Series	6 x 2 ml	CP2479
CRP Full Range Calibrator	6 x 1 ml	CP2499

CANINE CRP CONTROL

A dedicated control designed for use in the quality control of the Randox Canine CRP assay.

- Liquid ready-to-use
- Canine based serum
- Stable to expiry date at 2°C to 8°C
- Once opened stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
Canine CRP Control Level 2	3 x 1 ml	CP2803
Canine CRP Control Level 3	3 x 1 ml	CP2804

CYSTATIN C CONTROL

A dedicated control designed for use in the routine monitoring of both accuracy and precision. This product is compatible for use on most clinical chemistry analysers.

- Liquid ready-to-use
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Cystatin C Control Level 2	3 x 2 ml	CYS5019
Cystatin C Control Level 3	3 x 2 ml	CYS5020
Cystatin C Calibrator	5 x 2 ml	CYS2699

ASO STANDARD

A dedicated calibrator designed for use in the calibration of ASO immunoturbidimetric assays. This product is compatible for use on most clinical analysers.

- Liquid ready-to-use
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Once opened stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
ASO Standard	5 x 1 ml	LO2306

β-2-MICROGLOBULIN CALIBRATOR

Dedicated calibrator designed for use in the calibration of β-2-Microglobulin assays. This product is compatible for use on most clinical analysers.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 30 days at 2°C to 8°C or 3 months at -20°C

Description	Size	Cat. No.
β - 2 -Microglobulin Calibrator	3 x 1 ml	BM1362

IMMUNOGLOBULIN CALIBRATORS

Analytes		
IgA	IgG	IgM

Calibrator series designed for use in the calibration of IgA, IgG and IgM immunoturbidimetric assays. Suitable for use with the RX series of immunoglobulin assays.

- Liquid ready-to-use
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Immunoglobulin Calibrator RX Series	3 x 1 ml	IT3861

IgE CALIBRATOR

Calibrator series designed for use in the calibration of IgE immunoturbidimetric assays.

- Lyophilised for enhanced stability
- Human IgE in a stabilised matrix
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 4 weeks at 2°C to 8°C

Description	Size	Cat. No.
IgE Calibrator Series	6 x 1 ml	IE2492

HIGH SENSITIVITY IgG CONTROL AND CALIBRATOR

Dedicated control and calibrator designed for use with the Randox high sensitivity IgG assay.

- Liquid ready-to-use
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
High Sensitivity IgG Control Level 1	5 x 2 ml	IT3982
High Sensitivity IgG Control Level 2	5 x 2 ml	IT3983
High Sensitivity IgG Control Level 3	5 x 2 ml	IT3984
High Sensitivity IgG Calibrator	3 x 1 ml	IT3899

RHEUMATOID FACTOR CALIBRATOR SERIES

Dedicated calibrator series designed for use in the calibration of rheumatoid factor immunoturbidimetric assays.

- Liquid ready-to-use
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Once opened stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
Rheumatoid Factor Calibrator Series	5 x 1 ml	RF2301

SPECIFIC PROTEIN CALIBRATORS

Analytes			
ASO	CRP	IgG	Rheumatoid Factor
Ceruloplasmin	Ferritin	IgM	
Complement C_3	Haptoglobin	Prealbumin	
Complement C_4	IgA	Transferrin	

Multi-analyte calibrator set designed for use in the calibration of the 13 analytes listed above.

- Liquid ready-to-use
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Specific Protein Calibrator (Liquid)	5 x 1 ml	IT2691

FOR USE WITH SAMPLES THAT DO NOT REQUIRE PRE-DILUTION

SPECIFIC PROTEIN CALIBRATORS

Analytes		
Alpha-1-Acid Glycoprotein	IgA	IgM
Alpha-1-Antitrypsin	IgG	

Multi-analyte calibrator set designed for use in the calibration of the 5 analytes listed above.

- Liquid ready-to-use
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Specific Protein Calibrator (Liquid)	5 x 1 ml	IT2692

FOR USE WITH SAMPLES THAT REQUIRE PRE-DILUTION

CSF CONTROL

Analytes		
Albumin	γ-globulin	Lactate
α-1-globulin	Chloride	Protein (Total)
α-2-globulin	Glucose	Sodium
β-globulin	IgG	

Multi-analyte Cerebrospinal Fluid control designed for use in the routine monitoring of both accuracy and precision. This product is compatible for use on most clinical analysers and provides method specific target values and ranges for 11 analytes.

- Lyophilised for enhanced stability
- 100% human CSF
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 14 days at 2°C to 8°C

Description	Size	Cat. No.
CSF Control Level 2	10 x 3 ml	CF1500
CSF Control Level 3	10 x 3 ml	CF1501

Lipid Controls

LIPID PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Lipid Control Level 1	5 x 1 ml	LE2668
Lipid Control Level 2	5 x 1 ml	LE2669
Lipid Control Level 3	5 x 1 ml	LE2670
Lipid Control Level 1	5 x 3 ml	LE2661
Lipid Control Level 2	5 x 3 ml	LE2662
Lipid Control Level 3	5 x 3 ml	LE2663
Apolipoprotein Control Level 1	3 x 1 ml	LE5016
Apolipoprotein Control Level 2	3 x 1 ml	LE5017
Apolipoprotein Control Level 3	3 x 1 ml	LE5018
Apolipoprotein Calibrator	3 x 1 ml	LP3023
Apolipoprotein Calibrator 2	3 x 1 ml	LP5047
Direct HDL/LDL Cholesterol Calibrator (clearance)	3 x 1 ml	CH2673
Lipoprotein (a) Control Level 3	3 x 1 ml	LP3406
Lipoprotein (a) Calibrator Series	5 x 1 ml	LP3404
sLDL Control Level 1	3 x 1 ml	LE5013
sLDL Control Level 2	3 x 1 ml	LE5014
sLDL Control Level 3	3 x 1 ml	LE5015
sLDL Calibrator	3 x 1 ml	CH5050

LIPID CONTROL

Analytes		
Apolipoprotein A-1	HDL Cholesterol (Precipitation)	Total Cholesterol
Apolipoprotein B	LDL Cholesterol (Direct Method)	Triglycerides
HDL Cholesterol (Direct Method)	Lipoprotein (a)	

A multi-analyte control designed for monitoring both the accuracy and precision of 7 analytes making up the full lipid profile. Accurately assigned target values and ranges are provided for both traditional precipitation methods as well as the various direct methods used for HDL and LDL measurement. Three levels are available, in line with internationally recommended cut-off values for lipid tests.

- Lyophilised for enhanced stability
- 100% human serum
- Sodium Azide is not present - no interference occurs with clearance methods
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Lipid Control Level 1	5 x 1 ml	LE2668
Lipid Control Level 2	5 x 1 ml	LE2669
Lipid Control Level 3	5 x 1 ml	LE2670
Lipid Control Level 1	5 x 3 ml	LE2661
Lipid Control Level 2	5 x 3 ml	LE2662
Lipid Control Level 3	5 x 3 ml	LE2663

APOLIPOPROTEIN CONTROL & CALIBRATORS

Analytes		
Apolipoprotein Control	**Apolipoprotein Calibrator**	**Apolipoprotein Calibrator 2**
Apolipoprotein A-II	Apolipoprotein A-I	Apolipoprotein A-II
Apolipoprotein C-II	Apolipoprotein B	Apolipoprotein C-II
Apolipoprotein C-III		Apolipoprotein C-III
Apolipoprotein E		Apolipoprotein E

This multi-analyte control is designed for use in the routine monitoring of 4 esoteric Apolipoproteins. Our Apolipoprotein calibrators are designed for use in the calibration of 6 esoteric Apolipoprotein assays on a wide range of clinical chemistry analysers.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Control - reconstituted stability of up to 28 days at 2°C 8°C for Apolipoprotein A-II and Apolipoprotein C-III, 14 days for Apolipoprotein C-II and 8 hours for Apolipoprotein E
- Calibrator - reconstituted stability of 7 days at 2°C to 8°C for Apolipoprotein control A-I, B, A-II, C-II and C-III, 1 day for Apolipoprotein E

Description	Size	Cat. No.
Apolipoprotein Control Level 1	3 x 1 ml	LE5016
Apolipoprotein Control Level 2	3 x 1 ml	LE5017
Apolipoprotein Control Level 3	3 x 1 ml	LE5018
Apolipoprotein Calibrator	3 x 1 ml	LP3023
Apolipoprotein Calibrator 2	3 x 1 ml	LP5047

DIRECT HDL & LDL CHOLESTEROL CALIBRATOR

Analytes
HDL Cholesterol LDL Cholesterol

Designed for use in the calibration of HDL and LDL Clearance assays on clinical chemistry analysers.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C and 1 month at -20°C

Description	Size	Cat. No.
Direct HDL / LDL Cholesterol Calibrator (Clearance)	3 x 1 ml	CH2673

LP(a) CONTROL AND CALIBRATOR

Dedicated control designed for use in the routine monitoring of both accuracy and precision. The calibrator is designed to calibrate Lp (a) assays on clinical chemistry analysers.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 14 days at 2°C to 8°C

Description	Size	Cat. No.
Lipoprotein (a) Control Level 3	3 x 1 ml	LP3406
Lipoprotein (a) Calibrator Series	5 x 1 ml	LP3404

sLDL CONTROLS & CALIBRATOR

Dedicated control designed for use in the routine monitoring of both accuracy and precision.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C

Description	Size	Cat. No.
sLDL Control Level 1	3 x 1ml	LE5013
sLDL Control Level 2	3 x 1 ml	LE5014
sLDL Control Level 3	3 x 1 ml	LE5015
sLDL Calibrator	3 x 1 ml	CH5050

Section 8

Cardiac Controls

CARDIAC PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Cardiac Control (Tri-Level)	3 x 1 ml	CQ3100
Cardiac Control (Tri-Level)	3 x 2 ml	CQ3259
Liquid Cardiac Control Level 1	3 x 3 ml	CQ5051
Liquid Cardiac Control Level 2	3 x 3 ml	CQ5052
Liquid Cardiac Control Level 3	3 x 3 ml	CQ5053
Liquid BNP Control (Beckman Access / Beckman Dx1) Level 1	3 x 1 ml	CQ5133
Liquid BNP Control (Beckman Access / Beckman Dx1) Level 2	3 x 1 ml	CQ5134
Liquid BNP Control (Beckman Access / Beckman Dx1) Level 3	3 x 1 ml	CQ5135
Liquid BNP Control (Abbott Architect) Level 1	3 x 1 ml	CQ5136
Liquid BNP Control (Abbott Architect) Level 2	3 x 1 ml	CQ5137
Liquid BNP Control (Abbott Architect) Level 3	3 x 1 ml	CQ5138
Liquid BNP Control (Siemens Advia Centaur) Level 1	3 x 1 ml	CQ5139
Liquid BNP Control (Siemens Advia Centaur) Level 2	3 x 1 ml	CQ5140
Liquid BNP Control (Siemens Advia Centaur) Level 3	3 x 1 ml	CQ5141
Myoglobin Calibrator Series	4 x 1 ml	MY2456
CK-MB Control	10 x 2 ml	CK1212
CK-MB Calibrator	10 x 1 ml	CK2393
High Sensitivity Troponin T Control	3 x 3 ml	CQ5080
H-FABP Control Level 1	3 x 1 ml	FB4026
H-FABP Control Level 2	3 x 1 ml	FB4027
H-FABP Calibrator Series	6 x 1 ml	FB3134

CARDIAC CONTROL

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

A comprehensive cardiac control designed for use in the routine monitoring of both accuracy and precision. Assayed target values and ranges are provided for the most common instruments and methods. Temperature specific values are available for CK and CK-MB.

- Lyophilised for enhanced stability
- 100% human serum
- Cut off levels for Troponin I and T in line with internationally recommended levels
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Tri-Level Cardiac Control	3 x 1 ml	CQ3100
Tri-Level Cardiac Control	3 x 2 ml	CQ3259

LIQUID CARDIAC CONTROL

Analytes		
CK-MB (Mass)	hs CRP	Troponin I
D-dimer	Myoglobin	Troponin T
Digoxin	NT-ProBNP	

A comprehensive control designed for use in the routine monitoring of both accuracy and precision. Assayed instrument specific target values and ranges are provided for 8 analytes, including NT-proBNP and D-dimer. The control is suitable for use on a wide range of clinical chemistry, immunoassay and POC instruments. Cut off levels for Troponin I and T are provided, in line with internationally recommended levels.

- Liquid ready-to-use
- 100% human serum
- Suitable for use in POC testing
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid Cardiac Control Level 1	3 x 3 ml	CQ5051
Liquid Cardiac Control Level 2	3 x 3 ml	CQ5052
Liquid Cardiac Control Level 3	3 x 3 ml	CQ5053

BNP CONTROL

Dedicated BNP control designed for use in the routine monitoring of accuracy and precision. Assayed instrument specific target values and ranges are provided for Beckman, Abbott and Siemens systems.

- Liquid ready-to-use
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid BNP Control (Beckman Access / Beckman Dx1) Level 1	3 x 1 ml	CQ5133
Liquid BNP Control (Beckman Access / Beckman Dx1) Level 2	3 x 1 ml	CQ5134
Liquid BNP Control (Beckman Access / Beckman Dx 1) Level 3	3 x 1 ml	CQ5135
Liquid BNP Control (Abbott Architect) Level 1	3 x 1 ml	CQ5136
Liquid BNP Control (Abbott Architect) Level 2	3 x 1 ml	CQ5137
Liquid BNP Control (Abbott Architect) Level 3	3 x 1 ml	CQ5138
Liquid BNP Control (Siemens Advia Centaur) Level 1	3 x 1 ml	CQ5139
Liquid BNP Control (Siemens Advia Centaur) Level 2	3 x 1 ml	CQ5140
Liquid BNP Control (Siemens Advia Centaur) Level 3	3 x 1 ml	CQ5141

MYOGLOBIN CALIBRATOR SERIES

Dedicated calibrator designed for use in the calibration of Myoglobin immunoturbidimetric assays.

- Lyophilised for enhanced stability
- Prepared from purified human Myoglobin in a stabilised matrix
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 30 days at 2°C to 8°C or 6 months at -20°C

Description	Size	Cat. No.
Myoglobin Calibrator Series	4 x 1 ml	MY2456

CK-MB CONTROL & CALIBRATOR

Analytes	
CK-MB	CK-NAC

A dedicated CK-MB control designed for use in the routine monitoring of both accuracy and precision. Accurately assigned target values are provided for serum start, substrate start and CK-NAC methods.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
CK-MB Control	10 x 2 ml	CK1212
CK-MB Calibrator	10 x 1 ml	CK2393

HIGH SENSITIVITY TROPONIN T CONTROL

A dedicated Troponin T control designed to monitor the performance of high sensitivity Troponin T assays. The control is assayed allowing for the routine assessment of both accuracy and precision.

- Lyophilised for enhanced stability
- 100% human serum
- Very low Troponin T levels around 20.5ng/l (0.0205ng/ml)
- Stable to expiry at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
High Sensitivity Troponin T Control	3 x 3 ml	CQ5080

HEART TYPE FATTY ACID BINDING PROTEIN (H-FABP) CONTROL AND CALIBRATOR SET

Dedicated controls and calibrators designed for use in the routine monitoring and calibration of the Randox H-FABP assay.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
H-FABP Control Level 1	3 x 1 ml	FB4026
H-FABP Control Level 2	3 x 1 ml	FB4027
H-FABP Calibrator Series	6 x 1 ml	FB3134

Section 9

Diabetes/Haemoglobin Controls

DIABETES PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
HbA1c Control Set Level 1 And 2	2 x 2 x 0.5 ml	HA5072
HbA1c Calibrator Series	5 x 2 ml, 1 x 8 ml	HA3444
G-6PDH Control Deficient	6 x 0.5 ml	PD2617
G-6PDH Control Normal	6 x 0.5 ml	PD2618
Fructosamine Control Level 1	3 x 1 ml	FR2994
Fructosamine Control Level 3	3 x 1 ml	FR2996
Fructosamine Calibrator	3 x 1 ml	FR2993
Haemoglobin F and A2 Control	2 x 2 x 0.2 ml	HA5083
Adiponectin Control Level 2	3 x 1 ml	AO2801
Adiponectin Control Level 3	3 x 1 ml	AO2802
Adiponectin Calibrator	4 x 1 ml	AO2800

HbA1c

Analytes	
HbA1c	Total Haemoglobin

A human based whole blood control designed for use in the routine monitoring of both accuracy and precision. Assayed values are provided for HPLC and a wide range of clinical chemistry analysers.

