

RANDOX

# EQA PROGRAMMES

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# FEATURES AND BENEFITS

## Randox International Quality Assessment Scheme **RIQAS**

**RIQAS** is the largest international EQA scheme, used by more than 76,000 laboratory participants in over 140 countries worldwide. This large number of participants ensures an extensive database of results for many analytical methods, directly increasing statistical validity as a result.

### Benefits

#### Large Database of Users

- A high level of participation means peer group numbers are maximised whilst ensuring availability of data for a wide range of instruments and methods.

#### User-friendly Reports

- Simple one page per parameter format enables at-a-glance performance assessment, saving valuable laboratory time.
- Complimentary multi-instrument and interlaboratory reports allow comparative performance assessment of all laboratory systems and multiple connected laboratories.
- End-of-Cycle reports summarising performance compared to the previous cycle allow you to identify improvements in quality over time.

#### Cost Effective

- Our extensive range of multi-analyte programmes will reduce the number of individual programmes required to cover your test menu, saving both time and money.
- Reduced parameter options for selected programmes offer greater flexibility, ensuring suitability for laboratories of all sizes and budgets.
- Register up to five instruments per programme at no extra cost for comparative performance assessment.

#### Frequency

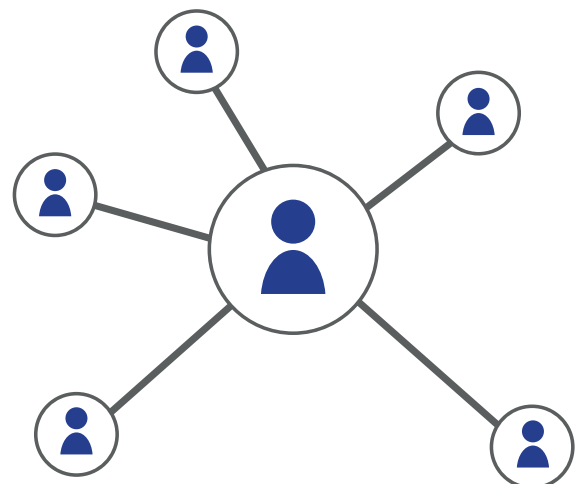
- Frequent reporting allows early identification of system errors and implementation of any necessary corrective actions with minimum disruption to the lab.
- With a turnaround of less than 72 hours for most reports, corrective action can be taken immediately reducing the time spent performing expensive re-tests.

#### High Quality Samples

- Samples spanning clinically relevant levels, allows identification of concentration related biases and ensures accurate instrument performance.
- Human samples free from interfering preservatives increase confidence that EQA performance mirrors the performance of patient samples.
- Reference method values are provided in the Clinical Chemistry and Immunosuppressant programmes for selected parameters and lots.

#### Accredited

- RIQAS is accredited to ISO/IEC 17043:2010 "Conformity Assessment – General Requirements for Proficiency Testing" which is accepted by national and international accreditation bodies. Please see accreditation schedule for additional information.



## Ammonia/Ethanol Programme *With target scoring*

RQ9164 (2 ml)  
2 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

Ammonia Ethanol

## Anti-Müllerian Hormone (AMH) Programme •

RQ9198 (1 ml)  
1 Parameter  
Samples every month, 1 x 12 month cycle, 12 month subscription

Anti-Müllerian Hormone (AMH)

## Anti-TSH Receptor Programme • *With target scoring*

RQ9174 (1 ml)  
1 Parameter  
Samples every month, 1 x 12 month cycle, 12 month subscription

Anti-TSH Receptor (TRAb)

## Blood Gas Programme *With target scoring*

RQ9134 (1.8 ml) First registered instrument 11 Parameters + 1 pilot Samples every month, 1 x 12 month cycle, 12 month subscription	RQ9134/A (1.8 ml) Subsequent instruments 11 Parameters + 1 pilot Samples every month, 1 x 12 month cycle, 12 month subscription
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Bicarbonate Ca <sup>++</sup> Cl <sup>-</sup>	CO <sub>2</sub> (Total) Glucose H <sup>+</sup> *	Lactate K <sup>+</sup> Na <sup>+</sup>	pCO <sub>2</sub> pH pO <sub>2</sub>
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## Blood Typing Programme+

