

RIQAS

RANDOX INTERNATIONAL QUALITY ASSESSMENT SCHEME

**METHOD QUESTIONNAIRE
SERUM INDICES PROGRAMME
RQ9194**

Please be aware that the RIQAS Instrument and reagent supplier codes are now in a separate booklet. Please ensure you have a copy of this in order to complete this document.

This document must be retained by participant

REGISTRATION INSTRUCTIONS & RIQAS POLICIES

CRITERIA FOR PARTICIPATION

This programme is available to any laboratory running the parameters listed in this document. Qualitative and quantitative results will be accepted on this programme.

INTRODUCTION

Method questionnaires are available for all routine RIQAS Programmes and are reviewed and updated every month, as indicated by the issue date at the bottom of every page. They are designed to allow you to register for this RIQAS Programme and to inform you of RIQAS protocols and policies. It is important that you read and understand all the information in these introductory pages before completing the enrolment document, which forms the basis of your registration and contract with RIQAS. If you have any questions or concerns about any of the information presented in this document, please contact RIQAS either directly or through your local Randox Laboratories representative. RIQAS Calendar dates and information about the RIQAS portfolio of products can be found on www.randox.com/external-quality-assessment.

REGISTRATION INSTRUCTIONS

NOTE: IF A REGISTERED PARTICIPANT DOES NOT PARTICIPATE FOR A CYCLE, THEY WILL BE EXPECTED TO COMPLETE NEW ENROLMENT DOCUMENTS IN ORDER TO RE-JOIN THE PROGRAMME.

METHOD QUESTIONNAIRE:- To be retained by participant

This method questionnaire should be completed and retained by you for your records. Please ensure that you complete the method questionnaire in full. Your details will help us to classify your results correctly and thus provide you with useful statistical data.

In order to fully complete this questionnaire you will also need a copy of the RIQAS Instruments and Reagent Suppliers which is available to download from the Randox website (www.randox.com/external-quality-assessment). Please ensure you have this list available when completing this questionnaire.

Following this introduction section is the method questionnaire which indicates the method codes available for each parameter along with the standard RIQAS unit. On the method questionnaire, for each parameter you wish to run, please tick the method appropriate to you, then state your instrument code, reagent code, and the units that you use in your laboratory if they are different from the RIQAS standard units. If codes are not available for your assay, please state the details of your method clearly in the section at the end of the enrolment document.

NB For enzymes, it is important for you to record the temperature at which the assay is performed.

Once your method questionnaire has been completed, you must transfer the information onto your enrolment document.

ENROLMENT DOCUMENT:- To be returned to RIQAS

Please be aware that it may take up to 3 weeks to process enrolment documents if you are not entering your own assay details. When registering RIQAS enrolment documents, it is recommended that you state business contact details, rather than personal.

A. LABORATORY REFERENCE NUMBER

On receipt of an enrolment document, each participant is assigned a **laboratory reference number** which consists of a **participant number** which is unique to your laboratory and a **registration letter** which is assigned for each new registration we receive from you. If you are a current or previous participant, please state your **participant number** on the enrolment document. If you do not have a Laboratory Reference Number, this will be generated by RIQAS when you register for the first time. Please quote this number on all correspondence with RIQAS.

B. ORDER NUMBER

If you are a UK or Irish participant, please state your official order number in the boxes provided. Other participants may order directly from their local Randox Laboratories representative.

C. CYCLE/PRODUCT REQUIREMENTS

Please tick the cycles you wish to subscribe for. If there is more than one kit/product offered for the programme, please also tick the kit you wish to subscribe for.

D. PRIMARY CONTACT DETAILS

It is important to state the full address details of the Quality Assessment Officer or contact person who will receive all correspondence during the cycle. Please also state the company name of the Randox representative who is supplying you with the RIQAS product under 'Randox Office/Distributor'

Please inform RIQAS of any change to contact details as soon as possible.

E. RIQASNet

RIQASNet is a web-based online method for result entry / method changes and additions of parameters / viewing of released reports. To access RIQASnet go to www.riqas.net. Internet access and login details are required for RIQASNet and Adobe Reader is required for viewing reports. Your initial login information and password will be supplied by RIQAS. Once you have logged in for the first time you will be able to change your RIQASNet password. If you forget your password please follow the 'Forgotten Password' link. Your login information will be based on the 1st email address you supply on your enrolment document. A PDF copy of the report will be sent to this address and can also be sent to 2 other email addresses. These addresses should be stated on your enrolment document.

F. PDF REPORTS

Reports are sent as PDF files. These files can be sent to up to 3 email addresses. Adobe Reader is required to view the reports. The email addresses to which reports are sent can be reviewed and changed on RIQASNet.

G. CUSTOMER DECLARATION

The declaration indicates that by submitting your enrolment document to RIQAS, either directly or via your local Randox representative, you have read and understood the RIQAS policies stated in the most recent Method Questionnaire associated with this programme. You understand that the submission of your enrolment document to RIQAS marks the beginning of an on-going agreement, and you will be automatically enrolled in subsequent cycles of this programme until we receive written confirmation of your cancellation. This should be received 12 weeks prior to the month in which the cycle starts. You understand that you must inform RIQAS of any changes to your contact details, assay details or contract status. You authorise Randox Laboratories Ltd. to send communication related to the products and service provided to the e-mail or postal addresses stated on your submitted enrolment document. You understand that you are permitted to request disclosure of, change or erase personal details held by Randox Laboratories Ltd. at any time. Note: Method questionnaires are updated every month and the issue date is stated on every questionnaire and enrolment document.