- Lyophilised for enhanced stability
- 100% human whole blood
- Treated in the same manner as a patient sample (requires pre-treatment)
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 4 weeks at 2°C to 8°C

Description	Size	Cat. No.
HbA1c Control Set Level 1 And 2	2 x 2 x 0.5 ml	HA5072
HbA1c Calibrator Series	5 x 2 ml, 1 x 8 ml	HA3444

G-6-PDH (GLUCOSE-6-PHOSPHATE DEHYDROGENASE) CONTROL

Dedicated G-6-PDH control designed for use in the routine monitoring of both accuracy and precision. Two levels are available (normal and deficient) with method specific target values and ranges provided.

- Lyophilised for enhanced stability
- Human based whole blood
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C

Description	Size	Cat. No.
G-6-PDH Control Deficient	6 x 0.5 ml	PD2617
G-6-PDH Control Normal	6 x 0.5 ml	PD2618

FRUCTOSAMINE CONTROL AND CALIBRATOR

Dedicated fructosamine control and calibrator designed for use in the routine monitoring and calibration of the Randox fructosamine assay.

- Lyophilised for enhanced stability
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 28 days at 2°C to 8°C

Description	Size	Cat. No.
Fructosamine Control Level 1	3 x 1 ml	FR2994
Fructosamine Control Level 3	3 x 1 ml	FR2996
Fructosamine Calibrator	3 x 1 ml	FR2993

HAEMOGLOBIN F & A2 CONTROL

Analytes	
Level 1	Level 2
Haemoglobin F (HbF)	Haemoglobin F (HbF)
Haemoglobin A2 (HbA2)	Haemoglobin A2 (HbA2)
	Haemoglobin S (HbS)

100% human whole blood control designed to routinely monitor reproducibility and precision in laboratories measuring the haemoglobin variants associated with Thalassemia. Suitable for use with all major systems and methods including HPLC, Immunoassay and Glycation Specific.

- Lyophilised for enhanced stability
- 100% human whole blood
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 4 weeks at 2°C to 8°C

Description	Size	Cat. No.
Haemoglobin F & A2 Control	2 x 2 x 0.2 ml	HA5083

ADIPONECTIN CONTROL AND CALIBRATOR

Dedicated adiponectin control and calibrator designed for use in the routine monitoring and calibration of the Randox Adiponectin assay.

- Liquid ready-to-use
- Human based serum
- Stable to expiry date at 2°C to 8°C
- Once opened stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
Adiponectin Control Level 2	3 x 1 ml	AO2801
Adiponectin Control Level 3	3 x 1 ml	AO2802
Adiponectin Calibrator	4 x 1 ml	AO2800

Urine Controls

URINE PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Assayed Urine Control Level 2	12 x 10 ml	AU2352
Assayed Urine Control Level 3	12 x 10 ml	AU2353
Urine Precision Control Level 2	10 x 10 ml	UC1502
Urine Precision Control Level 3	10 x 10 ml	UC1503
Liquid Urine Control Level 2	10 x 10 ml	UC5074
Liquid Urine Control Level 3	10 x 10 ml	UC5075
Urinalysis Control Level 1	12 x 12 ml	UC5033
Urinalysis Control Level 2	12 x 12 ml	UC5034
Urinalysis Control Level 1 (dropper)	6 x 25 ml	UC5078
Urinalysis Control Level 2 (dropper)	6 x 25 ml	UC5079
Microalbumin Control Level 1 & 2	6 x 1 ml	MA1361
Microalbumin Calibrator Series	6 x 2 ml	MA1567

ASSAYED URINE CONTROL

Analytes			
Amylase	Dopamine	Microalbumin	Potassium
Calcium	Epinephrine	Norepinephrine	Total Protein
Chloride	Glucose	Normetanephrine	Sodium
Copper	5-HIAA	Osmolality	Urea
Cortisol	Magnesium	Oxalate	Uric Acid (Urate)
Creatinine	Metanephrine	Phosphorous	Vanillylmandelic Acid

Multi-analyte control designed for use in the routine monitoring of both accuracy and precision. Assayed values are provided for 24 analytes, including kidney function parameters, catecholamines and their metabolites and urinary proteins. Method specific target values are also provided for the most commonly used methods.

- Lyophilised for enhanced stability
- 100% human urine
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C or 14 days at -20°C

Description	Size	Cat. No.
Assayed Urine Control Level 2	**12 x 10 ml**	**AU2352**
Assayed Urine Control Level 3	**12 x 10 ml**	**AU2353**

UNASSAYED URINE CONTROL

Analytes			
Calcium	Glucose	Phosphorous	Sodium
Chloride	Magnesium	Potassium	Urea
Creatinine	Osmolality	Total Protein	Uric Acid (Urate)

Multi-analyte control designed for use in the routine monitoring of precision of 12 analytes.

- Lyophilised offering enhanced stability
- 100% human urine
- Stable until expiry when stored at 2°C to 8°C
- Reconstituted stability of 5 days at 2°C to 8°C or 14 days at -20°C

Description	Size	Cat. No.
Urine Precision Control Level 2	**10 x 10 ml**	**UC1502**
Urine Precision Control Level 3	**10 x 10 ml**	**UC1503**

LIQUID URINE CONTROL

Analytes			
Amylase	Glucose	pH	Specific Gravity
Calcium	hCG	Phosphate (Inorganic)	Urea
Chloride	Magnesium	Potassium	Uric Acid (Urate)
Cortisol	Microalbumin	Protein (Total)	
Creatinine	Osmolality	Sodium	

Multi-analyte control designed for use in the routine monitoring of accuracy and precision. Assayed instrument and method specific values and ranges are provided for 18 commonly analysed parameters.

- Liquid ready-to-use
- Human based urine
- Stable to expiry date at 2°C to 8°C
- Open vial stability 30 days at 2°C to 8°C

Description	Size	Cat. No.
Liquid Urine Control Level 2	**10 x 10 ml**	**UC5074**
Liquid Urine Control Level 3	**10 x 10 ml**	**UC5075**

URINALYSIS CONTROL

Analytes			
Albumin	Glucose	Nitrite	Urobilinogen
Bilirubin	hCG	pH	
Blood	Ketones	Protein	
Creatinine	Leukocytes	Specific Gravity	

A multi-analyte control specifically designed for use in the quality control of urine test strips. Assayed values are provided for 13 parameters and a wide range of test strip manufacturers.

- Liquid ready-to-use
- 100% human urine
- Suitable for use in POC testing
- Stable to expiry date at 2°C to 8°C
- Open vial stability of 30 days at 2°C to 25°C (20 immersions for UC5033/5034)

Description	Size	Cat. No.
Urinalysis Control Level 1	**12 x 12 ml**	**UC5033**
Urinalysis Control Level 2	**12 x 12 ml**	**UC5034**
Urinalysis Control Level 1 (dropper)	**6 x 25 ml**	**UC5078**
Urinalysis Control Level 2 (dropper)	**6 x 25 ml**	**UC5079**

MICROALBUMIN CONTROL AND CALIBRATOR

Liquid ready to use, human control and calibrator designed for in vitro diagnostic use in the calibration and monitoring of microalbumin immunoturbidimetric assays. This product is compatible for use on most clinical analysers.

- Liquid ready-to-use
- 100% human urine
- Stable to expiry date at 2°C to 8°C
- Once opened stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
Microalbumin Control Level 1 & 2	**6 x 1 ml**	**MA1361**
Microalbumin Calibrator Series	**6 x 2 ml**	**MA1567**

Section 11

Therapeutic Drug Controls

THERAPEUTIC DRUG PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Therapeutic Drug Control Level 1	20 x 5 ml	HD1667
Therapeutic Drug Control Level 2	20 x 5 ml	HD1668
Therapeutic Drug Control Level 3	20 x 5 ml	HD1669
Therapeutic Drug Calibrator	6 x 3 ml	TD3417

THERAPEUTIC DRUG CONTROL

Analytes			
Amikacin	Ethosuximide	Phenobarbitone	Tobramycin
Caffeine	Gentamicin	Phenytoin	Valproic Acid
Carbamazepine	Lithium	Primidone	Vancomycin
Cyclosporine	Methotrexate	Salicylate	
Digoxin	Paracetamol (Acetaminophen)	Theophylline	

Multi-analyte control designed for use in the quality control of therapeutic drug monitoring. Assayed target values and ranges are supplied for 18 analytes including commonly used antibiotics, anti-convulsants, anti-inflammatory and anti-cancer drugs. Instrument and method specific target values are provided for the most common instruments and methods.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 4 weeks at 2°C to 8°C

Description	Size	Cat. No.
Therapeutic Drug Control Level 1	20 x 5 ml	HD1667
Therapeutic Drug Control Level 2	20 x 5 ml	HD1668
Therapeutic Drug Control Level 3	20 x 5 ml	HD1669

THERAPEUTIC DRUG CALIBRATOR

Analytes			
Carbamazepine	Gentamicin	Phenytoin	Valproic Acid
Digoxin	Phenobarbital	Theophylline	

Multi-analyte calibrator designed for use in the calibration of therapeutic drug assays on clinical chemistry analysers. Accurately assigned values are provided for 7 analytes.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 4 weeks at 2°C to 8°C or 8 weeks at -20°C

Description	Size	Cat. No.
Therapeutic Drug Calibrator	6 x 3 ml	TD3417

Toxicology Controls

TOXICOLOGY PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Drugs of Abuse Array I Plus (Urine) Controls	2 x 4 x 1 ml	EV3745
Drugs of Abuse Array I Plus (Urine) Calibrators	9 x 1 ml	EV3744
Drugs of Abuse Array I Plus (Whole Blood) Controls	4 x 2 x 1 ml	EV3750
Drugs of Abuse Array I Plus (Whole Blood) Calibrators	9 x 1 ml	EV3749
Drugs of Abuse Array II (Urine) Controls	4 x 2 x 1 ml	EV3657
Drugs of Abuse Array II (Whole Blood) Controls	4 x 2 x 1 ml	EV3682
Drugs of Abuse Array II (Oral Fluid) Controls	4 x 2 x 1 ml	EV3702
Drugs of Abuse Array II (Urine) Calibrator Series	9 x 1 ml	EV3656
Drugs of Abuse Array II (Whole Blood) Calibrator Series	9 x 1 ml	EV3687
Drugs of Abuse Array II (Oral Fluid) Calibrator Series	9 x 1 ml	EV3701
Drugs of Abuse Array III (Urine) Control	4 x 2 x 1 ml	EV3830
Drugs of Abuse Array III (Urine) Calibrator Series	9 x 1 ml	EV3829
Drugs of Abuse Array III (Whole Blood) Control	4 x 2 x 1 ml	EV3794
Drugs of Abuse Array III (Whole Blood) Calibrator Series	9 x 1 ml	EV3797
Drugs of Abuse Array IV (Urine) Control	4 x 2 x 1 ml	EV3835
Drugs of Abuse Array IV (Urine) Calibrator Series	9 x 1 ml	EV3834
Drugs of Abuse Array IV (Whole Blood) Control	4 x 2 x 1 ml	EV3809
Drugs of Abuse Array IV (Whole Blood) Calibrator Series	9 x 1 ml	EV3808
Drugs of Abuse Array V (Urine) Control	4 x 2 x 1 ml	EV3814
Drugs of Abuse Array V (Urine) Calibrator Series	9 x 1 ml	EV3815
Drugs of Abuse Array V (Whole Blood) Control	4 x 2 x 1 ml	EV3848
Drugs of Abuse Array V (Whole Blood) Calibrator Series	9 x 1 ml	EV3847
Cannabinoid Calibrator Set	5 x 3 ml	DA2700
Cannabinoid Control Level 1	5 x 3 ml	DA3127
Cannabinoid Control Level 2	5 x 3 ml	DA3128
Ecstasy Calibrator Set	5 x 10 ml	DA2701
Ecstasy Control Level 1	5 x 5 ml	DA3125
Ecstasy Control Level 2	5 x 5 ml	DA3126
EDDP Calibrator Set	5 x 10 ml	DA2702
EDDP Control Level 1	5 x 5 ml	DA3123
EDDP Control Level 2	5 x 5 ml	DA3124
Ethanol Calibrator/Control Set	5 x 10 ml	DA2703
Multidrug Calibrator Set	5 x 10 ml	DA2704
Multidrug Control Level 1	5 x 5 ml	DA3121
Multidrug Control Level 2	5 x 5 ml	DA3122
Benzodiazepines Control Level 1	5 x 5 ml	DA3130
Benzodiazepines Control Level 2	5 x 5 ml	DA3131
Benzodiazepines Calibrator Set	5 x 10 ml	DA3129

DRUGS OF ABUSE ARRAY I PLUS CONTROLS AND CALIBRATORS

Analytes			
Amphetamine Barbiturates Benzodiazepine 1 Benzodiazepine 2	Buprenorphine Cannabinoids Cocaine Metabolite MDMA	Methadone Methamphetamine Opiates Phencyclidine	Tricyclic Antidepressants Creatinine

Assayed control for use in monitoring the accuracy and precision on Randox Biochip systems. Two levels of control are provided covering the cut-off range.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Urine - Reconstituted stability of 14 days at 2°C to 8°C
- Whole Blood – Reconstituted stability of 7 days at 2°C to 8°C or 14 days at -20°C

Description	Size	Cat. No.
Drugs of Abuse Array I Plus (Urine) Controls	4 x 2 x 1 ml	EV3745
Drugs of Abuse Array I Plus (Urine) Calibrators	9 x 1 ml	EV3744
Drugs of Abuse Array I Plus (Whole Blood) Controls	4 x 2 x 1 ml	EV3750
Drugs of Abuse Array I Plus (Whole Blood) Calibrators	9 x 1 ml	EV3749

DRUGS OF ABUSE ARRAY II CONTROLS AND CALIBRATORS

Analytes		
3,4 Methylenedioxymethamphetamine (MDMA) Ketamine Lysergic Acid Diethylamide (LSD) Methaqualone	Buprenorphine Fentanyl Generic Opioids Oxycodone I	Oxycodone II Propoxyphene Creatinine

A comprehensive control designed for use in the routine monitoring of accuracy and precision on Randox Biochip systems. Assayed values are provided for 11 parameters.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Urine - Reconstituted stability of 7 days at 2°C to 8°C or 28 days at -20°C
- Whole Blood - Reconstituted stability of 7 days at 2°C to 8°C or 28 days at -20°C

Description	Size	Cat. No.
Drugs of Abuse Array II (Urine) Controls	4 x 2 x 1 ml	EV3657
Drugs of Abuse Array II (Whole Blood) Controls	4 x 2 x 1 ml	EV3682
Drugs of Abuse Array II (Oral Fluid) Controls	4 x 2 x 1 ml	EV3702
Drugs of Abuse Array II (Urine) Calibrator Series	9 x 1 ml	EV3656
Drugs of Abuse Array II (Whole Blood) Calibrator Series	9 x 1 ml	EV3687
Drugs of Abuse Array II (Oral Fluid) Calibrator Series	9 x 1 ml	EV3701

DRUGS OF ABUSE ARRAY III CONTROLS AND CALIBRATORS

Analytes		
Chloral Hydrate Metabolite	Meperidine	Zopiclone
Ethyl Glucuronide	Meprobamate	7-amino Flunitrazepam
Fentanyl	Zaleplon	Creatinine
Ketamine Metabolite	Zolpidem	

Assayed control for use in monitoring the accuracy and precision of the analytes above on Randox Biochip systems. Two levels of control are provided covering the cut-off range.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
Drugs of Abuse Array III (Urine) Control	4 x 2 x 1 ml	EV3830
Drugs of Abuse Array III (Urine) Calibrator Series	9 x 1 ml	EV3829
Drugs of Abuse Array III (Whole Blood) Control	4 x 2 x 1 ml	EV3794
Drugs of Abuse Array III (Whole Blood) Calibrator Series	9 x 1 ml	EV3797

DRUGS OF ABUSE ARRAY IV CONTROLS AND CALIBRATORS

Analytes		
Acetaminophen	Ibuprofen	Tramadol
Dextromethorphan	Methylphenidate	Trazodone
Escitalopram	Salicylate	Tricyclic Antidepressants
Fluoxetine	Salicyluric Acid	Creatinine
Haloperidol	Sertraline	

Assayed control for use in monitoring the accuracy and precision of the analytes above on Randox Biochip systems. Two levels of control are provided covering the cut-off range.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
Drugs of Abuse Array IV (Urine) Control	4 x 2 x 1 ml	EV3835
Drugs of Abuse Array IV (Urine) Calibrator Series	9 x 1 ml	EV3834
Drugs of Abuse Array IV (Whole Blood) Control	4 x 2 x 1 ml	EV3809
Drugs of Abuse Array IV (Whole Blood) Calibrator Series	9 x 1 ml	EV3808

DRUGS OF ABUSE ARRAY V CONTROLS AND CALIBRATORS

Analytes		
Bath Salts 1 (Methcathinone and Mephedrone)	Phenylpiperazines	Synthetic Cannabinoids 3
Bath Salts 2 (MDPV)	Salvinorin	Synthetic Cannabinoids 4
Benzylpiperazines	Synthetic Cannabinoids 1	
Mescaline	Synthetic Cannabinoids 2	

Assayed control for use in monitoring the accuracy and precision of the analytes above on Randox Biochip systems. Two levels of control are provided covering the cut-off range.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C

Description	Size	Cat. No.
Drugs of Abuse Array V (Urine) Control	4 x 2 x 1 ml	EV3814
Drugs of Abuse Array V (Urine) Calibrator Series	9 x 1 ml	EV3815
Drugs of Abuse Array V (Whole Blood) Control	4 x 2 x 1 ml	EV3848
Drugs of Abuse Array V (Whole Blood) Calibrator Series	9 x 1 ml	EV3847

CANNABINOID CONTROL AND CALIBRATOR

Dedicated calibrator and control set designed for the calibration and quality control of the Randox Cannabinoids assay.