RQ9206 (4 ml & 2 ml)  
6 Tests  
2 challenges per quarterly distribution, 1 x 12 month cycle, 12 month subscription

ABO Group Antibody Identification	Antibody Screen Antigen Typing	Compatibility (Cross-Match)	Rh(D)
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## BNP Programme • *With target scoring*

RQ9165 (1 ml)  
1 Parameter  
Samples every month, 1 x 12 month cycle, 12 month subscription

BNP

## Cardiac Programme *With target scoring*

RQ9127/a (1 ml) 2 Parameters only (choose from 7) Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription	RQ9127/b (1 ml) Full 7 Parameters Samples every month, 1 x 12 monthly cycle, 12 month subscription	RQ9186 (1 ml) Full 7 Parameters Samples every month, 1 x 12 monthly cycle, 12 month subscription
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CK, Total CK-MB (Activity)	CK-MB (Mass) Homocysteine	Myoglobin Troponin I	Troponin T
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## Cardiac Plus Programme *With target scoring*

RQ9190 (3 ml)  
11 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

CK, Total CK-MB Activity CK-MB Mass	D-dimer Digoxin Homocysteine	hsCRP Myoglobin NT proBNP	Troponin I Troponin T
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## Cerebrospinal Fluid Programme • *With target scoring*

RQ9168 (3 ml)  
7 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

Albumin Chloride	Glucose IgG	Lactate Protein (Total)	Sodium
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# RIQAS PROGRAMMES

## Coagulation Programme *With target scoring*

**RQ9135/a (1 ml)**  
5 Selected parameters only + 1 pilot  
(aPTT, PT, TT, Fibrinogen, Antithrombin III)  
Samples every month, 1 x 12 month cycle, 12 month subscription

aPTT  
PT (including INR)  
TT  
Fibrinogen  
Antithrombin III

**RQ9135/b (1 ml)**  
Full 17 Parameters + 1 pilot

D-dimer\*  
Factor II  
Factor V  
Factor VII  
Factor VIII

Factor IX  
Factor X  
Factor XI  
Factor XII  
Plasminogen

Protein C  
Protein S  
Protein S (Free)

## CO-Oximetry Programme+ *With target scoring*

**RQ9177 (1.2 ml)**  
First registered instrument  
7 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

Carboxyhaemoglobin (COHb / HbCO)  
Deoxyhaemoglobin (HHb)

Methaemoglobin (MetHb)  
Oxygen Content (O2CT)

Oxygen Saturation (sO2 / Vol O2)  
Oxyhaemoglobin (O2Hb / HbO2)

Total Haemoglobin (tHb)

## CYFRA 21-1 Programme • *With target scoring*

**RQ9175 (1 ml)**  
1 Parameter  
Samples every month, 1 x 12 month cycle, 12 month subscription

CYFRA 21-1 (Cytokeratin 19 fragment)

## Cytokines Programme • *With target scoring for IL-6*

**RQ9195 (1 ml)**  
1 Parameter + 11 pilots  
Samples every month, 1 x 12 month cycle, 12 month subscription

Epidermal Growth Factor (EGF)\*  
Interleukin - 1 alpha (IL-1α)\*  
Interleukin - 1 beta (IL-1β)\*  
Interleukin - 2 (IL-2)\*

Interleukin - 4 (IL-4)\*  
Interleukin - 6 (IL-6)  
Interleukin - 8 (IL-8)\*  
Interleukin - 10 (IL-10)\*

Interferon gamma (INF-γ)\*  
Monocyte Chemoattractant Protein -1 (MCP-1)\*  
Tumour Necrosis Factor alpha (TNF-α)\*

Vascular Endothelial Growth Factor (VEGF)\*

## ESR Programme+ *With target scoring*

**RQ9163 (4.5 ml)**  
1 Parameter  
2 samples per quarterly distribution, 1 x 12 month cycle, 12 month subscription

ESR (Erythrocyte Sedimentation Rate)