H. REGISTRATION OF ASSAY DETAILS

Labs can register their assay details using RIQASNet or can complete the 'Registration of Assay Details' section of the enrolment document. Labs should tick the appropriate box under the 'Registration of Assay Details' section of the enrolment document. If a lab wishes RIQAS to register their assay details, they should complete the Registration of Assay Details section using the codes from this method questionnaire and the Instrument/Reagent Supplier Book.

Once a participant has registered they will receive an email containing their RIQASNet login information. Once you have successfully logged in to RIQASNet you will see your various laboratory reference numbers for each registered programme. If you have opted to add parameters/assay details using RIQASNet, please do so as soon as possible (see below).

If no code is available for your assay, please state the details of your method clearly in the section at the end of the enrolment document or follow the instructions on RIQASNet.

For Ortho-Clinical Diagnostics VITROS registrations, please state the 2 digit slide Generation number for each analyte.

If units other than the standard RIQAS units are used, please specify these in the boxes supplied.

ONCE COMPLETED, THE ENROLMENT DOCUMENT SHOULD BE SENT TO RIQAS FOR REGISTRATION.

I. UPDATING ASSAY DETAILS

It is possible to change your unit, method, instrument or reagent classification during a cycle.

Method Changes via RIQASNet: These can be made in the Assay Details section of the Data Entry menu. A list of your registered laboratory reference numbers will appear on screen. Select the laboratory reference number for which you would like to change the assay details. A current list of assay details will appear, click on the appropriate parameter. To change the details click the arrow box on the appropriate details and select a new one. Save the changes and submit them to RIQAS. Changes will not be instantaneously updated on RIQASNet but will be uploaded onto RIQASNet usually within 3 working days. It is possible to submit results and method changes together as method changes will be made before results are entered in to the RIQAS database.

J. ADDITION OF PARAMETERS / ASSAY DETAILS

Adding Parameters via RIQASNet: Parameters can be added using the Assay Details section of the Data Entry menu. A list of your registered laboratory reference numbers will appear on screen. Select the laboratory reference number for which you would like to add the assay details. At the top of the screen is 'Add Parameter'. Click on this and a list of parameters you are not registered for will appear. Select the parameter you wish to add and click the arrow box on the appropriate details and select your assay details. Save the changes and submit them to RIQAS. As above, additions will be available on RIQASNet usually within 3 working days.

ORDERING RIQAS PRODUCTS

Please ensure your purchase order for each cycle is placed with your local Randox representative 12 weeks prior to the month in which the cycle starts. This will ensure sufficient time to process and despatch your kit(s) to you. Participants from UK or Ireland may order products directly from RIQAS with an official order number. Orders received within 12 weeks of the start of the cycle will be processed with an additional administration fee. Current prices of RIQAS products are available from your local Randox Laboratories representative.

It may be possible to order RIQAS products during a cycle, subject to availability. Please contact your local Randox representative for more information.

SHIPPING AND RECEIPT OF RIQAS PRODUCTS

Provided that you have ordered sufficiently in advance, your RIQAS kit(s) will be shipped to you to arrive before the analysis date of the first sample in the kit. If you do not receive your kit(s) before this time, please contact your local Randox representative.

On RIQASNet please access your account and download the relevant Instructions For Use (IFU) document for the programme and cycle purchased. The IFU includes material characteristics, preparation, stability, storage and safety information. On receipt of your RIQAS kit, please check that:

- a) it is the product you ordered
- b) the correct number of samples are present as indicated on the IFU
- c) the samples have the appearance as indicated on the IFU and that none of them are damaged

Please notify your local Randox representative immediately if any of these are incorrect.

Please ensure that the product is immediately stored according to the recommendations on the package labelling.

ASSAY OF SAMPLES & RETURN OF RESULTS

Carefully read the instructions stated on the Instructions for Use (IFU) prior to preparation and assay of RIQAS samples. **These are available on RIQASNet only.** The RIQAS samples should be assayed at the recommended time specified on the IFU. Following appropriate preparation, samples should be treated as routine, unless otherwise stated on the IFU. Please assay the samples on or before the recommended date for analysis and forward your results to RIQAS by no later than **17:00 GMT on the FINAL DATE**, as indicated in the IFU. Results are submitted via RIQASNet, which can be accessed once you have received log in details via email. This will include a link to RIQASNet Instructions for Use.

LATE AND CORRECTED RESULTS

In keeping with the objectives of EQA schemes, participants should be aware that collusion and falsification of results is considered to be unethical and constitutes scientific fraud. RIQAS policies must ensure that a laboratory is unaware of RIQAS means for comparison before submitting their own results. Where a result is not submitted by the final date, a report will be issued, but the missing results will be indicated as "No return" or "N" throughout the RIQAS reports. RIQAS permits the submission of late or corrected results only under the circumstances described below. Requests for the submission of late or corrected results must be submitted in writing and in English on RIQAS Form No. 9277-RQ (either by the participant or their local Randox Representative) and must be approved by RIQAS Management. The form is available on www.riqas.net.

Requests for the submission of late results must be accompanied by evidence that an error has been made, and that the error has not been caused by the participant.