- Liquid ready-to-use
- 100% human urine
- Stable to expiry date when capped and stored at 2°C to 8°C
- Open vial stability of 28 days at 2°C to 8°C

Description	Size	Cat. No.
Cannabinoid Calibrator Set	5 x 3 ml	DA2700
Cannabinoid Control Level 1	5 x 3 ml	DA3127
Cannabinoid Control Level 2	5 x 3 ml	DA3128

ECSTASY CONTROL AND CALIBRATOR

Dedicated calibrator and control set designed for the calibration and quality control of the Randox Ecstasy assay.

- Liquid ready-to-use
- Human urine
- Stable to expiry date when capped and stored at 2°C to 8°C
- Open vial stability of 28 days at 2°C to 8°C

Description	Size	Cat. No.
Ecstasy Calibrator Set	5 x 10 ml	DA2701
Ecstasy Control Level 1	5 x 5 ml	DA3125
Ecstasy Control Level 2	5 x 5 ml	DA3126

EDDP CONTROL AND CALIBRATOR

Dedicated calibrator and control set designed for the calibration and quality control of the Randox EDDP assay.

- Liquid ready-to-use
- Human urine
- Stable to expiry date when capped and stored at 2°C to 8°C
- Once opened stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
EDDP Calibrator Set	5 x 10 ml	DA2702
EDDP Control Level 1	5 x 5 ml	DA3123
EDDP Control Level 2	5 x 5 ml	DA3124

ETHANOL CALIBRATOR/CONTROL SET

Dedicated calibrator and control set designed for the calibration and quality control of the Randox Ethanol assay.

- Liquid ready-to-use
- Human urine
- Stable to expiry date when capped and stored at 2°C to 8°C
- Open vial stability of 28 days at 2°C to 8°C

Description	Size	Cat. No.
Ethanol Calibrator/Control Set	5 x 10 ml	DA2703

MULTIDRUG CONTROL

Analytes	
Benzoylecgonine (Cocaine) Methamphetamine Secobarbital	Methadone Morphine (Opiates)

Multi-analyte control and calibrator designed for use in the quality control of the Randox Amphetamines, Barbiturates, Opiates, Cocaine and Methadone assays.

- Liquid ready-to-use
- Human urine
- Stable to expiry date when capped and stored at 2°C to 8°C
- Open vial stability of 28 days at 2°C to 8°C

Description	Size	Cat. No.
Multidrug Control Level 1	5 x 5 ml	DA3121
Multidrug Control Level 2	5 x 5 ml	DA3122
Multidrug Calibrator Set	5 x 10 ml	DA2704

BENZODIAZEPINES CONTROL AND CALIBRATOR

Analytes
Oxazepam

Dedicated calibrator and control set designed for the calibration and control of the Randox benzodiazepines assay.

- Liquid ready-to-use
- Human urine
- Stable to expiry date when capped and stored at 2°C to 8°C
- Open vial stability of 28 days at 2°C to 8°C

Description	Size	Cat. No.
Benzodiazepines Control Level 1	5 x 5 ml	DA3130
Benzodiazepines Control Level 2	5 x 5 ml	DA3131
Benzodiazepines Calibrator Set	5 x 10 ml	DA3129

ACUSERA

Section 13

Coagulation/Haematology Controls

COAGULATION PRODUCT RANGE		
PRODUCT DESCRIPTION	SIZE	CAT. NO.
Coagulation Control Level 1	12 x 1 ml	CG5021
Coagulation Control Level 2	12 x 1 ml	CG5022
Coagulation Control Level 3	12 x 1 ml	CG5023
Coagulation Calibrator	10 x 1 ml	CG5037
Haematology Control	3 x 2 x 4.5 ml	HM5162

COAGULATION CONTROL

Analytes			
Prothrombin Time (PT)	Antithrombin III (ATIII)	Factor VIII	Factor XII
Activated Partial Thromboplastin Time (APTT)	Factor II	Factor IX	Plasminogen
Thrombin Time (TT)	Factor V	Factor X	Protein C
Fibrinogen	Factor VII	Factor XI	Protein S

Multi-parameter control designed for use in the routine monitoring of both accuracy and precision. Assayed method and instrument specific target values and ranges are available for a variety of factor assays, basic coagulation and thrombophilia parameters.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 24 hours at 2°C to 8°C

Description	Size	Cat. No.
Coagulation Control Level 1	12 x 1 ml	CG5021
Coagulation Control Level 2	12 x 1 ml	CG5022
Coagulation Control Level 3	12 x 1 ml	CG5023

COAGULATION CALIBRATOR

Analytes	
Fibrinogen	Antithrombin III

Multi-analyte calibrator designed for use in the calibration of Randox Fibrinogen and Antithrombin III assays.

Description	Size	Cat. No.
Coagulation Calibrator	10 x 1 ml	CG5037

HAEMATOLOGY CONTROL

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

Combining 45 parameters in total the new Randox Acusera Haematology control completely covers the commonly tested full blood profile in a single control. Providing a true third party solution for Sysmex haematology analysers with 5-part differential technology an unbiased, independent assessment of analytical performance is guaranteed.

- Liquid ready-to-use samples requiring no preparation
- True third party control providing unbiased performance assessment
- Target values available for Sysmex instruments with 5-part differential technology
- Barcoded labels enabling quick and easy sample recognition and increased productivity
- Open vial stability of 14 days for all analytes when stored at 2°C to 8°C

Description	Size	Cat. No.
Haematology Control Tri-Level	3 x 2 x 4.5 ml	HM5162

Section 14

Blood Gas Controls

BLOOD GAS PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Blood Gas Control Level 1	30 x 1.8 ml	BG5001
Blood Gas Control Level 2	30 x 1.8 ml	BG5002
Blood Gas Control Level 3	30 x 1.8 ml	BG5003

BLOOD GAS CONTROL

Analytes			
pCO_2	Total CO_2	Glucose	Sodium
pH	Calcium	Lactate	
pO_2	Chloride	Potassium	

Liquid ready-to-use blood gas control designed for use in the routine monitoring of the 10 parameters listed above. Method specific target values are provided for the most common instruments.

- Aqueous material
- Stable to expiry date at 2°C to 8°C
- Once opened controls should be analysed within 1 minute for pH and blood gas parameters; for electrolyte measurements, the control should be analysed within 1 hour of opening

Description	Size	Cat. No.
Blood Gas Control Level 1	30 x 1.8 ml	BG5001
Blood Gas Control Level 2	30 x 1.8 ml	BG5002
Blood Gas Control Level 3	30 x 1.8 ml	BG5003

Antioxidant Controls

ANTIOXIDANT PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Glutathione Reductase Control	10 x 5 ml	GR2608
Glutathione Reductase Calibrator	10 x 5 ml	GR2609
Ransel Control	10 x 1 ml	SC692
Ransod Control	10 x 1 ml	SD126
Total Antioxidant Status Standard	10 x 1 ml	NX2615
TAS (Total Antioxidant Status) Control	10 x 5 ml	NX2331

GLUTATHIONE REDUCTASE CONTROL AND CALIBRATOR

A bovine based control designed for use in the routine monitoring of precision. This product is compatible for use on most clinical chemistry analysers.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 1 day at 2°C to 8°C or 8 hours at 15°C to 25°C

Description	Size	Cat. No.
Glutathione Reductase Calibrator	10 x 5 ml	GR2609
Glutathione Reductase Control	10 x 5 ml	GR2608

GLUTATHIONE PEROXIDASE (RANSEL) CONTROL

A bovine based, whole blood control designed for use in the routine monitoring of precision. This product is compatible for use on most clinical chemistry analysers.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 3 days at 2°C to 8°C

Description	Size	Cat. No.
RANSEL Control	10 x 1 ml	SC692

SUPEROXIDE DISMUTASE (RANSOD) CONTROL

A bovine based, whole blood control designed for use in the routine monitoring of precision. This product is compatible for use on most clinical chemistry analysers.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 10 days at 2°C to 8°C

Description	Size	Cat. No.
RANSOD Control	10 x 1 ml	SD126

TOTAL ANTIOXIDANT STATUS (TAS) CONTROL AND STANDARD

A human based control designed for use in the routine monitoring of reproducibility and precision. This product is compatible for use on most clinical chemistry analysers.

Control

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 2 days at 2°C to 8°C or 12 hours at 15°C to 25°C

Standard

- Lyophilised for enhanced stability
- Approximately 1.5 mmol/l
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 2 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Total Antioxidant Status Control	10 x 5 ml	NX2331
Total Antioxidant Status Standard	10 x 1 ml	NX2615

Speciality & Research Controls

SPECIALITY AND RESEARCH PRODUCT RANGE		
PRODUCT DESCRIPTION	**SIZE**	**CAT. NO.**
Antimicrobial Array I Plus Control	3 x 1 ml	AMC5084
Antimicrobial Control II	3 x 1 ml	AMC5035
Antimicrobial Control III	3 x 1 ml	AMC5036
Growth Promoter Control	3 x 1 ml	GP5003
Cell Adhesion Molecules Control	3 x 3 x 1 ml	EV3569
Adhesion Molecules Calibrator Series	9 x 1 ml	EV3568
Cerebral Series I Control	3 x 3 x 1 ml	CAB5008
Cerebral Array I Calibrator Series	9 x 1 ml	EV3625
Cerebral Series II Control	3 x 3 x 0.5 ml	CBB5009
Cytokine Array I Control	3 x 3 x 1 ml	CY5006
Cytokine Array I Control (High Sensitivity)	3 x 3 x 2 ml	CY5005
Cytokine Array Calibrator Series	9 x 1 ml	EV3561
Cytokine Array III Control	3 x 3 x 1 ml	CY5012
Cytokine Array III Calibrator Series	9 x 1 ml	EV3679
Cytokine Array IV Control	3 x 3 x 1 ml	CY5011
Cytokine Array IV Calibrator Series	9 x 1 ml	EV3658
Cytokine Array V Control	3 x 3 x 1 ml	CY5010
Cardiac Array Control	3 x 3 x1 ml	EV3691
Endocrine Array Controls	3 x 3 x 1 ml	EV3713
Endocrine Array Calibrator Series	9 x 1 ml	EV3712
Evidence Immunoassay Controls	4 x 3 x 5 ml	EV3570
Synthetic Steroids Control	3 x 1 ml	EV3709
Synthetic Steroids Calibrator	9 x 1 ml	EV3708
Metabolic Syndrome Array I Controls	3 x 3 x 1 ml	EV3757
Metabolic Syndrome Array I Calibrators	9 x 1 ml	EV3756
Thyroid Total Calibrator Series	9 x 1 ml	EV3555
Thyroid Free Calibrator Series	9 x 1 ml	EV3563

ANTIMICROBIAL CONTROLS

ANTIMICROBIAL CONTROL I PLUS ANALYTES			
Sulphadiazine	Sulphathiazole	Sulphisoxazole	Sulphamethoxazole
Sulphadimethoxine	Sulphachlorpyridazine	Sulphamethizole	Sulphamonomethoxine
Sulphaquinoxaline	Sulphapyridine	Sulphadoxine	Trimethoprim
Sulphamethazine	Sulphamethoxypyridazine	Sulphamerazine	

A multi-analyte control containing target values and ranges for 15 different antimicrobial agents.

- Liquid ready-to-use
- Stable to expiry date at 2°C to 8°C

Description	Size	Cat. No.
Antimicrobial Array I Plus Control	3 x 1 ml	AMC5084

ANTIMICROBIAL CONTROL II ANALYTES		
Tetracyclines (generic)	Thiamphenicol	Streptomycin
Quinolones (generic)	Tylosin	Ceftiofur

A multi-analyte control supplied with values for 6 different antimicrobial agents used extensively in veterinary medicine.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 24 hours at 2°C to 8°C or 2 weeks at -20°C

Description	Size	Cat. No.
Antimicrobial Control II	3 x 1 ml	AMC5035

ANTIMICROBIAL CONTROL III ANALYTES	
5-Methylmorpholino-3-amino-2-oxazolidinone (AMOZ)	Semicarbazine (SEM)
1-Amino hydantoin hydrochloride (AHD)	Chloramphenicol
3-Amino-2-oxazoilidinone (AOZ)	

Multi-analyte control containing values for 5 different antimicrobial agents.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 28 days at 2°C to 8°C or 28 days at -20°C

Description	Size	Cat. No.
Antimicrobial Control III	3 x 1 ml	AMC5036

GROWTH PROMOTER CONTROL

Analytes		
Boldenone	Corticosteroids	Trenbolone
Zeranol	Nandrolone	Stanozolol
Ractopamine	Stilbenes	Beta-Agonists (Clenbuterol)

A multi-analyte control provided with accurately assigned target values and ranges for 9 different growth promoters.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 14 days at 2°C to 8°C

Description	Size	Cat. No.
Growth Promoter Control	3 x 1 ml	GP5003

CELL ADHESION MOLECULES CONTROL AND CALIBRATOR

Analytes	
Vascular cell adhesion molecule-1 (VCAM-1)	P-Selectin (P-SEL)
Intercellular adhesion molecule-1 (ICAM-1)	L-Selectin (L-SEL)
E-Selectin (E-SEL)	

A multi-analyte control with target values and ranges supplied for 5 different adhesion molecules.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 24 hours at 2°C to 8°C or 7 days at -20°C

Description	Size	Cat. No.
Adhesion Molecules Tri-Level Control	3 x 3 x 1 ml	EV3569
Adhesion Molecules Calibrator Series	9 x 1 ml	EV3568

CEREBRAL SERIES 1 CONTROL AND CALIBRATOR

Analytes	
Brain Derived Neurotrophic Factor (BDNF)	Glial Fibrillary Acidic Protein (GFAP)
Fatty Acid Binding Protein (FABP)	Interleukin 6 (IL6)

A multi-analyte control with target values and ranges provided for 4 analytes.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 8 hours at 2°C to 8°C or 21 days at -20°C

Description	Size	Cat. No.
Cerebral Series 1 Tri-Level Control	3 x 3 x 1 ml	CAB5008
Cerebral Array 1 Calibrator Series	9 x 1 ml	EV3625

CEREBRAL SERIES II CONTROL

Analytes		
Neuron Specific Enolase (NSE)	Soluble Tumour Necrosis Factor Receptor I (sTNFRI)	Thrombomodulin (TM)
Neutrophil Gelatinase-associated Lipocalin (NGAL)	D-dimer	C-Reactive Protein (CRP)

A multi-analyte control with target values and ranges provided for 6 analytes.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 8 hours at 2°C to 8°C or 14 days at -80°C

Description	Size	Cat. No.
Cerebral Series II Tri-Level Control	3 x 3 x 0.5 ml	CBB5009

CYTOKINE ARRAY I & HIGH SENSITIVITY CYTOKINE ARRAY I CONTROLS AND CALIBRATOR

Analytes	
Interleukin - 1α (IL-1α)	Vascular Endothelial Growth Factor (VEGF)
Interleukin - 1β (IL-1β)	Interferon γ (IFNγ)
Interleukin - 2 (IL2)	Tumour Necrosis Factor α (TNFα)
Interleukin - 4 (IL4)	Monocyte Chemoattractant Protein-1 (MCP-1)
Interleukin - 6 (IL6)	Epidermal Growth Factor (EGF)
Interleukin - 8 (IL8)	
Interleukin - 10 (IL10)	

Multi-analyte controls with target values and ranges provided for 12 different cytokines.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 10 -12 hours at 2°C to 8°C or 14 days at -20°C
- High sensitivity - Reconstituted stability of 4 hours at 2°C to 8°C or 7 days at -20°C