## General Clinical Chemistry Programme *With target scoring*

**RQ9112/a (5 ml)**  
10 Parameters + 6 pilots

Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, reference method values

ACE (Angiotensin Converting Enzyme)  
Acid Phosphatase (Prostatic)  
Acid Phosphatase (Total)  
Albumin  
Alkaline Phosphatase  
ALT (ALAT)  
Amylase (Pancreatic)  
Amylase (Total)  
Anion Gap\*  
AST (ASAT)  
Bicarbonate  
Bile Acids  
Bilirubin (Direct)  
Bilirubin (Total)  
Calcium  
Calcium, Adjusted

**RQ9112/b (5 ml)**  
17 Parameters + 6 pilots

Calcium (Ionised)  
Chloride  
Cholesterol  
Cholinesterase  
CK, Total (CPK)  
Copper  
Creatinine  
D-3-Hydroxybutyrate  
eGFR (estimated glomerular filtration rate)  
FIB-4\*  
Fructosamine  
γGT  
GLDH  
Glucose  
HBDH  
HDL-Cholesterol

**RQ9112/c (5 ml)**  
Full 56 Parameters + 6 pilots

Iron  
Lactate  
LD (LDH)  
LDL-Cholesterol  
Lipase  
Lithium  
Magnesium  
NEFA  
Non-HDL Cholesterol  
Osmolality  
Osmolar Gap\*  
Phosphate (Inorganic)  
Potassium  
Protein (Total)  
PSA  
Sodium

**RQ9128 (5ml)**  
Full 56 Parameters + 6 pilots

Samples every month, 1 x 12 monthly cycle, 12 month subscription

TIBC  
T - Uptake\*  
T<sub>3</sub> (Free)  
T<sub>3</sub> (Total)  
T<sub>3</sub> (Free)  
T<sub>4</sub> (Total)  
Transferrin\*  
Transferrin Saturation\*  
Triglycerides  
TSH  
UIBC  
Urea  
Uric Acid  
Zinc

## Glycated Haemoglobin Programme (HbA1c) *With target scoring*

**RQ9129 (0.5ml)**  
2 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

HbA1c

Total Haemoglobin

## Haematology Programme *With target scoring*

**RQ9118 (2 ml)**  
11 Parameters  
Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription

Haematocrit (HCT)  
Haemoglobin (Hb)  
Mean Cell Haemoglobin (MCH)

Mean Cell Haemoglobin Concentration (MCHC)  
Mean Cell Volume (MCV)

**RQ9140 (2ml)**  
11 Parameters  
Samples every month, 1 x 12 monthly cycle, 12 month subscription

Mean Platelet Volume (MPV)  
Platelets (PLT)  
Plateletcrit (PCT)

Red Blood Cell Count (RBC)  
Red Cell Distribution Width (RDW)  
Total White Blood Cell Count (WBC)

## Human Urine Programme *With target scoring*

**RQ9115 (2 x 10 ml)**  
25 Parameters + 2 pilots  
Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription

ACR  
Albumin/Microalbumin  
Amylase  
Anion Gap\*  
Calcium  
Chloride  
Copper

Cortisol  
Creatinine  
Dopamine  
Epinephrine  
Glucose  
Metanephrine  
Norepinephrine

**RQ9185 (10ml)**  
25 Parameters + 2 pilots  
Samples every month, 1 x 12 monthly cycle, 12 month subscription

Normetanephrine  
Magnesium  
Osmolality  
Oxalate  
Phosphate (Inorganic)  
Potassium  
Protein (Total)

Protein/Creatinine Ratio\*  
Sodium  
Urea  
Uric Acid  
VMA  
5-HIAA

## Immunoassay Programme *With target scoring*

**RQ9125/a (5 ml)**  
4 Parameters only + 4 pilots  
Samples every two weeks, 2 x 6 monthly cycles, 12 month subscription (RQ9125/a, RQ9125/b, RQ9125/c)

ACTH  
AFP  
Aldosterone  
Amikacin  
Androstenedione  
 $\beta$ -2-Microglobulin  
CA125  
CA15-3  
CA19-9  
Carbamazepine  
CEA  
Cortisol  
C-Peptide  
DHEA-Sulphate