Requests for the correction or removal of erroneous results must be accompanied by evidence that the error was non-analytical, as defined on form 9277-RQ. RIQAS is obliged to inform country-specific regulatory bodies of requests for correction of results (if they request such information for laboratory monitoring purposes).

New reports will be re-issued for late or corrected results only where there has been an error made by Randox Laboratories HQ, Randox representatives or distributors.

LATE RESULTS

In general, late results will not be accepted after the final date.

Late results will only be accepted where there has been an error made by Randox Laboratories HQ, Randox representatives or distributors.

CORRECTED RESULTS

Laboratories may correct results only if it can be determined that the error was non-analytical and where the request for submission is within 4 weeks of the original final date. A laboratory may correct a result under the following circumstances:

- Reconstituting a sample in an incorrect volume before analysis
- Assaying and/or submitting the results for the wrong sample
- Making a transcription error - submission of an analyser print-out indicating that the analysis date was before the final date is required.

DESPATCH OF REPORTS

PDF reports will be emailed within 72 hours of the FINAL DATE and for those registered for RIQASNet the PDF reports will be available on RIQASNet shortly after.

USE OF RIQAS REPORTS

Participants have permission to make copies of their RIQAS reports for internal use and for regulatory purposes only. RIQAS reports must not be duplicated for external use without permission from the RIQAS Scheme Co-ordinator. Under no circumstances should information on RIQAS reports be taken out of context or falsified in any way. Information regarding the format of RIQAS Reports and the monitoring of EQA performance can be found in the RIQAS Brochure on www.randox.com/external-quality-assessment Information regarding the calculations and scores used to evaluate participants' performance on RIQAS Reports can be found following log in to RIQASNet, in a document entitled "Evaluation of Performance".

CONFIDENTIALITY

Participation in any RIQAS programme is considered to be strictly confidential. Any data transfer or correspondence with participants, either directly or via local Randox representative, will be deemed confidential. Participants should be aware that regulatory authorities have the right to request an assessment of a participant's performance. Where regulatory authorities are to be provided with a participant's results, participants will be notified.

GENERAL DATA PROTECTION REGULATION 2018

Randox Laboratories Ltd. complies with GDPR and holds the minimum information required to maintain the contract with RIQAS customers. Contact details are required in order to effectively provide you with the RIQAS products and services. Participants are not under any obligation to provide personal information to enter into a contract with RIQAS. We recommend that business contact details are provided. All data associated with the provision of RIQAS is collated, stored and processed confidentially and securely, to avoid unlawful processing, accidental loss or damage.

CERTIFICATES OF PARTICIPATION

Complimentary certificates of participation for each RIQAS programme are made available on RIQASNet to participants at the **end of the current cycle**, provided that **at least 50%** of results have been returned. Participants who enrol mid-cycle will be eligible for a Certificate for Participation if they have participated in at least 50% of samples available for the remainder of the cycle since enrolment. The certificate will specify the cycle, programme and the LABORATORY / HOSPITAL NAME which is detailed in the certificate section of RIQASNet. At the end of a cycle, a list of all eligible labs will be exported from RIQASNet and certificates will be created according to these details. Please ensure all certificate details are up to date in your RIQASNet account.

PERFORMANCE SURVEILLANCE OF UK LABS

RIQAS is obligated to identify and report persistent poor performing UK labs to the National Quality Assessment Advisory Panel. Poor performers are identified as those failing to meet performance criteria agreed with NQAAP. The performance criteria is specified in all performance surveillance correspondence with participants, and is also available on request. Participants are initially informed of poor performance by letter. Failure to improve performance will prompt details to be forwarded to NQAAP. All information sent to participants and NQAAP is strictly confidential. Please contact RIQAS if you require further information on Performance Surveillance.

PARTICIPANT FEEDBACK, COMPLAINTS & APPEALS

In order to ensure that RIQAS provides an appropriate and satisfying service, participants are invited to complete a feedback survey on RIQASNet. You may contact us at any time during the cycle, should you have any requests for additional programmes or parameters or comments regarding existing programmes.

RIQAS makes every effort to ensure that the samples provided are clinically challenging to as many laboratory systems as possible. For details, please contact RIQAS either directly or through your local Randox representative.

Should the need arise, participants may raise requests or enquiries through correspondence with the local Randox Laboratories representative or by contacting RIQAS directly. Participants may appeal against the evaluation of their performance by completing a PARTICIPANT APPEALS FORM, 10770-RQ. Participants may raise a complaint in relation to the product or service provided by completing the PARTICIPANT COMPLAINTS FORM, 10772-RQ. These forms are available on RIQASNet, or on request from RIQAS.

SUB-CONTRACTING

RIQAS sub-contracts aspects of the scheme. RIQAS accepts responsibility for the sub-contractors' work and protocols are in place to ensure that sub-contractors are deemed competent.

OUR COMPETENCE AS A PROFICIENCY TESTING PROVIDER

On request, RIQAS is willing to co-operate with participants seeking evidence of our competence as a proficiency testing provider or information on the design and implementation of RIQAS Programmes.

DEVIATION FROM EXISTING POLICIES/SERVICE

If there is any deviation from the existing policies or service, participants will be notified either directly or via their local Randox representative.

COMMUNICATION

As part of the service provided by Randox Laboratories Ltd., participants may be contacted by e-mail regarding updates and new products, in line with Randox Laboratories Ltd. privacy policy, as stated in www.randox.com.