Description	Size	Cat. No.
Cytokine Array I Tri-Level Control	3 x 3 x 1 ml	CY5006
High Sensitivity Cytokine Array I Tri-Level Control	3 x 3 x 2 ml	CY5005
Cytokine Array Calibrator Series	9 x 1 ml	EV3561

CYTOKINE ARRAY III CONTROL AND CALIBRATOR

Analytes	
Interleukin - 5 (IL-5)	Granulocyte Macrophage Colony-Stimulating Factor (GMCSF)
Interleukin - 15 (IL15)	Macrophage Inflammatory Protein-1 Alpha (MIP-1α)

A multi-analyte control with target values and ranges provided for 4 analytes.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 24 hours at 2°C to 8°C or 28 days at -20°C

Description	Size	Cat. No.
Cytokine Array III Tri-Level Control	3 x 3 x 1 ml	CY5012
Cytokine Array III Calibrator Series	9 x 1 ml	EV3679

CYTOKINE ARRAY IV CONTROL AND CALIBRATOR

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

A multi-analyte control with target values and ranges provided for 5 analytes.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C 8°C or 28 days at -20°C

Description	Size	Cat. No.
Cytokine Array IV Tri-Level Control	3 x 3 x 1 ml	CY5011
Cytokine Array IV Calibrator Series	9 x 1 ml	EV3658

CYTOKINE ARRAY V CONTROL

Analytes	
Interleukin-3 (IL-3)	Interleukin-13 (IL13)
Interleukin-7 (IL7)	Interleukin-23 (IL23)
Interleukin 12p70 (IL12p70)	

A multi-analyte control with target values and ranges provided for 5 analytes.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry when stored at 2°C to 8°C
- Reconstituted stability of 14 days at 2°C to 8°C or 21 days at -20°C

Description	Size	Cat. No.
Cytokine Array V Tri-Level Control	3 x 3 x 1 ml	CY5010

CARDIAC ARRAY CONTROL

Analytes	
CK-MB	Myoglobin
H - FABP	Troponin I

Multi-analyte cardiac control designed for use in the routine monitoring of precision on clinical chemistry and immunoassay systems. This is the only control of its type to include the novel marker heart type fatty acid binding protein (H - FABP). Three levels of control are supplied spanning the complete clinical range.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 16 hours at 2°C to 8°C or 7 weeks at -80°C

Description	Size	Cat. No.
Cardiac Array Controls	3 x 3 x 1 ml	EV3691

ENDOCRINE ARRAY CONTROL AND CALIBRATOR

Analytes	
Cortisol	17αHydroxyprogesterone
DHEA-S	Leptin

Human based control designed for use in the routine monitoring of both accuracy and precision. Three levels of control are supplied with assayed target values and ranges provided for 4 analytes.

- Lyophilised for enhanced stability
- Assayed values available for both the Evidence and Evidence Investigator
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 21 days at -20°C

Description	Size	Cat. No.
Endocrine Array Controls	3 x 3 x 1 ml	EV3713
Endocrine Array Calibrator Series	9 x 1 ml	EV3712

EVIDENCE IMMUNOASSAY CONTROL

Analytes		
CEA	Leutinising Hormone	Testosterone
Estradiol	Prolactin	Total T_4
FSH	Progesterone	Total T_3
Free T_4	PSA (Total)	TSH
Free T_3	PSA (Free)	

Multi-analyte immunoassay control designed for use in the routine monitoring of the Randox Fertility, Thyroid and Tumour Marker Arrays.

- Lyophilised for enhanced stability
- 100% human serum
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C or 4 weeks at -20°C

Description	Size	Cat. No.
Evidence Immunoassay Controls	4 x 3 x 5 ml	EV3570

SYNTHETIC STEROIDS CONTROL AND CALIBRATOR

Analytes		
17β Clostebol	Gestagens (generic)	Methandriol
Ethinylestradiol	Methyltestosterone	

Human based control designed for use in the routine monitoring of both accuracy and precision. Assayed target values and ranges are provided for 5 different synthetic steroids.

- Lyophilised for enhanced stability
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 3 days at 2°C to 8°C or 14 days at -20°C

Description	Size	Cat. No.
Synthetic Steroids Control	3 x 1 ml	EV3709
Synthetic Steroids Calibrator	9 x 1 ml	EV3708

METABOLIC SYNDROME ARRAY 1 CONTROL

Analytes		
C-Peptide	Resistin	Tumour Necrosis Factor α (TNFα)
Ferritin	Insulin	Leptin
Interleukin-6 (1L6)	Interleukin-1α (1L-1α)	Plasminogen Activator Inhibitor-1

A multi-analyte control with target values and ranges provided for 9 parameters associated with metabolic syndrome.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 72 hours at 2°C to 8°C and 7 days at -20°C

Description	Size	Cat. No.
Metabolic Syndrome Array 1 Controls	3 x 3 x 1 ml	EV3757
Metabolic Syndrome Array 1 Calibrators	9 x 1 ml	EV3756

THYROID TOTAL CALIBRATOR

Analytes		
TSH	T_4	T_3

A comprehensive multi analyte calibrator designed for use in the calibration of the Randox Thyroid Total Array on Randox Biochip systems.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C and 4 weeks at -20°C

Description	Size	Cat. No.
Thyroid Total Calibrator Series	9 x 1 ml	EV3555

THYROID FREE CALIBRATOR

Analytes		
TSH	FT_4	FT_3

A comprehensive multi analyte calibrator designed for use in the calibration of the Randox Thyroid Free Array on Randox Biochip systems.

- Lyophilised for enhanced stability
- 100% human material
- Stable to expiry date at 2°C to 8°C
- Reconstituted stability of 7 days at 2°C to 8°C and 4 weeks at -20°C

Description	Size	Cat. No.
Thyroid Free Calibrator Series	9 x 1 ml	EV3563

Customised Quality Control Sera

CUSTOMISED QUALITY CONTROL SERA

For over 30 years, laboratories, EQA scheme organisers and other diagnostic companies have looked to Randox to provide their QC needs. Randox Laboratories manufactures a full portfolio of quality controls, calibrators and standards for over 350 parameters. In addition to 'off the shelf' quality control products, Randox is the world's leading provider of customised control materials. Customising control materials can involve adding analytes, removing unused parameters, specifying analyte concentrations or choosing alternative vial sizes.

Our principal control products are;

- Antioxidants
- Cardiac
- Clinical Chemistry
- Coagulation/Haematology
- Diabetes
- Immunoassay
- Immunology and Specific Proteins
- Lipids
- Tumour Markers
- Therapeutic Drugs and Toxicology
- Urine tests
- Specialist and Research controls such as Cytokines, Growth Promoters, Antimicrobials, Cerebral Markers and a variety of single-analyte control products.

Randox also produce custom sera for EQA schemes and specialised controls for research projects.

Quality is our focus during the manufacturing process, as all control products are produced to the same high specifications using procedures complying with ISO 13485 for medical devices. State of the art clinical chemistry and immunoassay analysers are used during the manufacturing and quality control processes.

To enable us to identify and fulfil your needs, please discuss your requirements with your Randox representative. We are happy to consider any requirements you may have. Randox has over 30 years experience in producing customised sera, and we will ensure you will receive the specified product you want in a professional and timely manner.

CONSOLIDATION

Randox will **significantly consolidate your existing controls.** An average laboratory may rationalise from 7 sera to a single control product

TAILOR MADE

Specify the analytes and levels you require. We can provide the levels tailored to your cut off values

STABILITY

Randox sera are **stable for up to 4 years**, enabling use of the same lot over an extended period

OPTIONS

Customised controls in different matrices
e.g. serum, urine, aqueous

FLEXIBILITY

Batch sizes manufactured between **50 – 250,000 vials.** Randox can provide a wide range of **vial sizes from 1 ml to 10 ml**

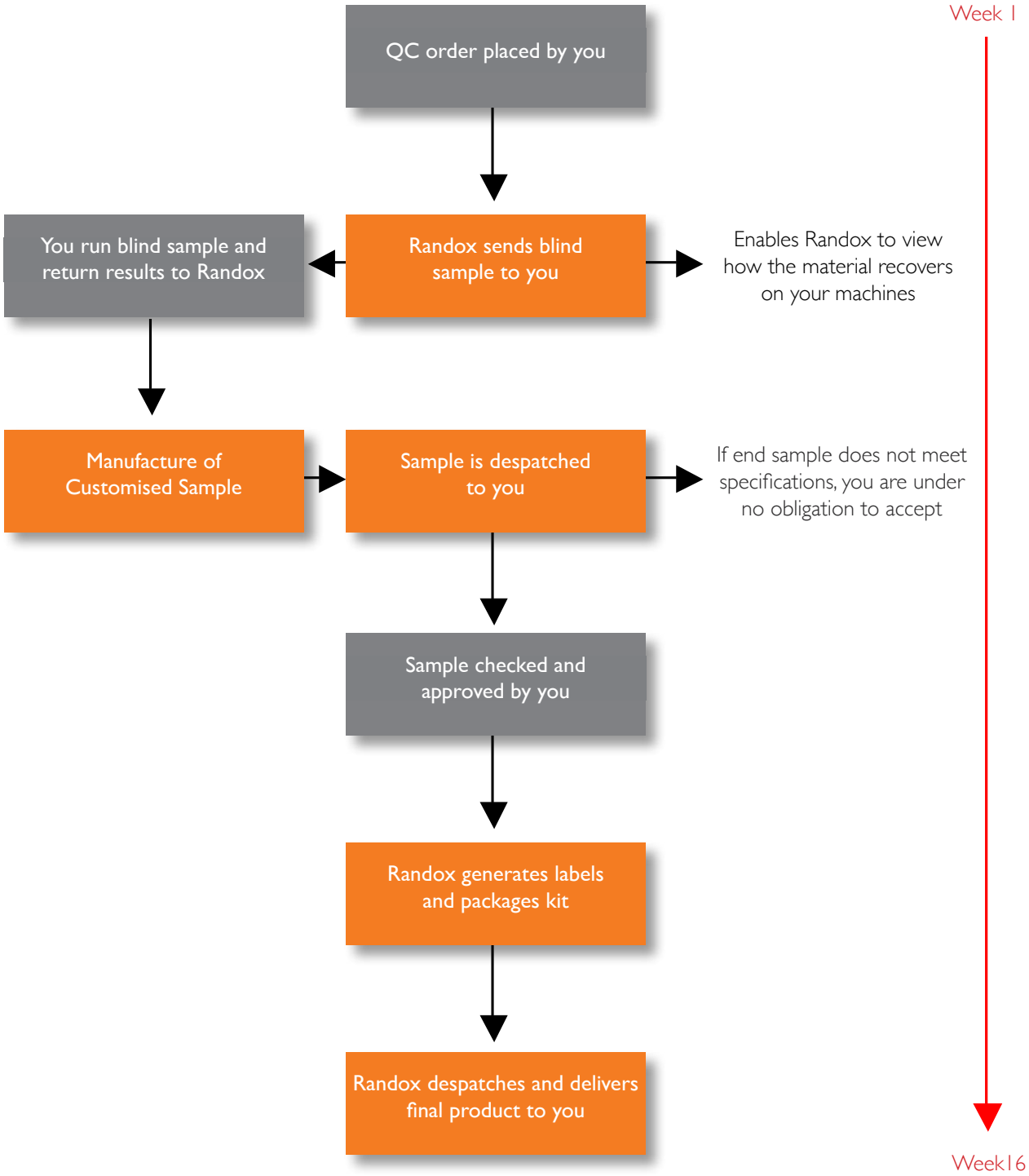
QUALITY

All controls are **produced to high quality specification**, fully compliant with ISO 13485

CHOICE

3 different formats – lyophilised / liquid / liquid frozen

CUSTOMISED ACUSERA TIMELINE:



Customised Quality Control Sera

ANTIOXIDANT
Glutathione Peroxidase
Glutathione Reductase
Superoxide Dismutase
Total Antioxidant Status

BLOOD GAS
Calcium
Chloride
Glucose
Lactate
pCO_2
pH
pO_2
Potassium
Sodium
Total CO_2

CARDIAC
BNP
CK (Total)
CK-MB
Carbonic Anhydrase III (CAIII)
D-Dimer
Digoxin
Heart-type Fatty Acid-Binding Protein (H-FABP)
Glycogen Phosphorylase BB (GPBB)
hs-CRP
High Sensitivity Troponin T
Homocysteine
Myoglobin
NT-ProBNP
Troponin I
Troponin T

CELLULAR ADHESION MOLECULES
E-Selectin
ICAM-1
L-Selectin
P-Selectin
VCAM-1

CEREBRAL
BDNF
GFAP
IL-6
NSE
NGAL
sTNFRi
Thrombomodulin

COAGULATION
Activated Partial Thromboplastin Time (aPTT)
Antithrombin III
Factor II
Factor V
Factor VII
Factor VIII
Factor IX
Factor X
Factor XI
Factor XII
Fibrinogen
Plasminogen
Protein C
Protein S
Prothrombin Time (PT)
Thrombin Time (TT)

CSF
Albumin
Alpha-1-globulin
Alpha-2-globulin
Beta-globulin
Chloride
Gamma-globulin
Glucose
IgG
Lactate
Protein
Sodium

CYTOKINE & GROWTH FACTORS
Epidermal Growth Factor (EGF)
Granulocyte Macrophage Colony-Stimulating Factor (GMCSF)
Intercellular Adhesion Molecule 1 (ICAM-1)
Interferon-gamma (IFN-γ)
Interleukin-1 alpha (IL-1 α)
Interleukin-1 beta (IL-1β)
Interleukin-2 (IL-2)
Soluble Interleukin-2 Receptor Alpha (SIL-2Rα)
Interleukin-3 (IL-3)
Interleukin-5 (IL-5)
Soluble Interleukin-6 Soluble Receptor (SIL-6SR)
Interleukin-4 (IL-4)
Interleukin-6 (IL-6)
Interleukin-7 (IL-7)
Interleukin-7D (IL-7D)
Interleukin-8 (IL-8)
Interleukin-10 (IL-10)
Interleukin-12p (IL-12p)
Interleukin-13 (IL-13)
Interleukin-15 (IL-15)
Interleukin-23 (IL-23)
Macrophage Inflammatory Protein-1 Alpha (MIP-1a)
Matrix Metalloproteinase 9 (MMP-9)
Monocyte Chemotactic Protein-1 (MCP-1)
Soluble Tumour Necrosis Factor Receptor-1 (sTNFRI)
Soluble Tumour Necrosis Factor Receptor-2 (sTNFR2)
Tumour Necrosis Factor - alpha (TNF - α)
Tumour Necrosis Factor - beta (TNF - β)
Vascular Endothelial Growth Factor (VEGF)

DIABETES
Fructosamine
HbA1c
Hbf
Hbs
HbA2

DRUGS (THERAPEUTIC)
Acetaminophen (Paracetamol)
Amikacin
Carbamazepine
Caffeine
Cyclosporine
Digoxin
Ethosuximide
Gentamicin
Lithium
Methotrexate
Phenobarbital
Phenytoin
Primidone
Salicylate
Theophylline
Tobramycin
Valproic Acid
Vancomycin

DRUGS OF ABUSE
7-aminoflunitrazepam
11-Nor D-9-THC-9-COOH
Acetaminophen
Amphetamine
Bath Salts 1+2
Benzylpiperazines
Barbiturates
Benzodiazepine
Benzoylecgonine
Buprenorphine
Cannabinoids
Chloral Hydrate Metabolite
Cocaine Metabolite
Dextromethorphan
Ecstasy
EDDP
Ethyl Glucuronide
Ethanol
Escitalopram
Fentanyl
Generic Opiods
Haloperidol
Ibuprofen
Ketamine
LSD
Mescaline
Meprobamate
Meperidine
Methadone
Methamphetamine
Methaqualone
Methylphenidate
Morphine
MDMA
Opiates
Oxazepam
Oxycodone I
Oxycodone II
Phencyclidine
Phenobarbital
Phenylpiperazines
Propoxyphene
Salicylate
Salicyluric Acid
Salvinorin
Secobarbital
Setraline
Tricyclic Antidepressants
Tramadol
Trazodone
Zoleplon
Zolpidem
Zopiclone

ENDOCRINE
Leptin

IMMUNOASSAY
17-OH – Progesterone

This list is not exhaustive. If the analyte you require is not present, please contact your Randox representative