**RQ9125/b (5 ml)**  
13 Parameters only + 4 pilots

DHEA Unconjugated  
Digoxin  
Estriol (Only available in RQ9130)  
Free Androgen Index (FAI)\*  
Ferritin  
Folate  
FSH  
Gentamicin  
GH  
hCG  
IgE  
Insulin  
LH  
Oestradiol

**RQ9125/c (5 ml)**  
Full 50 Parameters + 4 pilots

17-OH-Progesterone  
Paracetamol  
Phenobarbital  
Phenytoin  
Progesterone  
Prolactin  
PSA (Free)  
PSA (Total)  
PTH  
PTH (1-84)  
Salicylate  
SHBG  
T-Uptake\*  
T<sub>3</sub> (Free)

**RQ9130 (5 ml)**  
Full 51 Parameters + 4 pilots  
Samples every month, 1 x 12 month cycle, 12 month subscription (RQ9130)

T<sub>3</sub> (Total)  
T<sub>4</sub> (Free)  
T<sub>4</sub> (Total)  
Testosterone (Free)\*  
Testosterone (Total)  
Theophylline  
Thyroglobulin  
TSH  
Valproic Acid  
Vancomycin  
Vitamin B12  
1-25-(OH)<sub>2</sub>-Vitamin D\*  
25-OH-Vitamin D

## Immunoassay Speciality 1 Programme *With target scoring*

**RQ9141 (2 ml)**  
10 Parameters + 1 pilot  
Samples every month, 1 x 12 month cycle, 12 month subscription

1-25-(OH)<sub>2</sub>-Vitamin D\*  
25-OH-Vitamin D  
C-Peptide

Anti-TG  
Anti-TPO  
IGF-1

Osteocalcin  
Procalcitonin  
PTH

PTH (1-84)  
Insulin

## Immunoassay Speciality 2 Programme *With target scoring*

**RQ9142 (1 ml)**  
5 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

Calcitonin  
Gastrin

Procalcitonin

Plasma Renin Activity

Renin (Direct Concentration)

## Immunosuppressant Programme • *With target scoring*

**RQ9159 (2 ml)**  
4 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription, reference method values

Ciclosporin

Everolimus

Sirolimus

Tacrolimus

## Lipid Programme *With target scoring*

**RQ9126/a (3 ml)**  
3 Parameters only (choose from 7)  
Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription

Apolipoprotein A1  
Apolipoprotein B

**RQ9126/b (3 ml)**  
Full 7 Parameters

Cholesterol (Total)  
HDL-Cholesterol

LDL-Cholesterol  
Lipoprotein (a)

Triglycerides

# RIQAS PROGRAMMES

## Maternal Screening Programme *With target scoring*

RQ9137 (1 ml)  
6 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

AFP  
free β-hCG

Total hCG  
Inhibin A

PAPP-A

Unconjugated Oestriol

## Microbiology (Bacterial Identification) Programme+

RQ9197  
1 strain (complete with case study)  
Samples every 2 months, 1 x 12 month cycles, 12 month subscription

1 strain complete with case study Identification of the micro-organisms can be made at Gram positive / negative, Genus and Species level Antimicrobial Susceptibility Testing on identified strain

Antimicrobial Susceptibility Testing

Strain Identification

## Neonatal Bilirubin Programme • *With target scoring*

RQ9191 (3 ml)  
2 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

Direct Bilirubin

Total Bilirubin

## Pre-eclampsia Programme+

RQ9207 (1 ml)  
4 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription

PAPP-A

PIGF

sFlt-1

sFlt-1/PIGF ratio

## Serology Chagas Programme+

RQ9208 (1 ml)  
1 Parameter  
Samples every month, 1 x 12 month cycle, 12 month subscription

*Trypanosoma Cruzi* Antibodies

## Serology (EBV) Programme+

RQ9153 (1 ml)  
3 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results

Anti-EBNA IgG

Anti-EBV VCA IgG

Anti-EBV VCA IgM

## Serology (HIV-Hepatitis) Programme+

RQ9151 (1.8 ml)  
16 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results