THIS PROGRAMME IS NOT ACCREDITED TO
ISO/IEC 17043:2010

Please contact RIQAS at

Tel: +44 (0) 28 9445 4399

E-Mail mail@riqas.com

RIQAS Scheme Co-ordinator: Stephen Doherty

RANDOX LABORATORIES LTD., 55 Diamond Road, Crumlin, County Antrim, BT29 4QY, United Kingdom

RQ9194 - SERUM INDICES METHOD QUESTIONNAIRE

SERUM INDICES PARAMETERS

HAEMOLYTIC INDEX MG/DL

CODE	METHOD
1HARC	<input type="checkbox"/> Abbott Architect
1HAAC	<input type="checkbox"/> Abbott Alinity
1HOAU	<input type="checkbox"/> Beckman AU Instruments
1HDXC	<input type="checkbox"/> Beckman DxC600/ DxC 800
1HDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
1HRC1	<input type="checkbox"/> Roche Cobas C111
1HRC3	<input type="checkbox"/> Roche Cobas C311
1HRC5	<input type="checkbox"/> Roche Cobas C501/ 502/ 503
1HRC7	<input type="checkbox"/> Roche Cobas C701/ 702/ 711
1HRCI	<input type="checkbox"/> Roche Integra
1HCNS	<input type="checkbox"/> Siemens ADVIA Chemistry
1HSAC	<input type="checkbox"/> Siemens Atellica
1HDD	<input type="checkbox"/> Siemens Dimension

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

ICTERIC INDEX UMOL/L

CODE	METHOD
1IARC	<input type="checkbox"/> Abbott Architect
1IAAC	<input type="checkbox"/> Abbott Alinity
1IOAU	<input type="checkbox"/> Beckman AU Instruments
1IDXC	<input type="checkbox"/> Beckman DxC600/ DxC 800
1IDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
1IRC1	<input type="checkbox"/> Roche Cobas C111
1IRC3	<input type="checkbox"/> Roche Cobas C311
1IRC5	<input type="checkbox"/> Roche Cobas C501/ 502/ 503
1IRC7	<input type="checkbox"/> Roche Cobas C701/ 702/ 711
1IRCI	<input type="checkbox"/> Roche Integra
1ICNS	<input type="checkbox"/> Siemens ADVIA Chemistry
1ISAC	<input type="checkbox"/> Siemens Atellica
1IDD	<input type="checkbox"/> Siemens Dimension

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

LIPAEMIC INDEX MMOL/L

CODE	METHOD
1LARC	<input type="checkbox"/> Abbott Architect
1LAAC	<input type="checkbox"/> Abbott Alinity
1LOAU	<input type="checkbox"/> Beckman AU Instruments
1LDXC	<input type="checkbox"/> Beckman DxC600/ DxC 800
1LDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
1LRC1	<input type="checkbox"/> Roche Cobas C111
1LRC3	<input type="checkbox"/> Roche Cobas C311
1LRC5	<input type="checkbox"/> Roche Cobas C501/ 502/ 503
1LRC7	<input type="checkbox"/> Roche Cobas C701/ 702/ 711
1LRCI	<input type="checkbox"/> Roche Integra
1LCNS	<input type="checkbox"/> Siemens ADVIA Chemistry
1LSAC	<input type="checkbox"/> Siemens Atellica
1LDD	<input type="checkbox"/> Siemens Dimension

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

**RQ9194 - SERUM INDICES
METHOD QUESTIONNAIRE**

CHEMISTRY PARAMETERS

ALKALINE PHOSPHATASE U/I

CODE	METHOD
APBC	<input type="checkbox"/> Beckman AMP (Calibrator)
APBE	<input type="checkbox"/> Beckman AMP (Extinction Coeff)
APNON	<input type="checkbox"/> AMP, non-optimised
APIF	<input type="checkbox"/> AMP, optimised to IFCC
APINT	<input type="checkbox"/> Roche AMP Buffer IFCC
APDB	<input type="checkbox"/> Siemens/Dade Dimension, AMP buffer
APC	<input type="checkbox"/> Colorimetric
APDEA	<input type="checkbox"/> Diethanolamine buffer, DEA
APFJ	<input type="checkbox"/> Fuji Dri-Chem JSCC
APDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
APDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/> <input type="text"/>
APOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

RESULTS REPORTED AT 25°C 30°C 37°C

OTHER UNITS, SPECIFY

ALANINE TRANSAMINASE, ALT U/I

CODE	METHOD
ALTBTC	<input type="checkbox"/> Beckman (Extinction Coefficient)
ALTBIP	<input type="checkbox"/> Beckman IFCC Ref. with P5P
ALTBNP	<input type="checkbox"/> Beckman Mod. IFCC Ref. without P5P
ALTC	<input type="checkbox"/> Colorimetric
ALTP	<input type="checkbox"/> Phosphate buffer, DGKC
ALTDDB	<input type="checkbox"/> Siemens/Dade standard non IFCC correlated
ALTNP	<input type="checkbox"/> Tris buffer without pyridoxal - 5 - phosphate
ALTIF	<input type="checkbox"/> Tris buffer with pyridoxal - 5 - phosphate
ALTP5	<input type="checkbox"/> Tris buffer with pyridoxal - 5 - phosphate, NVKC
ASTT	<input type="checkbox"/> Tris buffer, SCE
ALTDV	<input type="checkbox"/> Ortho Vitros Microslide Systems
ALTDV	<input type="checkbox"/> Ortho Vitros MicroSlide visible
ALTDV	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/> <input type="text"/>
ALTOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