ACTH
AFP
Aldosterone
Amikacin
β-2-Microglobulin
CEA
CA 125
CA 15-3
CA 19-9
CA 72-4
Calcitonin
Carbamazepine
C-Peptides
Cyfra 21-1
Cortisol
C-Peptide
DHEA-Sulphate
Digoxin
Estriol
Estriol (unconjugated)
Ethosuximide
Ferritin
Folate
FSH
Gastrin
Gentamicin
Growth Hormone
hCG
Free β hCG
IgE
IGF-1
Inhibin A
Insulin
LH
Neuron Specific Enolase
Osteocalcin
Oestradiol
Paracetamol
PAPP- A
Phenobarbital
Phenytoin
Primidone
Procalcitonin
Progesterone
Prolactin
PSA (Free)
PSA (Total)
PTH
Renin
Salicylate
SHBG
TBG
T Uptake
T_3 (Free)
T_3 (Total)
T_4 (Free)
T_4 (Total)
Testosterone
Testosterone (Free)
Theophylline
Thyroglobulin
Anti-TG
Anti-TPO
Tobramycin
TSH
Vanomycin
Valproic Acid
Vitamin B12
1-25-$(OH)_2$-Vitamin D
25-OH-Vitamin D

LIPIDS

Apolipoprotein A-I
Apolipoprotein A-II
Apolipoprotein B
Apolipoprotein C-II
Apolipoprotein C-III
Apolipoprotein E
Cholesterol (Total)
Cholesterol (HDL)
Cholesterol (LDL)
Lipoprotein (a)
Triglycerides
sLDL

METABOLIC SYNDROME

Resistin
Plasminogen Activator Inhibitor-1

PROTEINS

AFP
Albumin
Alpha-1-Acid Glycoprotein (AAG)
Alpha-1-Antitrypsin (AAT)
Alpha-2-Macroglobulin
Antistreptolysin O
Anti-thrombin III
β-2-Microglobulin
Ceruloplasmin
Complement C_3
Complement C_4
CRP
Cystatin C
Ferritin
Haptoglobin
IgA
IgE
IgG
IgM
Kappa Light Chain
Kappa Light Chain (Free)
Lambda Light Chain
Lambda Light Chain (Free)
Prealbumin
Protein (Total)
RBP (Retinol Binding Protein)
Rheumatoid Factor
Transferrin

ROUTINE CHEMISTRY

Albumin
Alpha-1-globulin
Alpha-2-globulin
Beta-1-globulin
Acid Phosphatase (Prostatic)
Acid Phosphatase (Total)
Albumin
ALP
ALT (GPT)
Amylase
Amylase (Pancreatic)
AST (GOT)
Bicarbonate
Bile Acids
Bilirubin (Direct)
Bilirubin (Total)
Cholinesterase
Calcium
Calcium (Ionised)
Chloride
Copper
Creatinine
Gamma GT
Gamma-globulin
Glucose
GLDH
α-HBDH
D-3-Hydroxybutyrate
Iron
LAP
LD (LDH)
Lipase
Lactate
Magnesium
Osmolality
Phosphate (Inorganic)
Potassium
Sodium
TIBC
Urea
Uric Acid (Urate)
Zinc

URINE

Amylase
Calcium
Chloride
Copper
Cortisol
Creatinine
Dopamine
Epinephrine
Glucose
5-HIAA
hCG
Magnesium
Metanephrine
Microalbumin
Norepinephrine
Normetanephrine
Osmolality
Oxalate
pH
Phosphorous
Potassium
Total Protein
Sodium
Specific Gravity
Urea
Uric Acid
VMA (Vanillylmandelic Acid)

Interlaboratory Data Management

What is Acusera 24•7?

Acusera 24•7 Live Online is an interlaboratory data management and peer group reporting package designed to complement the Acusera range of third party controls. Using Acusera 24•7 will help medical laboratories to improve error detection, reduce false rejections and ensure accurate patient test results.

Acusera 24•7 provides access anytime, anywhere to an extensive range of features including user defined QC multi-rules and interactive charts & reports. With peer statistics generated from over 20,000 laboratory participants, interlaboratory data management has never been easier.

Why run a peer group reporting program?

- Quickly identify trends, system errors and reagent issues, minimising expensive repeat tests
- Bridges the gap between daily quality control and external quality assessment
- Improve EQA performance by eliminating any undetected bias
- Facilitate regulatory compliance
- Reduce false rejections through the use of QC multi-rules
- Increase confidence in assigned QC target values
- Rapid and effective troubleshooting therefore shorter delays in reporting

With Acusera 24•7, peer group data is uniquely updated every 24 hours, giving you access to the most up-to-date information available. Access to relevant peer group data enables rapid and effective troubleshooting, it may even help to identify errors earlier.

Acusera Advisor

Acusera Advisor is an optional tool designed to help laboratories select an optimum QC strategy for each individual test in use. Not only will the advisor tool recommend a set of QC multi-rules, it will also suggest a minimum QC frequency based on the performance of the method in question.

Dashboard

The unique Dashboard interface is displayed each time a user logs onto the software, conveniently displaying all alerted or rejected QC results that have fallen outside defined performance limits and multi-rules in the last seven days.

Multiple Comparisons

With Acusera 24•7 Live Online, users have the ability to add multiple instruments, parameters and lots onto the same interactive Levey-Jennings, Histogram or Participant Summary Chart. The ability to combine data enables users to identify and assess trends in QC data or a bias between instruments. Automatically generated by the software, charts can be based on either Standard Deviation or Percentage Deviation.

Peer Group Statistics

Uniquely updated every 24 hours, users can customise peer groups depending on their instrument, methods or reagents. Peer Group Reporting allows users to compare the performance of their own instrument and/or assay method against other laboratories using the same lot of control but with a different instrument and/or method. Statistics are generated from up to 20,000 laboratory participants.

Audit Trail Report

The comprehensive Audit Trail Report provides a secure, electronic record of the creation, modification and deletion of data. This effective method of documenting the review process can help laboratories meet regulatory requirements and gain accreditation.

Acusera 24•7 Connect

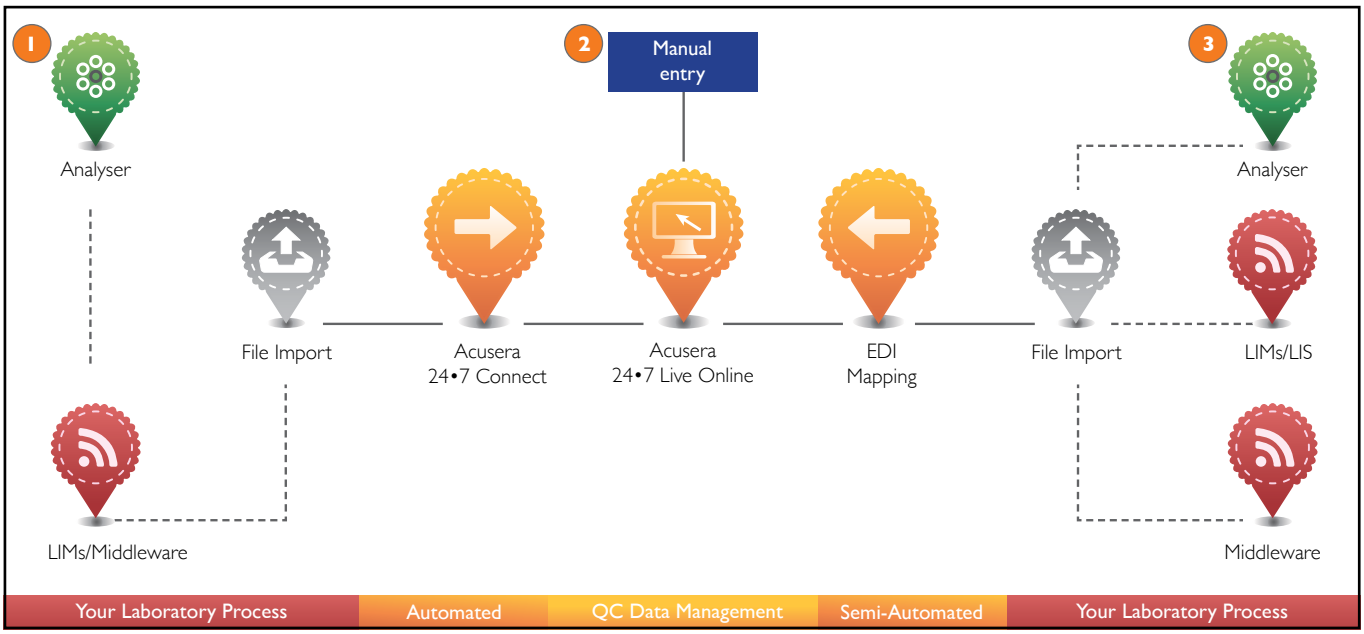
Our fully automated connectivity solution is designed to meet the needs of all laboratory types and sizes. QC data can be quickly and efficiently imported from your laboratory, LIS or middleware to Acusera 24•7 Live Online.

- Eliminates issues associated with manual data entry
- Increases productivity and efficiency
- Automatic import of QC data to 24•7
- Captures and imports only QC data
- Continue to use standard LIS QC reports

QC Result Capture Options

The diagram below demonstrates the three different methods of transferring QC data to Acusera 24•7 Live Online

1 Fully automated import via Acusera 24•7 Connect
2 Manual data entry
3 Semi-automated import via EDI Mapping



Ordering details

Description	Catalogue Number
Acusera 24•7 Live Online Registration and Year 1 License	QC4218
Acusera 24•7 Live Online Subsequent 12 Month License	QC4204
Acusera 24•7 Connect*	QC4205
Acusera 24•7 Live Upgrade	QC4220
Acusera 24•7 Live Online Training	QC4221
Acusera 24•7 Advisor	QC4223

*pending site survey completion

RIQAS

Section 19

Randox International Quality Assessment Scheme

RANDOX INTERNATIONAL QUALITY ASSESSMENT SCHEME (RIQAS)

RIQAS is the largest global EQA scheme, used by more than 28,000 laboratory participants in over 105 countries. This large number of participants makes RIQAS the best quality EQA scheme in the world and ensures an extensive database of results for many analytical methods, directly increasing statistical validity as a result.

FEATURES AND BENEFITS

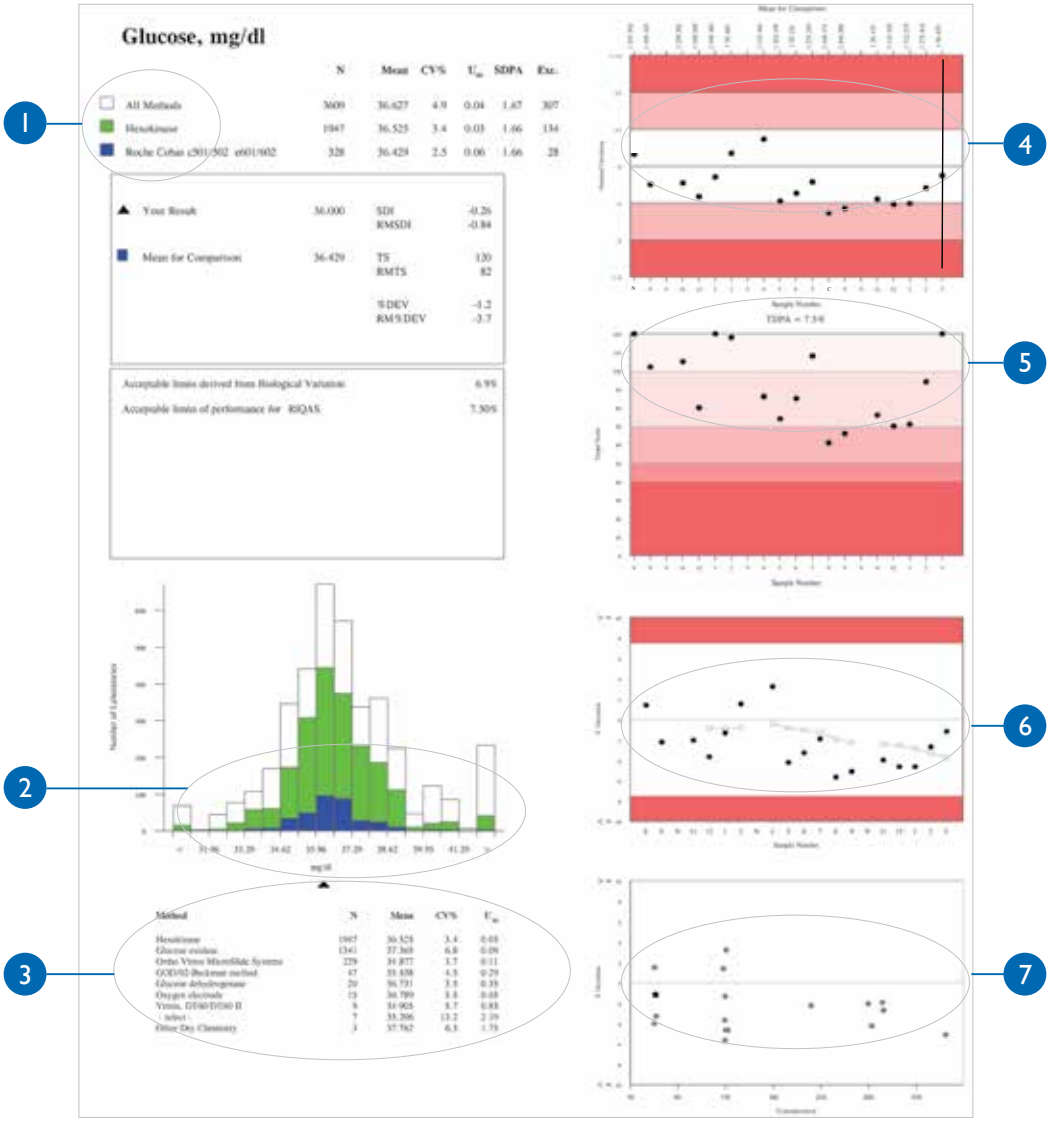
- RIQAS systems and procedures are accredited to a number of internationally recognised standards including ISO/IEC 17043:2010
- Human samples free from interfering preservatives increase confidence that EQA performance mirrors performance of patient samples
- A wide range of parameters are available covering a wide spectrum of laboratory tests allowing for effective consolidation of existing EQA programmes
- User friendly reports provide a statistical breakdown of results by method and instrument, allowing analytical performance to be assessed at a glance. Levey Jennings and Histogram charts identify trends, biases and precision problems, while the unique Target Scoring chart grades performance in a moving window for the last 20 samples
- Regular reports with rapid turnaround times ensure corrective actions can be taken as soon as possible. Reports returned in 2 - 3 days
- Reduced parameter options for selected programmes offer greater flexibility, ensuring suitability for laboratories of all sizes and budgets
- Participant certificates provide evidence of participation in a reputable EQA scheme
- Laboratories can register up to five instruments for each parameter at no extra cost. Individual reports for each instrument plus a unique multi-instrument report are provided.
- Interlaboratory group reports allow comparison of multiple connected laboratories at no extra cost
- RIQAS support staff are on hand to offer advice and troubleshoot technical queries
- Submit results and view reports online via RIQAS.net

STANDARD REPORT

The unique target scoring system was developed to provide a simple interpretation of your laboratory's performance. The system will present the performance of your results for each RIQAS sample and also show how your laboratory's performance varies with time.

Laboratories can register up to five instruments for each parameter at no extra cost. Individual reports for each instrument plus a unique multi-instrument report are provided.

Performance data is presented in a one page format with up to seven sub-reports



1	Text Section:	Statistics for all methods, your method and instrument group (programme specific)
2	Histogram:	Method and instrument comparison
3	Multi Method Stat Section:	Enables assessment of the performance of each method
4	Levey-Jennings Chart:	Details features of your laboratory's performance
5	Target Score:	This unique chart provides a numerical index of performance, allowing at a glance assessment
6	% Deviation by Sample:	Helps to identify trends and shifts in performance
7	% Deviation by Concentration:	Rapid assessment of concentration related biases

AMMONIA / ETHANOL PROGRAMME +

RQ9164
2 parameters (Ammonia / Ethanol)

Samples every month, 1 x 12 month cycle, 12 months subscription, liquid ready-to-use.

Ammonia*
Ethanol*

BLOOD GAS PROGRAMME *With target scoring*

RQ9134
First registered instrument
10 Parameters

RQ9134/A
Subsequent instruments
10 Parameters

*** Note to participants with multiple instruments on the Blood Gas Programme**
RQ9134 must be purchased for the first registered instrument and individual RQ9134/A kits for every subsequently registered instrument.

Samples every month, 1 x 12 month cycle, 12 months subscription, liquid ready-to-use.

pCO2	tCO2	K+	Lactate
pH	Ca++	Na+	
pO2	Cl-	Glucose	

BNP PROGRAMME+

RQ9165
1 parameter (BNP alone)

RQ9165/a
Order with RQ9136/a when BNP and Liquid Cardiac parameters are required

Samples every month, 1 x 12 month cycle, 12 months subscription, liquid ready-to-use.