Anti-CMV (Total)  
Anti-HAV IgM  
Anti-HAV (Total)  
Anti-HBc

Anti-HBc IgM  
Anti-HBe (Total)  
Anti-HBs (Total)  
Anti-HCV

Anti-HIV-1  
Anti-HIV-2  
Anti-HIV combined  
Anti-HTLV I

Anti-HTLV II  
Anti-HTLV combined  
HBsAg  
P24

## Serology (Syphilis) Programme+

RQ9154 (1 ml)  
1 Parameter  
Samples every month, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results

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

## Serology (ToRCH) Programme+

RQ9152 (1 ml)  
15 Parameters  
Samples every month, 1 x 12 month cycle, 12 month subscription, Quantitative and Qualitative results

Anti-CMV IgG  
Anti-CMV IgM  
Anti-HSV1 IgG  
Anti-HSV1 IgM

Anti-HSV2 IgG  
Anti-HSV2 IgM  
Anti-HSV1/2 IgG  
Anti-HSV1/2 IgM

Anti-Measles IgG  
Anti-Mumps IgG  
Anti-Rubella IgG  
Anti-Rubella IgM

Anti-Toxoplasma IgG  
Anti-Toxoplasma IgM  
Anti-VZV IgG

## Serum Indices Programme+

**RQ9194 (1 ml)**  
**3 Indices Assessments**  
**25 Chemistry Parameters**  
**Samples Bi-Monthly, 2 x 9 samples, 12 month subscription**

**RQ9194/A<sup>Δ</sup> (1 ml)**  
<sup>Δ</sup> For additional Serum Indices EQA material, purchase RQ9194/A. This is an additional pack containing 9 x 1ml vials to be used as a supplement to your main RQ9194 Serum Indices programme.

### Indices Assessment (Quantitative and Semi-Quantitative)

Haemolysis	Icteric	Lipaemic
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### Parameter Assessment (Quantitative)

ALP	Cholesterol	Lactate	Sodium
ALT	CK NAC	LDH	Triglycerides
AST	Creatinine	Lipase	Urea
Bilirubin (Direct)	GGT	Magnesium	Uric Acid
Bilirubin (Total)	Glucose	Phosphate	
Calcium	HDL	Potassium	
Chloride	Iron	Protein (Total)	

## Specific Proteins Programme *With target scoring*

**RQ9114 (3 ml)**  
**26 Parameters**  
**Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription**

**RQ9187 (1ml)**  
**26 Parameters**  
**Samples every month, 1 x 12 monthly cycle, 12 month subscription**

AFP	β-2-Microglobulin	IgA	Lambda Light Chain (Total)
Albumin	Ceruloplasmin	IgE	Prealbumin (Transthyretin)
α-1-Acid glycoprotein	Complement C <sub>3</sub>	IgG	Retinol Binding Protein
α-1-Antitrypsin	Complement C <sub>4</sub>	IgM	Rheumatoid Factor
α-2-Macroglobulin	C-Reactive Protein	Kappa Light Chain (Free)	Transferrin
Anti Streptolysin O	Ferritin	Kappa Light Chain (Total)	
Antithrombin III	Haptoglobin	Lambda Light Chain (Free)	

## Sweat Testing Programme • *With target scoring*

**RQ9173 (2 ml)**  
**2 Parameters**  
**Samples every month, 1 x 12 month cycle, 12 month subscription**

Chloride	Conductivity
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## Therapeutic Drugs Programme *With target scoring*

**RQ9111 (5 ml)**  
**18 Parameters**  
**Samples every 2 weeks, 2 x 6 monthly cycles, 12 month subscription, Weighed-in values**

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

## Urinalysis Programme *With scoring*

**RQ9138 (12 ml)**  
**14 Parameters**  
**Samples every 2 months, 1 x 12 month cycle, 12 month subscription**

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

## Urine Toxicology Programme+

**RQ9139 (5 ml)**  
**20 Parameters**  
**Samples every month, 1 x 12 month cycle, 12 month subscription**

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

Whilst every attempt is made to ensure that information is accurate and up-to-date, some information is subject to change, please contact RIQAS for current details

 = Liquid ready-to-use samples

 = Lyophilised samples

PURPLE = The only parameters available on RQ9135/a

+ = Not accredited

\* = Pilot study ongoing

• = Accredited within the boundaries of Randox Laboratories Ltd.'s flexible scope of UKAS accreditation.

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