RESULTS REPORTED AT 25°C 30°C 37°C

OTHER UNITS, SPECIFY

ASPARTATE TRANSAMINASE, AST U/I

CODE	METHOD
ASTBTC	<input type="checkbox"/> Beckman (Extinction Coefficient)
ASTBIP	<input type="checkbox"/> Beckman IFCC Ref. with P5P
ASTBNP	<input type="checkbox"/> Beckman Mod. IFCC Ref. without P5P
ASTC	<input type="checkbox"/> Colorimetric
ASTP	<input type="checkbox"/> Phosphate buffer, DGKC
ASTDB	<input type="checkbox"/> Siemens/Dade standard non IFCC correlated
ASTIF	<input type="checkbox"/> Tris buffer with pyridoxal - 5 - phosphate
ASTP5	<input type="checkbox"/> Tris buffer with pyridoxal - 5 - phosphate, NVKC
ASTNP	<input type="checkbox"/> Tris buffer without pyridoxal - 5 - phosphate
ASTT	<input type="checkbox"/> Tris buffer, SCE
ASTDV	<input type="checkbox"/> Ortho Vitros Microslide visible slide
ASTDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/> <input type="text"/>
ASTOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

RESULTS REPORTED AT 25°C 30°C 37°C

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES

METHOD QUESTIONNAIRE

BILIRUBIN, CONJUGATED VITROS BC $\mu\text{mol/l}$

CODE METHOD
BCBUBC BuBc Vitros slide

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

BILIRUBIN, UNCONJUGATED VITROS BU $\mu\text{mol/l}$

CODE METHOD
BUBUBC BuBc Vitros slide
BUDB Direct Bilirubin Vitros Slide

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

BILIRUBIN, DIRECT $\mu\text{mol/l}$

CODE METHOD
BDDI Diazo with Dichloroaniline
BDSA Diazo with Sulphanilic Acid
BDDB Diazo/ Sulphanilic Beckman DxC
BDSD Diazo/ Sulphanilic Siemens Dimension
BDDD Dichlorophenyl Diazonium
BDVER Oxidation to Biliverdin/Vanadate
BDRD Roche DPD Doumas standardised
BDRJG Roche DPD JG standardised
BDCUS Roche (US Calibrator Only)
BDOD Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

BILIRUBIN, TOTAL $\mu\text{mol/l}$

CODE METHOD
BIDI Diazo with Dichloroaniline
BISA Diazo with Sulphanilic Acid
BIION Diazonium ion
BDD Dichlorophenyl Diazonium
BBDPD Dichlorophenyl Diazonium (Beckman AU)
BINBD Nitrobenzenediazonium Salt
BIVER Oxidation to Biliverdin/Vanadate
BIPM Pfaff Medical - Bilimeter 3
BIBL Ortho Vitros Microslide Systems Total Bil
BIBT Vitros DT60/DT60 II Total Bil
 Vitros Slide Generation Number
BIOD Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES METHOD QUESTIONNAIRE

CALCIUM mmol/l

CODE	METHOD
CAZO	<input type="checkbox"/> Arsenazo
CAAA	<input type="checkbox"/> Atomic absorption
CACPC	<input type="checkbox"/> Cresolphthalein complexone
CAISE	<input type="checkbox"/> Ion selective electrode
CAMB	<input type="checkbox"/> Methylthymol blue
CABAP	<input type="checkbox"/> NM-BAPTA
CAOES	<input type="checkbox"/> Optical Emission Spectroscopy
CAPO	<input type="checkbox"/> Phosphonazo
CADC	<input type="checkbox"/> Ortho Vitros Microslide Systems
CADT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/>
CAOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

CHLORIDE mmol/l

CODE	METHOD
CLCOL	<input type="checkbox"/> Colorimetric
CLCOU	<input type="checkbox"/> Coulometric
CLSED	<input type="checkbox"/> Ion Selective Electrode, direct
CLISE	<input type="checkbox"/> Ion Selective Electrode, indirect
CLTIT	<input type="checkbox"/> Titrimetric
CLOF	<input type="checkbox"/> Optical Fluorescence
CLDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
CLDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTE II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/>
CLOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

CHOLESTEROL mmol/l

CODE	METHOD
CH OCD	<input type="checkbox"/> Cholesterol Dehydrogenase
CHOL	<input type="checkbox"/> Cholesterol Oxidase - Abell Kendall
CHOLI	<input type="checkbox"/> Cholesterol Oxidase - IDMS
CHODB	<input type="checkbox"/> Siemens Dimension
CHODC	<input type="checkbox"/> Ortho Vitros Microslide Systems
CHODT	<input type="checkbox"/> Vitros DT60/DT60 II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/>
CHOOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES

METHOD QUESTIONNAIRE

CREATINE KINASE, TOTAL U/I

CODE	METHOD
CKIAB	<input type="checkbox"/> Abbott CK-NAC (IFCC)
CKIBC	<input type="checkbox"/> Beckman CK-NAC (IFCC)
CKIBE	<input type="checkbox"/> Beckman CK-NAC (Extinction Coeff)
CKIFF	<input type="checkbox"/> CK-NAC (IFCC)
CKACT	<input type="checkbox"/> CK-NAC serum start (DGKC)
CKNAC	<input type="checkbox"/> CK-NAC substrate start (DGKC)
CKCP	<input type="checkbox"/> Creatine phosphate substrate start
CKTD	<input type="checkbox"/> Dithioerythritol (DTE)
CKDIF	<input type="checkbox"/> Dithioerythritol (DTE) IFCC correlated
CKTM	<input type="checkbox"/> Monothioglycerol
CKDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
CKDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/> <input type="text"/>
CKOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

RESULTS REPORTED AT 25°C 30°C 37°C

OTHER UNITS, SPECIFY

CREATININE $\mu\text{mol/l}$

CODE	METHOD
CREAP	<input type="checkbox"/> Alkaline picrate without deproteinisation
CRDEP	<input type="checkbox"/> Alkaline picrate with deproteinisation
CRPAP	<input type="checkbox"/> Creatinine PAP method
CREUV	<input type="checkbox"/> Enzymatic UV method (340nm)
CRIDM	<input type="checkbox"/> IDMS traceable
CRERB	<input type="checkbox"/> Jaffe rate blanked
CREJC	<input type="checkbox"/> Jaffe rate blanked comp. for serum (-18 $\mu\text{mol/l}$)
CRERC	<input type="checkbox"/> Jaffe rate blanked compensated (subtract -26 $\mu\text{mol/l}$)
CRERD	<input type="checkbox"/> Jaffe rate blanked comp. (-33 $\mu\text{mol/l}$)
CRECP	<input type="checkbox"/> Roche Creatinine Plus
CREDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
CREID	<input type="checkbox"/> Vitros, IDMS traceable
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/> <input type="text"/>
CREOD	<input type="checkbox"/> Other Dry Chemistry
CREAO	<input type="checkbox"/> Other enzymatic methods

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

GAMMA GLUTAMYL TRANSFERASE, GGT U/I

CODE	METHOD
GGTBS	<input type="checkbox"/> Beckman Szasz (Extinction Coeff.)
GGTCL	<input type="checkbox"/> DCL gamma glutamyl-3-carboxy-4-nitroanalide
GGTCN	<input type="checkbox"/> Gamma glutamyl-3-carboxy-4-nitroanalide
GGTIF	<input type="checkbox"/> Gamma glutamyl-3-carboxy-4-nitroanalide (IFCC)
GGTN	<input type="checkbox"/> Gamma glutamyl-4-nitroanalide
GGTRCN	<input type="checkbox"/> Randox Colorimetric
GGTDB	<input type="checkbox"/> Siemens Dimension
GGTDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
GGTDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	<input type="checkbox"/> Vitros Slide Generation Number <input type="text"/> <input type="text"/>
GGTOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

RESULTS REPORTED AT 25°C 30°C 37°C

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES

METHOD QUESTIONNAIRE

GLUCOSE mmol/l

CODE	METHOD
GLUDH	<input type="checkbox"/> Glucose dehydrogenase
GLUOX	<input type="checkbox"/> Glucose oxidase
GLBEK	<input type="checkbox"/> GOD/02-Beckman method
GLUHX	<input type="checkbox"/> Hexokinase
GLUOE	<input type="checkbox"/> Oxygen electrode
GLDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
GLUDT	<input type="checkbox"/> Vitros DT60/DT60 II
	<input type="checkbox"/> Vitros Slide Generation Number <input style="width: 20px; height: 15px; border: 1px solid black;" type="text"/>
GLUOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

HDL-CHOLESTEROL mmol/l

CODE	METHOD
DIRECT METHODS	
HDL12	<input type="checkbox"/> Direct HDL, Clearance method
HDL10	<input type="checkbox"/> Direct HDL, Immunoseparation
HDL11	<input type="checkbox"/> Direct HDL, PEGME
HDL9	<input type="checkbox"/> Direct HDL, PPD (Polymer/Polyanion detergent)
HDR4	<input type="checkbox"/> Direct HDL, Roche 4th gen.
HDLUL	<input type="checkbox"/> HDL, Ultra/Accel Selective Detergent
HDLOD	<input type="checkbox"/> Other Dry Chemistry
HDLDP	<input type="checkbox"/> Vitros dHDL, PTA/MgCl ₂ direct precip.
HDLMT	<input type="checkbox"/> Vitros 5.1 FS Microtip assay
HDVIM	<input type="checkbox"/> Vitros, Magnetic HDL
	<input type="checkbox"/> Vitros Slide Generation Number <input style="width: 20px; height: 15px; border: 1px solid black;" type="text"/>

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

IRON µmol/l

CODE	METHOD
FE1	<input type="checkbox"/> Colorimetric with precipitation
FE2	<input type="checkbox"/> Colorimetric without precipitation
FEOES	<input type="checkbox"/> Optical Emission Spectroscopy
FEDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
FEDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	<input type="checkbox"/> Vitros Slide Generation Number <input style="width: 20px; height: 15px; border: 1px solid black;" type="text"/>
FEOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES

METHOD QUESTIONNAIRE

LACTATE mmol/l

CODE	METHOD
LACCL0	<input type="checkbox"/> Colorimetric - Lactate oxidase
LACEE	<input type="checkbox"/> Enzymatic Electrode
LACISE	<input type="checkbox"/> Ion Selective Electrode
LACOD	<input type="checkbox"/> Other Dry Chemistry
LACUV	<input type="checkbox"/> UV - LDH
LACDC	<input type="checkbox"/> Ortho Vitros MicroSlide Systems
LACDT	<input type="checkbox"/> Vitros DT60/DT60 II
	Vitros Slide Generation Number <input type="text"/> <input type="text"/>
Other methods, please specify on enrolment document	

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

LACTATE DEHYDROGENASE, LD U/l

CODE	METHOD
LACTATE TO PYRUVATE METHODS	
LDDB	<input type="checkbox"/> L to P Beckman (Extinction Coeff)
LDIF	<input type="checkbox"/> L to P, IFCC
LDDDB	<input type="checkbox"/> L to P Siemens/Dade, non-IFCC
LDLP	<input type="checkbox"/> Other Lactate to Pyruvate methods

PYRUVATE TO LACTATE METHODS	
LDPL2	<input type="checkbox"/> P to L German methods
LDPL1	<input type="checkbox"/> P to L Scandinavian & Dutch methods
LDPL3	<input type="checkbox"/> P to L SFBC
LDPL4	<input type="checkbox"/> Pyruvate 1.4 mM - Beckman LD-P

DRY CHEMISTRY	
LDDCI	<input type="checkbox"/> Ortho Vitros IFCC Traceable
LDDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
LDDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	Vitros Slide Generation Number <input type="text"/> <input type="text"/>
LDOD	<input type="checkbox"/> Other Dry Chemistry
Other methods, please specify on enrolment document	

INSTRUMENT CODE

REAGENT CODE

RESULTS REPORTED AT 25°C 30°C 37°C

OTHER UNITS, SPECIFY

LIPASE U/l

CODE	METHOD
LIP10	<input type="checkbox"/> Colorimetric, Randox
LIP6	<input type="checkbox"/> Colorimetric, Roche ACN(8)731 / ID 0-100
LIP11	<input type="checkbox"/> Colorimetric, Roche ACN(8)789 / ID 0-052
LIP5A	<input type="checkbox"/> Colorimetric, Siemens/Dade Dimension (LIPL kit)
LIP7	<input type="checkbox"/> Colorimetric, Sigma
LIP2	<input type="checkbox"/> Other Colorimetric
LIP9	<input type="checkbox"/> Randox, Turbidimetric with colipase
LIP8	<input type="checkbox"/> Roche, Turbidimetric with colipase
LIP1	<input type="checkbox"/> Other Turbidimetric with colipase
LIP4	<input type="checkbox"/> Turbidimetric without colipase
LIP3	<input type="checkbox"/> Titrimetric
LIPDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
LIPDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II
	Vitros Slide Generation Number <input type="text"/> <input type="text"/>
LIP0D	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

RESULTS REPORTED AT 25°C 30°C 37°C

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES

METHOD QUESTIONNAIRE

MAGNESIUM mmol/l

CODE	METHOD
MGAZO	<input type="checkbox"/> Arsenazo
MGAA	<input type="checkbox"/> Atomic absorption
MGCA	<input type="checkbox"/> Calmagite
MGCP	<input type="checkbox"/> Chlorphosphonazo III
MGEN	<input type="checkbox"/> Enzymatic
MGMS	<input type="checkbox"/> Mass Spectrometry
MGMB	<input type="checkbox"/> Methylthymol blue
MGXY	<input type="checkbox"/> Xylidyl Blue
MAGDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
MGDT	<input type="checkbox"/> Vitros DT60/DT60 II <input type="checkbox"/> Vitros Slide Generation Number <input type="text"/>
MAGOD	<input type="checkbox"/> Other Dry Chemistry
MGMD	<input type="checkbox"/> Other magnesium dyes

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

PHOSPHATE, INORGANIC mmol/l

CODE	METHOD
PHBK	<input type="checkbox"/> Beckman PHOSm kit (365nm)
PHENZ	<input type="checkbox"/> Phosphomolybdate enzymatic
PHMD	<input type="checkbox"/> Phosphomolybdate UV
PHDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
PHDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTSC II <input type="checkbox"/> Vitros Slide Generation Number <input type="text"/>
PHOD	<input type="checkbox"/> Other Dry Chemistry
PHOP	<input type="checkbox"/> Other methods, no protein ppt, please specify
PHOPT	<input type="checkbox"/> Other methods, with protein ppt, please specify

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

POTASSIUM mmol/l

CODE	METHOD
KCHR	<input type="checkbox"/> Chromolyte
KCOL	<input type="checkbox"/> Colorimetric
KEN	<input type="checkbox"/> Enzymatic
KFP	<input type="checkbox"/> Flame photometry
KISE	<input type="checkbox"/> Ion Selective Electrode method - direct
KISE1	<input type="checkbox"/> Ion Selective Electrode method - indirect
KOF	<input type="checkbox"/> Optical Fluorescence
KTUR	<input type="checkbox"/> Turbidimetric
KDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
KDT	<input type="checkbox"/> Vitros DT60/DT60 II/DTE II <input type="checkbox"/> Vitros Slide Generation Number <input type="text"/>
KOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES

METHOD QUESTIONNAIRE

PROTEIN, TOTAL g/l

CODE	METHOD
<input type="checkbox"/> PRCX	Biuret reaction, CX4/CX5/CX7
<input type="checkbox"/> PREP	Biuret reaction, end point
<input type="checkbox"/> PRKE	Biuret reaction, kinetic
<input type="checkbox"/> PRRF	Refractometry
<input type="checkbox"/> PRDC	Ortho Vitros Microslide Systems
<input type="checkbox"/> PRDT	Vitros DT60/DT60 II
	Vitros Slide Generation Number <input type="checkbox"/>
<input type="checkbox"/> PROD	Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

SODIUM mmol/l

CODE	METHOD
<input type="checkbox"/> NACH	Chromolyte
<input type="checkbox"/> NACOL	Colorimetric
<input type="checkbox"/> NAEN	Enzymatic
<input type="checkbox"/> NAFP	Flame photometry
<input type="checkbox"/> NAISE	Ion Selective Electrode method - direct
<input type="checkbox"/> NISE1	Ion Selective Electrode method - indirect
<input type="checkbox"/> NAOES	Optical Emission Spectroscopy
<input type="checkbox"/> NAOF	Optical Fluorescence
<input type="checkbox"/> NADC	Ortho Vitros Microslide Systems
<input type="checkbox"/> NADT	Vitros DT60/DT60 II/DTE II
	Vitros Slide Generation Number <input type="checkbox"/>
<input type="checkbox"/> NAOD	Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES

METHOD QUESTIONNAIRE

TRIGLYCERIDES

IMPORTANT NOTE

Triglycerides can be analysed and reported using several techniques

a) TOTAL GLYCEROL

The Total Glycerol in the sample is measured and reported. With this method only one measurement is required. Participants using this technique should select a method code from the TRIGLYCERIDES, TOTAL GLYCEROL section below.

b) TOTAL GLYCEROL WITH ESTIMATED FREE GLYCEROL CORRECTION

The Total Glycerol is measured as in a) and 0.11 mmol/l (10 mg/dl) is subtracted from this to give a corrected result. Participants using this technique should select a method code from the TRIGLYCERIDES, TOTAL GLYCEROL section below.

c) TOTAL GLYCEROL WITH TRUE FREE GLYCEROL CORRECTION

Two measurements are made: one for Total Glycerol and one for Free Glycerol and the difference between the two is reported.

RIQAS participants using this method should choose a method code from the TRIGLYCERIDES, TOTAL GLYCEROL WITH TRUE FREE GLYCEROL CORRECTION section.

If you are in any doubt which method you use, please contact **RIQAS**

TRIGLYCERIDES, TOTAL GLYCEROL mmol/l

CODE METHOD

METHOD 1 - LIPASE/GPO-PAP

- TG1A Colorimetric without glycerol correction
TG1B Colorimetric with 0.11 mmol/l (10 mg/dl) glycerol correction
TGBD Siemens Dimension

METHOD 2 - LIPASE/GLYCEROL KINASE UV

- TG2A End-point without glycerol correction
TG2B End-point with 0.11 mmol/l (10 mg/dl) glycerol correction

METHOD 3 - LIPASE/GLYCEROL DEHYDROGENASE

- TG3 Lipase/Glycerol Dehydrogenase

METHOD 4 - DRY CHEMISTRY

- TRIDC Ortho Vitros Microslide Systems
TRIDT Vitros DT60/DT60 II
Vitros Slide Generation Number
TRIOD Other Dry Chemistry

Other methods, please specify on enrolment document

TRIGLYCERIDES, TOTAL GLYCEROL WITH TRUE FREE GLYCEROL CORRECTION mmol/l

CODE METHOD

METHOD 1 - LIPASE/GPO-PAP

- TG1C Colorimetric 'free' glycerol blank correction

METHOD 2 - LIPASE/GLYCEROL KINASE UV

- TG2C End-point 'free' glycerol blank correction

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

RQ9194 - SERUM INDICES METHOD QUESTIONNAIRE

UREA mmol/l

CODE	METHOD
URAC	<input type="checkbox"/> Beckman-Conductivity
URDM	<input type="checkbox"/> Diacetyl monoxime
URPHT	<input type="checkbox"/> O-Phthalaldehyde
URUEP	<input type="checkbox"/> Urease, end point
URURH	<input type="checkbox"/> Urease, hypochlorite
URUK	<input type="checkbox"/> Urease, kinetic
URDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
URDT	<input type="checkbox"/> Vitros DT60/DT60 II <input type="checkbox"/>
	<input type="checkbox"/> Vitros Slide Generation Number
UROD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY

URIC ACID mmol/l

CODE	METHOD
URED	<input type="checkbox"/> Reduction methods
URSP	<input type="checkbox"/> Uricase @ 293nm
URPER	<input type="checkbox"/> Uricase peroxidase without ascorbate oxidase
URPA2	<input type="checkbox"/> Uricase peroxidase with ascorbate oxidase @ 546nm
URPAS	<input type="checkbox"/> Uricase peroxidase with ascorbate oxidase
URCAT	<input type="checkbox"/> Uricase - catalase 340nm.
UACDC	<input type="checkbox"/> Ortho Vitros Microslide Systems
UADT	<input type="checkbox"/> Vitros DT60/DT60 II <input type="checkbox"/>
	<input type="checkbox"/> Vitros Slide Generation Number
UACOD	<input type="checkbox"/> Other Dry Chemistry

Other methods, please specify on enrolment document

INSTRUMENT CODE

REAGENT CODE

OTHER UNITS, SPECIFY