BNP*

CARDIAC PROGRAMME *With target scoring*

RQ9127/a
2 Parameters only (choose from 7)

RQ9127/b
Full 7 Parameters

Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, lyophilised.

CK, Total	CK-MB Mass units	Myoglobin	Troponin T
CK-MB Activity units	Homocysteine	Troponin I	

COAGULATION PROGRAMME *With target scoring*

RQ9135/a
5 Selected Parameters only (aPTT, PT, TT, Fibrinogen, Antithrombin III)

RQ9135/b
Full 17 Parameters

Samples every month, 1 x 12 month cycle, 12 month subscription, lyophilised.

aPTT	Plasminogen	Factor VII	Factor XII
PT (including INR)	Protein C	Factor VIII	D-Dimer*
TT	Protein S	Factor IX	
Fibrinogen	Factor II	Factor X	
Antithrombin III	Factor V	Factor XI	

ESR PROGRAMME+

RQ9163
1 parameter (ESR)

2 samples per quarterly distribution, 1 x 12 month cycle, 12 months subscription, liquid ready-to-use.

ESR*

GENERAL CLINICAL CHEMISTRY PROGRAMMES *With target scoring*

RQ9112
10 Parameters only

RQ9112/S
17 Parameters only

RQ9113
Full 50 Parameters

Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, lyophilised.

Acid phosphatase, prostatic	Calcium, ionised	HDL-Cholesterol	Sodium
Acid phosphatase, total	Chloride	Iron	TIBC
Albumin	Cholesterol	Lactate	Free T3
Alkaline phosphatase	Cholinesterase	LD (LDH)	Total T3
ALT (ALAT)	CK, total (CPK)	Lipase	Free T4
Amylase, pancreatic	Copper	Lithium	Total T4
Amylase, total	Creatinine	Magnesium	Triglycerides
AST (ASAT)	D-3-hydroxybutyrate	NEFA*	TSH
Bicarbonate	Fructosamine	Osmolality	Urea
Bile acids	Gamma GT	Phosphate, inorganic	Uric acid
Bilirubin, direct	GLDH	Potassium	Zinc
Bilirubin, total	Glucose	Protein, total	
Calcium	HBDH	PSA	

PURPLE = The only parameters available on RQ9135/a

+ = Not accredited to ISO/IEC 17043

* = Pilot study ongoing

GLYCATED HAEMOGLOBIN PROGRAMME (HbAlc) *With target scoring*

RQ9129
2 Parameters
Samples every month, 1 x 12 month cycle, 12 month subscription, lyophilised.

HbA1c	Total Haemoglobin

HAEMATOLOGY PROGRAMME *With target scoring*

RQ9118
11 Parameters
Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, liquid ready-to-use.

Haematocrit (HCT)	Mean Cell Haemoglobin Concentration (MCHC)	Platelets (PLT)	Red Cell distribution width (RDW)
Haemoglobin (Hb)	Mean Cell Volume (MCV)	Plateletcrit (PCT)	Total White Blood Cell Count (WBC)
Mean Cell Haemoglobin (MCH)	Mean Platelet Volume (MPV)	Red Blood Cell Count (RBC)	

HUMAN URINE PROGRAMME *With target scoring*

RQ9115
245Parameters
Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, lyophilised.

Albumin Creatinine Ratio (ACR) *	Creatinine	Magnesium	Urea
Albumin/Microalbumin	Dopamine	Osmolality	Uric acid
Amylase	Epinephrine	Oxalate	VMA
Calcium	Glucose	Phosphate, inorganic	5-HIAA
Chloride	Metanephrine	Potassium	
Copper	Norepinephrine	Protein, total	
Cortisol	Normetanephrine	Sodium	

IMMUNOASSAY PROGRAMMES *With target scoring*

RQ9125/a	**RQ9125/b**	**RQ9125/c**	**RQ9130 (monthly)**
4 Parameters only (choose from 55)	13 Parameters only (choose from 55)	Full 55 Parameters	Full 55 Parameters

Samples every 2 weeks, 2 x 6 monthly cycles (RQ9125/a, RQ9125/b, RQ9125/c), 12 month subscription - Samples every month, 1 x 12 month cycle (RQ9130), 12 month subscription

ACTH	Digoxin	Phenobarbital	Testosterone, total
AFP	Estriol Total*	Phenytoin	Theophylline
Aldosterone	Ethosuximide*	Primidone*	Thyroglobulin
Amikacin*	Ferritin	Progesterone	Tobramycin*
Androstenedione*	Folate	Prolactin	TSH
Beta-2-microglobulin	FSH	Free PSA	Valproic acid
CA125	Gentamicin	Total PSA	Vancomycin
CA15-3	GH	PTH	Vitamin B12
CA19-9	hCG	Salicylate*	1-25-$(OH)_2$-Vitamin D*
Carbamazepine	IgE	SHBG	25-OH-Vitamin D
CEA	Insulin	Free T3	
Cortisol	LH	Total T3	
C-peptide	Oestradiol	Free T4	
DHEA-S	17-OH-progesterone	Total T4	
DHEA, Unconjugated	Paracetamol	Testosterone, free*	

IMMUNOASSAY SPECIALITY 1 PROGRAMME+

RQ9141
10 Parameters
Samples every month, 1 x 12 month cycle, 12 month subscription, lyophilised.

1-25-$(OH)_2$-Vitamin D	Anti-TG	Osteocalcin	Insulin
25-OH-Vitamin D	Anti-TPO	Procalcitonin	
C-Peptide	IGF-1	PTH	

IMMUNOASSAY SPECIALITY 2 PROGRAMME+

RQ9142
5 Parameters
Samples every month, 1 x 12 month cycle, 12 month subscription, lyophilised.

Calcitonin	Procalcitonin	Renin, direct concentration
Gastrin	Plasma Renin Activity	

LIPID PROGRAMME *With target scoring*

RQ9126/a	**RQ9126/b**
3 Parameters only (choose from 7)	Full 7 Parameters

Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, lyophilised.

Apolipoprotein A1	Cholesterol, total	LDL-Cholesterol	Triglycerides
Apolipoprotein B	HDL-Cholesterol	Lipoprotein (a)	

LIQUID CARDIAC PROGRAMME *With target scoring*

RQ9136
9 parameters (No BNP)

RQ9136/a
Order with RQ9165/a when BNP and Liquid Cardiac parameters are required

Samples every month, 1 x 12 month cycle, 12 months subscription, liquid ready-to-use.

CK-MB Mass	Homocysteine	NT proBNP
D-Dimer	hsCRP	Troponin I
Digoxin	Myoglobin	Troponin T

MATERNAL SCREENING PROGRAMME *With target scoring*

RQ9137
6 Parameters

Samples every month, 1 x 12 month cycle, 12 month subscription, lyophilised.

AFP	Total hCG	PAPP-A
Free Beta hCG	Inhibin A	Unconjugated Oestriol

SEROLOGY (EBV) PROGRAMME+

RQ9153
3 Parameters

3 Samples per quarterly distribution, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results, liquid ready-to-use.

Anti-EBV VCA IgG	Anti-EBNA IgG	Anti-EBV VCA IgM

SEROLOGY (HIV/HEPATITIS) PROGRAMME+

RQ9151
10 Parameters

5 Samples per quarterly distribution, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results only, liquid ready-to-use.

Anti-CMV (total)	Anti-HIV-1	Anti-HTLV-I	HBsAg
Anti-HBc	Anti-HIV-2	Anti-HTLV-II	
Anti-HCV	Anti-HIV-Combi	Anti-HTLV-Combi	

SEROLOGY (SYPHILIS) PROGRAMME+

RQ9154
1 Parameter

3 Samples per quarterly distribution, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results, liquid ready-to-use.

Syphilis (Methods available include Immunoassay RPR, VDRL and TPHA)

SEROLOGY (ToRCH) PROGRAMME+

RQ9152
12 Parameters

5 Samples per quarterly distribution, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results, liquid ready-to-use.

Anti-Toxoplasma IgG	Anti-Rubella IgM	Anti-HSV1 IgG	Anti-HSV2 IgM
Anti-Toxoplasma IgM	Anti-CMV IgG	Anti-HSV1 IgM	Anti-HSV-1&2 IgG Combined
Anti-Rubella IgG	Anti-CMV IgM	Anti-HSV2 IgG	Anti-HSV-1&2 IgM Combined

SPECIFIC PROTEINS PROGRAMME *With target scoring*

RQ9114 (3 ml)
26 Parameters

RQ9160 (2 ml)

RQ9161 (1 ml)

Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, liquid ready-to-use.

AFP	Beta-2-microglobulin	Immunoglobulin A	Total Lambda Light Chain
Albumin	Ceruloplasmin	Immunoglobulin E	Prealbumin (Transthyretin)
Alpha-1-acid glycoprotein	Complement, C3	Immunoglobulin G	Retinol Binding Protein
Alpha-1-antitrypsin	Complement, C4	Immunoglobulin M	Rheumatoid Factor
Alpha-2-macroglobulin	C-Reactive Protein	Free Kappa Light Chain	Transferrin
Anti Streptolysin O	Ferritin	Total Kappa Light Chain	
Antithrombin III	Haptoglobin	Free Lambda Light Chain	

THERAPEUTIC DRUGS PROGRAMME *With target scoring*

RQ9111
18 Parameters

Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, Weighed-in values, lyophilised.

Amikacin	Ethosuximide	Phenobarbital	Tobramycin
Caffeine	Gentamicin	Phenytoin	Valproic acid
Carbamazepine	Lithium	Primidone	Vancomycin
Cyclosporine	Methotrexate	Salicylic acid	
Digoxin	Paracetamol (Acetaminophen)	Theophylline	

URINALYSIS PROGRAMME+

RQ9138
14 Parameters

Samples every 2 months 1 x 12 month cycle, 12 month subscription, liquid ready-to-use.

Albumin	Galactose	Leukocytes	Specific Gravity
Bilirubin	Glucose	Nitrite	Urobilinogen
Blood	hCG	pH	
Creatinine	Ketones	Protein	

URINE TOXICOLOGY PROGRAMME+

RQ9139
20 Parameters

Samples every month, 1 x 12 month cycle, 12 month subscription, liquid ready-to-use.

Benzoylecgonine	d-Amphetamine	Lorazepam	Nortriptyline
Buprenorphine	d-Methamphetamine	LSD	Oxazepam
Cannabinoids (THC)	EDDP	MDMA	Phencyclidine
Cotinine*	Ethanol	Methadone	Phenobarbital
Creatinine	Free Morphine	Norpropoxyphene	Secobarbital

Analyte Index

Antioxidant Controls
Blood Gas
Cardiac Controls
Clinical Chemistry Controls
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		Glutathione Reductase	RANSEL	RANSOD	TAS	Blood Gas	Cardiac	Liquid Cardiac Control	High Sensitivity Troponin T	CK-MB	BNP Control	Myoglobin Calibrator	H-FABP Control	Liquid Assayed Chemistry Premium Plus	Chemistry Premium	Liquid Chemistry Premium	Assayed Chemistry Premium Plus	Liquid Chemistry Premium Plus	Precision Chemistry Premium Plus	Bovine Chemistry (Assayed)	Bovine Chemistry (Precision)	Clinical Chemistry Calibrator Serum	Aldolase	Ammonia/ Ethanol	Bilirubin (Elevated)	Glycerol	Multi Control & Calibrator	Coagulation	Haematology	Fructosamine	G-6-PDH	HbA1c	Haemoglobin F & A2	Adiponectin Control	Immunoassay Premium	Liquid Immunoassay Premium	Immunoassay Premium Plus	Liquid Immunoassay Premium Plus	Immunoassay Specialty I	Immunoassay Specialty II	Tumour Marker Control	Liquid Tumour Marker Control	Maternal Screening	Specific Proteins	CRP Liquid
#	7-amino flunitrazepam																																												
	17-OH-progesterone																																		×	×	×	×							
	17β Clostebol																																												
	5-HIAA																																												
A	Acetaminophen																																												
	Acid phosphatase, prostatic														×	×	×	×	×	×	×	×																							
	Acid phosphatase, total													×	×	×	×	×	×	×	×	×																							
	Acid phosphatase (non prostatic)																×			×		×																							
	ACTH																																		×		×	×							
	Adiponectin																																	×											
	AHD																																												
	Aldosterone																																		×	×	×	×							
	Alphafetoprotein (AFP)													×		×		×	×																×	×	×	×			×	×	×	×	
	Alpha-1-Antitrypsin													×		×		×	×																									×	
	Alpha-1-Acid Glycoprotein													×		×		×	×																									×	
	Alpha-HBDH													×	×	×	×	×	×	×	×	×																							
	Alpha-2-Macroglobulin																																											×	
	Alanine aminotransferase (ALT)													×	×	×	×	×	×	×	×	×																							
	Albumin													×	×	×	×	×	×	×	×	×																							×	
	Aldolase																						×																						
	Alkaline phosphatase (ALP)													×	×	×	×	×	×	×	×	×																							
	Alpha-1-globulin													×		×	×	×																											
	Alpha-2-globulin													×		×	×	×																											
	Amikacin													×				×																	×	×	×								
	Ammonia																							×			×																		
	AMOZ																																												
	Amphetamine																																												
	Amylase													×	×	×	×	×	×	×	×	×																							
	Amylase, pancreatic													×	×	×	×	×	×			×																							
	Androstenedione																																					×							
	Anti-thrombin III																											×																×	
	Anti-thyroglobulin (Anti-TG)																																						×						
	Anti-thyroperoxidase (Anti-TPO)																																					×	×						
	AOZ																																												
	aPTT																											×																	
	Apolipoprotein AI													×		×	×	×	×																										
	Apolipoprotein AII																																												
	Apolipoprotein B													×		×	×	×	×																										
	Apolipoprotein C III																																												
	Apolipoprotein CII																																												
	Apolipoprotein E																																												
	Anti-Streptolysin O																																											×	
	Aspartate Aminotransferase (AST)													×	×	×	×	×	×	×	×	×																							
B	Beta-Agonists																																												
	Basophils (BASO)																												×																
	Basophils % (% BASO)																												×																
	BASO-X																												×																
	BASO-Y																												×																
	Barbiturates group																																												
	Benzodiazepines 1 + 2																																												
	Benzoylecgonine																																												
	Benzylpiperazines																																												
	Beta-1-globulin													×		×	×	×																											
	Beta-2-Microglobulin													×				×																	×	×	×	×			×	×		×	
	Bicarbonate					×								×		×	×	×	×	×	×	×																							
	Bile acids													×		×	×	×	×	×	×	×																							
	Bilirubin, direct													×	×	×	×	×	×	×	×	×			×																				
	Bilirubin, total													×	×	×	×	×	×	×	×	×			×																				

Immunology/ Protein Controls
Lipid Controls
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	CSF	ASO Calibrator	b-2-Microglobulin Calibrator	Cystatin C	Immunoglobulin Calibrator	IgE Calibrator	IgG	Rheumatoid Factor Calibrator	Specific Protein Calibrator (For samples that do not require prediluting)	Specific Protein Calibrator (For samples that do require prediluting)	Lipid	Apolipoprotein Control & Calibrator	HDL/ LDL Cholesterol Calibrator	Lipoprotein (a)	sLDL Control	TDM Control	Drugs of Abuse Array I Plus Control	Drugs of Abuse Array II Control	Drugs of Abuse Array III Control	Drugs of Abuse Array IV Control	Drugs of Abuse Array V Control	Benzodiazepines Control	Cannabinoid Control	Ecstasy Control	EDDP Control	Ethanol Calibrator/Control Set	Multidrug Control	Assayed Urine Chemistry	Unassayed Urine Chemistry	Liquid Urine Control	Urinalysis	Microalbumin	Antimicrobials	Glutamine	Growth Promoters	Cellular Adhesion Molecules	Cerebral	Cytokines	Evidence Cardiac	Evidence Immunoassay	Endocrine	Metabolic Sydrome Control	Thyroid	Synthetic Steroids		
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B	Bath Salts 1																																												
	Bath Salts 2																																												
	Blood																																												
	Boldenone																																												
	BNP										x																																		
	Brain Derived Neurotropic Factor (BDNF)																																												
	Buprenorphine																																												
C	Cholesterol													x	x	x	x	x	x	x	x	x																							
	CK,Total						x							x	x	x	x	x	x	x	x	x																							
	CK-MB						x	x		x								x																												
	CA72-4																																								x	x			
	CA125																																				x	x			x	x			
	CA15-3																																				x	x			x	x			
	CA19-9																																				x	x			x	x			
	CA27-29																																									x			
	Ceruloplasmin													x		x		x	x																									x	
	Caffeine													x				x																											
	Calcitonin																																							x	x				
	Calcium					x								x	x	x	x	x	x	x	x	x																							
	Calcium (Ionised)													x	x	x		x																											
	Cannabinoids group																																												
	Carbamazepine													x		x		x	x																x	x	x	x							
	Carbonic Anhydrase III (CA III)																																												
	Carcinoembryonic Antigen (CEA)													x		x		x	x																x	x	x	x			x	x			
	Ceftiofur																																												
	Chloral Hydrate Metabolite																																												
	Chloramphenicol																																												
	Chloride					x								x	x	x	x	x	x	x	x	x																							
	Cholinesterase													x	x	x	x	x	x			x																							
	Cocaine group: Benzoylecgonine																																												
	Copper													x		x	x	x	x	x	x	x																							
	Corticosteroids																																												
	Cortisol													x		x	x	x	x	x	x														x	x	x	x							
	Complement C3													x		x		x	x																									x	
	Complement C4													x		x		x	x																									x	
	C-Peptide																																		x		x	x	x						
	C-Reactive Protein (CRP)													x		x		x	x																									x	x
	Creatinine													x	x	x	x	x	x	x	x	x																							
	Cyclosporine																																												
	Cystatin C																																												
	Cyfra 21																																								x	x			
D	D-3-hydroxybutyrate													x		x	x	x	x	x	x	x																							
	Dextromethorphan																																												
	D-Dimer							x																																					
	DHEA-Sulphate (DHEA-S)													x				x																	x	x	x	x							
	DIFF-X																												x																
	DIFF-Y																												x																
	Digoxin							x						x		x	x	x	x																x	x	x	x							
	Dopamine																																												
E	Ecstasy																																												
	EDDP																																												
	Electrophoresis													x			x																												
	Eosinophils (EOS)																												x																
	Eosinophils % (% EOS)																												x																
	Epidermal Growth Factor (EGF)																																												
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Page	CSF	ASO Calibrator	b-2-Microglobulin Calibrator	Cystatin C	Immunoglobulin Calibrator	IgE Calibrator	IgG	Rheumatoid Factor Calibrator	Specific Protein Calibrator (For samples that do not require precdilution)	Specific Protein Calibrator (For samples that do require precdilution)	Lipid	Apolipoprotein Control & Calibrator	HDL/ LDL Cholesterol Calibrator	Lipoprotein (a)	sLDL Control	TDM Control	Drugs of Abuse Array I Plus Control	Drugs of Abuse Array II Control	Drugs of Abuse Array III Control	Drugs of Abuse Array IV Control	Drugs of Abuse Array V Control	Benzodiazepines Control	Cannabinoid Control	Ecstasy Control	EDDP Control	Ethanol Calibrator/Control Set	Multidrug Control	Assayed Urine Chemistry	Unassayed Urine Chemistry	Liquid Urine Control	Urinalysis	Microalbumin	Antimicrobials	Glutamine	Growth Promoters	Cellular Adhesion Molecules	Cerebral	Cytokines	Evidence Cardiac	Evidence Immunoassay	Endocrine	Metabolic Sydrome Control	Thyroid	Synthetic Steroids		
	38	36	36	36	37	37	37	37	38	38	41	41	42	42	42	56	61	61	62	62	63	65	63	63	64	64	64	53	53	54	54	54	81	23	82	82	82,83	83,84	85	86	85	87	87	86		
																					×																								Bath Salts 1	B
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×																												×	×	×															Chloride	
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																												×		×											×				Cortisol	
									×																																				Complement C3	
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																																										×			C-Peptide	
									×																												×								C-Reactive Protein (CRP)	
																	×	×	×	×								×	×	×	×															Creatinine	
																×																													Cyclosporine	
			×																																										Cystatin C	
																																													Cyfra 21	
																																													D-3-hydroxybutyrate	D
																				×																									Dextromethorphan	
																																					×								D-Dimer	
																																									×				DHEA-Sulphate (DHEA-S)	
																																													DIFF-X	
																																													DIFF-Y	
																×																													Digoxin	
																												×																	Dopamine	
																								×																					Ecstasy	E
																									×																				EDDP	
																																													Electrophoresis	
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E	E-Selectin																																													
	Escitalopram																																													
	Estriol																																			x	x	x								
	Ethanol														x		x		x						x																					
	Ethinylestradiol																																													
	Ethosuximide																																			x	x	x								
	EthylGlucuronide																																													
F	Factor II																												x																	
	Factor V																												x																	
	Factor VII																												x																	
	Factor VIII																												x																	
	Factor IX																												x																	
	Factor X																												x																	
	Factor XI																												x																	
	Factor XII																												x																	
	Fatty Acid Binding Protein (FABP)																																													
	Fentanyl																																													
	Ferritin														x		x		x	x																x	x	x	x			x	x		x	
	Fibrinogen																												x																	
	Fluoxetine																																													
	Folate														x		x	x	x	x																x	x	x	x							
	Follicle Stimulating Hormone (FSH)														x				x																	x	x	x	x							
	Free thyroxine (FT4)														x		x	x	x	x	x	x														x	x	x	x							
	Free tri-iodothyronine (FT3)														x		x		x	x																x	x	x	x							
	Fructosamine																														x															
	FSC-X																													x																
G	G-6-PDH																															x														
	Gentamicin														x		x	x	x	x																x	x	x	x							
	Gestagens (generic)																																													
	Gamma-Globulin														x		x	x	x																											
	Gamma GT														x	x	x	x	x	x	x	x	x																							
	Gastrin																																								x					
	Growth Hormone (GH)																		x																	x	x	x	x							
	GLDH														x	x	x	x	x	x	x	x	x																							
	Glial Fibrillary Acidic Protein (GFAP)																																													
	Glucose						x								x	x	x	x	x	x	x	x	x					x																		
	Glutamate																											x																		
	Glutamine																																													
	Glutathione Peroxidase (RANSEL)			x																																										
	Glutathione Reductase (GR)		x																																											
	Glycerol																										x																			
	Glycogen Phosphorylase BB (GPBB)																																													
	GM-CSF																																													
H	Haematocrit (HCT)																													x																
	Haemoglobin (HGB)																													x																
	Haemopioetic Progenitor Cell (HPC)																													x																
	Haloperidol																																													
	Haptoglobin														x		x		x	x																										x	
	Haemoglobin (Total)																																x													
	HbA2																																	x												
	HbA1c																																x													
	HbF																																	x												
	HbS																																	x												
	hCG														x		x		x	x																x	x	x	x			x	x	x		
	hCG (Free beta)																																											x		
	HDL Cholesterol														x		x	x	x	x																										

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																																					×										E-Selectin	E
																				×																											Escitalopram	
																																															Estriol	
																										×																					Ethanol	
																																													×	Ethinylestradiol	
																×																															Ethosuximide	
																			×																												EthylGlucuronide	
																																															Factor II	F
																																															Factor V	
																																															Factor VII	
																																															Factor VIII	
																																															Factor IX	
																																															Factor X	
																																															Factor XI	
																																															Factor XII	
																																						×										Fatty Acid Binding Protein (FABP)	
																		×	×																													Fentanyl	
									×																																	×					Ferritin	
																																															Fibrinogen	
																				×																												Fluoxetine	
																																															Folate	
																																									×						Follicle Stimulating Hormone (FSH)	
																																									×			×			Free thyroxine (FT4)	
																																									×			×			Free tri-iodothyronine (FT3)	
																																															Fructosamine	
																																															FSC-X	
																																															G-6-PDH	G
																×																															Gentamicin	
																																													×	Gestagens (generic)	
×																																															Gamma-Globulin	
																																															Gamma GT	
																																															Gastrin	
																																															Growth Hormone (GH)	
																																															GLDH	
																																						×									Glial Fibrillary Acidic Protein (GFAP)	
×																												×	×	×	×																Glucose	
																																															Glutamate	
																																		×													Glutamine	
																																															Glutathione Peroxidase (RANSEL)	
																																															Glutathione Reductase (GR)	
																																															Glycerol	
																																															Glycogen Phosphorylase BB (GPBB)	
																																							×	×							GM-CSF	
																																															Haematocrit (HCT)	H
																																															Haemoglobin (HGB)	
																																															Haemopioetic Progenitor Cell (HPC)	
																				×																											Haloperidol	
									×																																						Haptoglobin	
																																															Haemoglobin (Total)	
																																															HbA2	
																																															HbA1c	
																																															HbF	
																																															HbS	
																															×	×																hCG	
																																															hCG (Free beta)	
											×		×																																		HDL Cholesterol	

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		Glutathione Reductase	RANSEL	RANSOD	TAS	Blood Gas	Cardiac	Liquid Cardiac Control	High Sensitivity Troponin T	CK-MB	BNP Control	Myoglobin Calibrator	H-FABP Control	Liquid Assayed Chemistry Premium Plus	Chemistry Premium	Liquid Chemistry Premium	Assayed Chemistry Premium Plus	Liquid Chemistry Premium Plus	Precision Chemistry Premium Plus	Bovine Chemistry (Assayed)	Bovine Chemistry (Precision)	Clinical Chemistry Calibrator Serum	Aldolase	Ammonia/ Ethanol	Bilirubin (Elevated)	Glycerol	Multi Control & Calibrator	Coagulation	Haematology	Fructosamine	G-6-PDH	HbA1c	Haemoglobin F & A2	Adiponectin Control	Immunoassay Premium	Liquid Immunoassay Premium	Immunoassay Premium Plus	Liquid Immunoassay Premium Plus	Immunoassay Speciality I	Immunoassay Speciality II	Tumour Marker Control	Liquid Tumour Marker Control	Maternal Screening	Specific Proteins	CRP Liquid
H	H-FABP												x																																
	Homocysteine						x																															x							
	hsCRP							x																																					
I	Ibuprofen																																												
	IgA													x	x	x	x	x	x																									x	
	IgE													x		x		x	x																x	x	x	x						x	
	IgG													x	x	x	x	x	x																									x	
	IgM													x	x	x	x	x	x																									x	
	Inhibin A																																		x	x	x						x		
	Insulin																																		x	x	x	x	x						
	Insulin Like Growth Factor (IGF-I)																																					x	x						
	Intercellular Adhesion Molecule-I (ICAM-I)																																												
	Interferon-gamma (IFN-γ)																																												
	Interleukin-I alpha (IL-I a)																																												
	IMIDC																												x																
	IMIRF																												x																
	Immature Granulocytes (IG)																												x																
	Immature Granulocytes % (% IG)																												x																
	Immature Myeloid Information (IMI)																												x																
	Immature Platelet Fraction (IPF)																												x																
	Interleukin-1 beta (IL-1b)																																												
	Interleukin-10 (IL-10)																																												
	Interleukin-12p70 (IL-12 p70)																																												
	Interleukin-13 (IL-13)																																												
	Interleukin-15 (IL-15)																																												
	Interleukin-2 (IL-2)																																												
	Interleukin-23 (IL-23)																																												
	Interleukin-3 (IL-3)																																												
	Interleukin-4 (IL-4)																																												
	Interleukin-5 (IL-5)																																												
	Interleukin-6 (IL-6)																																												
	Interleukin-7 (IL-7)																																												
	Interleukin-8 (IL-8)																																												
	Iron													x	x	x	x	x	x	x	x	x																							
K	Kappa Light Chain																																											x	
	Kappa Light Chain (free)																																											x	
	Ketamine																																												
	Ketones																																												
L	Lambda Light Chain																																											x	
	Lambda Light Chain (free)																																											x	
	Lactate					x								x	x	x	x	x	x	x	x	x					x																		
	LAP													x	x	x	x	x	x			x																							
	LDH													x	x	x	x	x	x	x	x	x																							
	Leptin																																												
	LDL Cholesterol													x		x		x																											
	Leukocytes																																												
	Luteinising Hormone (LH)													x				x																	x	x	x	x							
	Lipase													x	x	x	x	x	x	x	x	x																							
	Lipoprotein (a)													x		x		x																											
	Lithium													x	x	x	x	x	x	x	x	x																							
	L-Selectin																																												
	Lymphocytes (LYMPH)																												x																
	Lymphocytes % (% LYMPH)																												x																
	Lysergic Acid Diethylamide (LSD)																																												
M	MIP-1a																																												
	Magnesium													z	z	z	z	z	z	z	z	z																							

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	38	36	36	36	37	37	37	37	38	38	41	41	42	42	42	56	61	61	62	62	63	65	63	63	64	64	64	53	53	54	54	54	81	23	82	82	82,83	83,84	85	86	85	87	87	86		
																																					×		×						H-FABP	H
																																													Homocysteine	
																																													hsCRP	
																	×			×																									Ibuprofen	I
					×				×	×																																			IgA	
						×																																							IgE	
×					×		×		×	×																																			IgG	
					×				×	×																																			IgM	
																																													Inhibin A	
																																										×			Insulin	
																																													Insulin Like Growth Factor (IGF-I)	
																																				×									Intercellular Adhesion Molecule-I (ICAM-I)	
																																						×							Interferon-gamma (IFN-γ)	
																																						×				×			Interleukin-I alpha (IL-I a)	
																																													IMIDC	
																																													IMIRF	
																																													Immature Granulocytes (IG)	
																																													Immature Granulocytes % (% IG)	
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																																						×							Interleukin-1 beta (IL-1b)	
																																						×							Interleukin-10 (IL-10)	
																																						×							Interleukin-12p70 (IL-12 p70)	
																																						×							Interleukin-13 (IL-13)	
																																						×							Interleukin-15 (IL-15)	
																																						×							Interleukin-2 (IL-2)	
																																						×							Interleukin-23 (IL-23)	
																																						×							Interleukin-3 (IL-3)	
																																						×							Interleukin-4 (IL-4)	
																																						×							Interleukin-5 (IL-5)	
																																					×	×				×			Interleukin-6 (IL-6)	
																																						×							Interleukin-7 (IL-7)	
																																						×							Interleukin-8 (IL-8)	
																																													Iron	
																																													Kappa Light Chain	K
																																													Kappa Light Chain (free)	
																		×	×																											Ketamine	
																															×															Ketones	
																																													Lambda Light Chain	L
																																													Lambda Light Chain (free)	
×																																													Lactate	
																																													LAP	
																																													LD	
																																									×	×			Leptin	
											×		×																																LDL Cholesterol	
																															×															Leukocytes	
																																								×					Luteinising Hormone (LH)	
																																													Lipase	
											×			×																															Lipoprotein (a)	
																×																													Lithium	
																																				×									L-Selectin	
																																													Lymphocytes (LYMPH)	
																																													Lymphocytes % (% LYMPH)	
																		×																											Lysergic Acid Diethylamide (LSD)	
																																						×							MIP-1a	M
																												z	z	z															Magnesium	

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		Glutathione Reductase	RANSEL	RANSOD	TAS	Blood Gas	Cardiac	Liquid Cardiac Control	High Sensitivity Troponin T	CK-MB	BNP Control	Myoglobin Calibrator	H-FABP Control	Liquid Assayed Chemistry Premium Plus	Chemistry Premium	Liquid Chemistry Premium	Assayed Chemistry Premium Plus	Liquid Chemistry Premium Plus	Precision Chemistry Premium Plus	Bovine Chemistry (Assayed)	Bovine Chemistry (Precision)	Clinical Chemistry Calibrator Serum	Aldolase	Ammonia/ Ethanol	Bilirubin (Elevated)	Glycerol	Multi Control & Calibrator	Coagulation	Haematology	Fructosamine	G-6-PDH	HbA1c	Haemoglobin F & A2	Adiponectin Control	Immunoassay Premium	Liquid Immunoassay Premium	Immunoassay Premium Plus	Liquid Immunoassay Premium Plus	Immunoassay Speciality I	Immunoassay Speciality II	Tumour Marker Control	Liquid Tumour Marker Control	Maternal Screening	Specific Proteins	CRP Liquid
M	Matrix Metalloproteinase-9 (MMP-9)																																												
	MDMA																																												
	Mean Corpuscular Volume (MCV)																												×																
	Mean Corpuscular Haemoglobin (MCH)																												×																
	Mean Corpuscular Haemoglobin Concentration(MCHC)																												×																
	Mean Platelet Volume (MPV)																												×																
	Meprobamate																																												
	Medroxyprogesteron Acetate																																												
	Meperidine																																												
	Metanephrine																																												
	Methadone																																												
	Methandriol																																												
	Methamphetamine																																												
	Methaqualone																																												
	Mescaline																																												
	Methotrexate																																												
	Methyltestosterone																																												
	Methylphenidate																																												
	Microalbumin																																												
	Monocytes (MONO)																												×																
	Monocytes % (% MONO)																												×																
	Morphine																																												
	Myoglobin						×	×				×		×		×		×	×																										
	MCP-1																																												
N	Nandrolone																																												
	NEFA																×		×	×	×																								
	Neuron-Specific Enolase (NSE)																																							×	×				
	Neutrophils (NEUT)																												×																
	Neutrophils % (% NEUT)																												×																
	NGAL																																												
	Nitrite																																												
	Norepinephrine																																												
	Normetanephrine																																												
	NT-proBNP							×																														×								
	Nucleated Red Blood Cells X (NRBC-X)																												×																
	Nucleated Red Blood Cells Y (NRBC-Y)																												×																
	Nucleated Red Blood Cells																												×																
	Nucleated Red Blood Cells % (% NRBC)																												×																
O	Oestradiol																																		×	×	×	×							
	Opiates group																																												
	Osmolality													×		×	×	×	×	×	×	×																								
	Osteocalcin																																						×						
	Oxalate																																												
	Oxazepam																																												
	Oxycodone																																												
P	Paracetamol													×		×	×	×	×																×	×	×	×							
	PAPP-A																																										×		
	pCO_2					×																																							
	pH					×																																							
	Phencyclidine																																												
	Phenobarbital													×		×		×	×																×	×	×	×							
	Phenytoin													×		×		×	×																×	×	×	×							
	Phenylpiperazines																																												
	Phosphate Inorganic													×	×	×	×	×	×	×	×	×																								
	Phosphorous																																												
	Plasminogen																											×																	
	Plasminogen Activator Inhibitor																																												

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	38	36	36	36	37	37	37	37	38	38	41	41	42	42	42	56	61	61	62	62	63	65	63	63	64	64	64	53	53	54	54	54	81	23	82	82	82,83	83,84	85	86	85	87	87	86		
																																						x							Matrix Metalloproteinase-9 (MMP-9)	M
																	x	x																											MDMA	
																																													Mean Corpuscular Volume (MCV)	
																																													Mean Corpuscular Haemoglobin (MCH)	
																																													Mean Corpuscular Haemoglobin Concentration(MCHC)	
																																													Mean Platelet Volume (MPV)	
																			x																										Meprobamate	
																																												x	Medroxyprogesteron Acetate	
																			x																										Meperidine	
																												x																	Metanephrine	
																	x										x																		Methadone	
																																												x	Methandriol	
																	x										x																		Methamphetamine	
																		x																											Methaqualone	
																					x																								Mescaline	
																x																													Methotrexate	
																																												x	Methyltestosterone	
																				x																									Methylphenidate	
																												x		x		x													Microalbumin	
																																													Monocytes (MONO)	
																																													Monocytes % (% MONO)	
																											x																		Morphine	
																																						x						Myoglobin	
																																						x						MCP-1	
																																			x										Nandrolone	N
																																													NEFA	
																																					x								Neuron-Specific Enolase (NSE)	
																																													Neutrophils (NEUT)	
																																													Neutrophils % (% NEUT)	
																															x						x									NGAL	
																															x															Nitrite	
																												x																		Norepinephrine	
																												x																		Normetanephrine	
																																													NT-proBNP	
																																													Nucleated Red Blood Cells X (NRBC-X)	
																																													Nucleated Red Blood Cells Y (NRBC-Y)	
																																													Nucleated Red Blood Cells	
																																													Nucleated Red Blood Cells % (% NRBC)	
																																							x						Oestradiol	O
																	x																												Opiates group	
																												x	x	x															Osmolality	
																																													Osteocalcin	
																												x																		Oxalate	
																						x																								Oxazepam	
																		x																												Oxycodone	
																x				x																										Paracetamol	P
																																													PAPP-A	
																																													pCO_2	
																														x	x															pH	
																	x																													Phencyclidine	
																x																														Phenobarbitone	
																x																														Phenytoin	
																					x																									Phenylpiperazines	
																														x																Phosphate	
																												x	x																	Phosphorous	
																																													Plasminogen	
																																										x				Plasminogen Activator Inhibitor	

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P	Platelet Distribution Width (PDW)																												×																
	Platelet Large Cell Ratio (P-LCR)																												×																
	Plateletcrit (PCT)																												×																
	Platetlets (PLT)																												×																
	Platetles Optical Count (PLT-O)																												×																
	pO_2					×																																							
	Potassium					×								×	×	×	×	×	×	×	×	×																								
	Prealbumin													×		×	×	×	×	×	×																								×	
	Primidone																																		×	×	×								
	Procalcitonin																																						×	×					
	Progesterone													×		×		×		×															×	×	×	×							
	Prolactin													×	×	×		×	×	×	×														×	×	×	×							
	Propoxyphene group																																												
	Protein																																												
	Protein C																											×																	
	Protein S																											×																	
	Protein, total													×	×	×	×	×	×	×	×	×																						×	×
	PSA (Total)													×			×		×	×	×														×	×	×	×			×	×			
	PSA (Free)																																		×	×	×	×			×	×			
	P-Selectin																																												
	PT																											×																	
	PTH (Intact)																																		×		×	×	×						
Q	Quinolones																																												
R	Ractopamine																																												
	Red Blood Cell X (RBC-X)																												×																
	Red Blood Cell Y (RBC-Y)																												×																
	Red Blood Cell Distribution Width CV (RDW-CV)																												×																
	Red Blood Cell Distribution Width SD (RDW-SD)																												×																
	Red Blood Cells (RBC)																												×																
	Red Blood Cells Optical Count (RBC-O)																												×																
	Renin																																							×					
	Resistin																																												
	Retinol Binding Protein (RBP)																																											×	
	Rheumatoid Factor (RF)																																											×	
S	Salicylate													×		×	×	×	×																×	×	×								
	Salicyluric																																												
	Salvinorin																																												
	Secoborbital																																												
	SEM																																												
	Sertraline																																												
	Sex Hormone Binding Globulin (SHBG)																																		×	×	×	×							
	sLDL																																												
	Sodium					×								×	×	×	×	×	×	×	×	×																							
	Soluble IL-2 Receptor Alpha (sIL-2Ra)																																												
	Soluble IL-6 Receptor (sIL-6R)																																												
	Specific Gravity																																												
	sTNFRI																																												
	sTNFRII																																												
	Stanozolol																																												
	Stilbenes																																												
	Streptomycin/Dihydrostreptomycin																																												
	Sulphachlorpyridazine																																												
	Sulphadiazine																																												
	Sulphadimethoxine																																												
	Sulphadoxine																																												
	Sulphamerazine																																												
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	CSF	ASO Calibrator	b-2-Microglobulin Calibrator	Cystatin C	Immunoglobulin Calibrator	IgE Calibrator	IgG	Rheumatoid Factor Calibrator	Specific Protein Calibrator (For samples that do not require prediluion)	Specific Protein Calibrator (For samples that do require prediluion)	Lipid	Apolipoprotein Control & Calibrator	HDL/ LDL Cholesterol Calibrator	Lipoprotein (a)	sLDL Control	TDM Control	Drugs of Abuse Array I Plus Control	Drugs of Abuse Array II Control	Drugs of Abuse Array III Control	Drugs of Abuse Array IV Control	Drugs of Abuse Array V Control	Benzodiazepines Control	Cannabinoid Control	Ecstasy Control	EDDP Control	Ethanol Calibrator/Control Set	Multidrug Control	Assayed Urine Chemistry	Unassayed Urine Chemistry	Liquid Urine Control	Urinalysis	Microalbumin	Antimicrobials	Glutamine	Growth Promoters	Cellular Adhesion Molecules	Cerebral	Cytokines	Evidence Cardiac	Evidence Immunoassay	Endocrine	Metabolic Sydrome Control	Thyroid	Synthetic Steroids		
																																													Platelet Distribution Width (PDW)	P
																																													Platelet Large Cell Ratio (P-LCR)	
																																													Plateletcrit (PCT)	
																																													Platelets (PLT)	
																																													Platelles Optical Count (PLT-O)	
																																													pO_2	
																												x	x	x															Potassium	
									x																																				Prealbumin	
																x																													Primidone	
																																													Procalcitonin	
																																								x					Progesterone	
																																								x					Prolactin	
																		x																											Propoxyphene group	
																															x														Protein	
																																													Protein C	
																																													Protein S	
	x																											x	x	x															Protein, total	
																																								x					PSA (Total)	
																																								x					PSA (Free)	
																																				x									P-Selectin	
																																													PT	
																																													PTH (Intact)	
																																	x												Quinolones	Q
																																			x										Ractopamine	R
																																													Red Blood Cell X (RBC-X)	
																																													Red Blood Cell Y (RBC-Y)	
																																													Red Blood Cell Distribution Width CV (RDW-CV)	
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																																													Red Blood Cells (RBC)	
																																													Red Blood Cells Optical Count (RBC-O)	
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																																													Retinol Binding Protein (RBP)	
								x	x																																				Rheumatoid Factor (RF)	
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																				x																									Salicyluric	
																					x																								Salvinorin	
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																																	x												SEM	
																				x																									Sertraline	
																																													Sex Hormone Binding Globulin (SHBG)	
															x																														sLDL	
	x																											x	x	x															Sodium	
																																						x							Soluble IL-2 Receptor Alpha (sIL-2Ra)	
																															x							x							Soluble IL-6 Receptor (sIL-6R)	
																														x	x							x							Specific Gravity	
																																					x	x							sTNFRI	
																																			x			x							sTNFRII	
																																			x										Stanozolol	
																																			x										Stilbenes	
																																	x												Streptomycin/Dihydrostreptomycin	
																																	x												Sulphachlorpyridazine	
																																	x												Sulphadiazine	
																																	x												Sulphadimethoxine	
																																	x												Sulphadoxine	
																																	x												Sulphamerazine	
																																	x												Sulphamethazine	

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			Glutathione Reductase	RANSEL	RANSOD	TAS	Blood Gas	Cardiac	Liquid Cardiac Control	High Sensitivity Troponin T	CK-MB	BNP Control	Myoglobin Calibrator	H-FABP Control	Liquid Assayed Chemistry Premium Plus	Chemistry Premium	Liquid Chemistry Premium	Assayed Chemistry Premium Plus	Liquid Chemistry Premium Plus	Precision Chemistry Premium Plus	Bovine Chemistry (Assayed)	Bovine Chemistry (Precision)	Clinical Chemistry Calibrator Serum	Aldolase	Ammonia/ Ethanol	Bilirubin (Elevated)	Glycerol	Multi Control & Calibrator	Coagulation	Haematology	Fructosamine	G-6-PDH	HbA1c	Haemoglobin F & A2	Adiponectin Control	Immunoassay Premium	Liquid Immunoassay Premium	Immunoassay Premium Plus	Liquid Immunoassay Premium Plus	Immunoassay Speciality I	Immunoassay Speciality II	Tumour Marker Control	Liquid Tumour Marker Control	Maternal Screening	Specific Proteins	CRP Liquid
S	Sulphamethizole																																													
	Sulphamethoxypyridazine																																													
	Sulphamethoxazole																																													
	Sulphapyridine																																													
	Sulphaquinoxaline																																													
	Sulphathiazole																																													
	Sulphisoxazole																																													
	Sulphamonomethoxine																																													
	Superoxide Dismutase (RANSOD)						x																																							
	Synthetic Cannabinoids																																													
T	TCA																																													
	Testosterone														x				x																	x	x	x	x							
	Testosterone (Free)																																			x	x	x								
	Tetracyclines																																													
	Theophylline														x		x	x	x	x																x	x	x	x							
	Thiamphenicol/Florfenicol																																													
	Thrombomodulin (TM)																																													
	Thyroglobulin																																			x		x	x	x	x	x	x			
	TIBC														x	x	x	x	x	x	x	x	x																							
	Tobramycin																	x		x																x	x	x	x							
	Total Lipids																					x																								
	Total Antioxidant Status (TAS)				x																																									
	Total Thyroxine (TT_4)														x		x	x	x	x	x	x														x	x	x	x							
	Total Tri-iodothyronine (TT_3)														x		x	x	x	x	x	x														x	x	x	x							
	Tramadol																																													
	Transferrin														x	x	x	x	x	x																									x	
	Trazadone																																													
	Trenbolone																																													
	Tricyclic Antidepressants																																													
	Triglycerides														x	x	x	x	x	x	x	x	x																							
	Trimethoprim																																													
	Troponin I							x	x											x																			x							
	Troponin T							x	x						x		x		x																				x							
	High Sensitivity Troponin T									x																																				
	TSH														x		x	x	x	x																x	x	x	x							
	Thrombin Time (TT)																																													
	T-Uptake														x				x																	x	x	x	x							
	Tumour Necrosis Factor-alpha (TNF-a)																																													
	Tylosin/Tilmicosin																																													
U	UIBC															x	x		x	x																											
	Unconjugated Estriol																																											x		
	Urea														x	x	x	x	x	x	x	x	x																							
	Uric acid														x	x	x	x	x	x	x	x	x																							
	Urobilinogen																																													
V	Valproic acid														x		x		x	x																x	x	x	x							
	Vancomycin														x		x		x	x																x	x	x	x							
	Vanillylmandelic Acid (VMA)																																													
	VCAM-1																																													
	VEGF																																													
	Vitamin B12														x		x	x	x	x																x	x	x	x							
	1-25-(OH_2)-Vitamin D																																			x		x		x						
	25-OH-Vitamin D																																			x		x	x	x						
W	White Blood Cells (WBC)																													x																
	White Blood Cells Differential (WBC-D)																													x																
Z	Zeronal																																													
	Zinc																																													
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Page	CSF	ASO Calibrator	b-2-Microglobulin Calibrator	Cystatin C	Immunoglobulin Calibrator	IgE Calibrator	IgG	Rheumatoid Factor Calibrator	Specific Protein Calibrator (For samples that do not require predilution)	Specific Protein Calibrator (For samples that do require predilution)	Lipid	Apolipoprotein Control & Calibrator	HDL/ LDL Cholesterol Calibrator	Lipoprotein (a)	sLDL Control	TDM Control	Drugs of Abuse Array I Plus Control	Drugs of Abuse Array II Control	Drugs of Abuse Array III Control	Drugs of Abuse Array IV Control	Drugs of Abuse Array V Control	Benzodiazepines Control	Cannabinoid Control	Ecstasy Control	EDDP Control	Ethanol Calibrator/Control Set	Multidrug Control	Assayed Urine Chemistry	Unassayed Urine Chemistry	Liquid Urine Control	Urinalysis	Microalbumin	Antimicrobials	Glutamine	Growth Promoters	Cellular Adhesion Molecules	Cerebral	Cytokines	Evidence Cardiac	Evidence Immunoassay	Endocrine	Metabolic Sydrome Control	Thyroid	Synthetic Steroids		
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																																	×												Sulphamethizole	S
																																	×												Sulphamethoxypyridazine	
																																	×												Sulphamethoxazole	
																																	×												Sulphapyridine	
																																	×												Sulphaquinoxaline	
																																	×												Sulphathiazole	
																																	×												Sulphisoxazole	
																																	×												Sulphamonomethoxine	
																																													Superoxide Dismutase (RANSOD)	
																					×																								Synthetic Cannabinoids	
																	×			×																									TCA	T
																																								×					Testosterone	
																																													Testosterone (Free)	
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																×																													Theophylline	
																																	×												Thiamphenicol/Florfenicol	
																																					×								Thrombomodulin (TM)	
																																													Thyroglobulin	
																																													TIBC	
																×																													Tobramycin	
																																													Total Lipids	
																																													Total Antioxidant Status (TAS)	
																																								×			×		Total Thyroxine (TT_4)	
																																								×			×		Total Tri-iodothyronine (TT_3)	
																				×																									Tramadol	
									×																																				Transferrin	
																				×																									Trazadone	
																																			×										Trenbolone	
																	×			×																									Tricyclic Antideppressants	
											×																																		Triglycerides	
																																	×												Trimethoprim	
																																							×						Troponin I	
																																													Troponin T	
																																													High Sensitivity Troponin T	
																																								×			×		TSH	
																																													Thrombin Time (TT)	
																																													T-Uptake	
																																						×				×		Tumour Necrosis Factor-alpha (TNF-a)	
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																																													UIBC	U
																																													Unconjugated Estriol	
																												×	×	×															Urea	
																												×	×	×															Uric acid	
																															×														Urobilinogen	
																×																													Valproic acid	V
																×																													Vancomycin	
																												×																	Vanillylmandelic Acid (VMA)	
																																				×									VCAM-1	
																																						×							VEGF	
																																													Vitamin B12	
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																																													White Blood Cells (WBC)	W
																																													White Blood Cells Differential (WBC-D)	
																			×																										Zeronal	Z
																			×																										Zinc	
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To find out more about Quality Control visit:
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RANDOX
QUALITY CONTROL

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LT027 DEC14

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