QualiCont eqas.gr

CONTENTS

GENERAL INFORMATION

QualiCont Nonprofit Kft. is an **independent and impartial** Hungarian External Quality Assessment **(EQA) provider**.

It has been supporting the work carried out by in vitro diagnostic measuring places **for more than 25 years** by **organising** wide range of tests of **proficiency surveys** in order to maintain and improve the quality of professional work achieving increasing **patient safety** and a high level of **health protection** by **making healthcare diagnostics more reliable.**

The **proficiency tests organised by QualiCont** are internationally well-known and acknowledged schemes with approximately 4000 international participants thanks to the Distributors.

QualiCont sets the EQA schemes and prices on an **annual basis, but there is also an opportunity to apply during the year.**

QUALITY MANAGEMENT

Our Company has been **certified** since 2001 according to the ISO 9001 standard.
Audited activities: Planning, organization and management of proficiency testing (external quality assessment) and the related supporting services for in vitro medical diagnostic laboratories and investigators on other human and veterinary medicine.

The certification document is available at www.qualicont.com.

ACCREDITATION

QualiCont Nonprofit Kft. is a proficiency testing provider accredited by NAH (National Accreditation Authority) **under registration number NAH-8-0002/2023.** According to **MSZ EN ISO/IEC standard 17043:2010**, QualiCont **received the accredited status in 2014**. **As of today, 63 of its proficiency testing schemes** have accredited status. All such schemes are accompanied by the letter (A) in related documentation.

More than 90% of the measured parameters are provided accredited, the scope of accreditation is constantly being expanded.

Both the Accreditation Certificate and the Detailed scope of Accreditation are available on the QualiCont website: www.qualicont.com, as well as on the NAH website: www.nah.gov.hu.

NEW!

From 2023 QualiCont provides its accredited proficiency tests ensuring the option of **flexible accreditation**, which makes **much easier to manage and implement changes to meet demands.**
In practice, this means that **within one accreditation cycle (5 years) it is possible to introduce**, for example, the measurement of the same parameter in a **new matrix** or to introduce a **new parameter** in the same matrix and measurement principle **without having to repeat the accreditation procedure.**
Feel free to contact us with your requirements!

ASSISTING AND SUPPORTING THE PROFESSIONAL WORK OF PARTICIPANTS

You can receive **technical and professional assistance** regarding the implementation of proficiency testing by

- phone: +36 62 543-016
- mobile phone: +36 30 462 5864
- email: mail@qualicont.com
- I-QC program.

Further professional assistance is possible as follows:

- consultations for small groups with **training purposes** scheduled in advance
- **one-on-one consulting opportunities** - personally if it is required - at prearranged times with pre-set conditions in order to solve selected issues, involving experts if necessary.
- once a year **accredited professional training session** (QualiCont Forum), so far available only in Hungarian language.

INTERNATIONAL RELATIONS

QualiCont Nonprofit Kft. has been a member of

- **EQALM** (The European Organisation for External Quality Assurance Providers in Laboratory Medicine), since its foundation in 1996 and
- the EA-EUROLAB-EURACHEM's work group involved in external quality control accreditation since 2014,
- the **EEE PT WG** (EA-EUROLAB-EURACHEM's work group: 'Proficiency Testing in Accreditation').

Colleagues

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Head of Quality Management,
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Survey organisation:
Program-coordinator:
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QualiCont Experts

The professional work at QualiCont is supported by experts who are members of the Scientific Advisory Board. *President of the Scientific Advisory Board:* ***Prof. Dr. László Dux***

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I-QC Program

Taking into account the requests of the participants, **a constantly renewed Internet-based electronic customer service system** awaits the participants of the surveys, which is

- ✓ available on multiple types of IT devices
- ✓ offering complex services:
  - ‣ browser login, with a single point of access, find **everything in one place**
  - ‣ traceability of the whole survey process
- ✓ offering quick access to information:
  - ‣ results graphical interpretation (statistical demonstration)
  - ‣ quick identification of errors
- ✓ easy to handle.

Thanks to the online customer service system, you can **carry out all survey-related administrative tasks online**: contracting, ordering (which can be viewed and supplemented at any time), also **evaluations and graphic charts** (short- and long term), as well as **Certificates of Participation, Performance** and further ones can be viewed.
You can let us know about your proposals and remarks by sending us a message directly through the program.

Our website's contents:

I-QC program	*Surveys* (reporting results) *Assessment documents:* - Closed surveys: pre-assessments: statistical demonstration and 'expected results/values' - Evaluated surveys: short and long term statistical demonstrations, evaluations compared to target values, certificates, graphic charts *Contracts* (contracting) *Orders* *Documents* (Evaluations, Manuals, User manual)
Pathology program	Reporting results (in case of Diagnostics of cervical cytology all parts are digital), Evaluations, Certificates
News	News, Up-to-date information about the launch of the current survey, submission deadline, status of evaluations
About us	About QualiCont, Quality Policy, Our Awards, Colleagues, Experts
Certificates	Accreditation Certificate, Detailed Scope of Accreditation, ISO Certificate
Surveys	General information (terms and conditions for participation in surveys, shipment of samples, reporting results, evaluations, certificates, special services, novelties, changes), Scheme Catalogue, List of parameters, Manuals, Unit conversation factors
Events	QualiCont Forum (at this moment only in Hungarian language), Trainings
Professional information	Types of target values, acceptable ranges; Professional presentations and publications, Performance analysis
Documents available for download	Scheme catalogue, Calendar, Complaint sheet, Data protection and Data handling notice, Information Notice on the Possibility of Recourse to Conciliation Panels, Data Privacy Incident Report and other current documents
Newsletters	Newsletters sent by e-mail can be viewed here
FAQ	Frequently Asked Questions

www.qualicont.com

NOVELTIES AND CHANGES 2024

Please send your letters to the **e-mail addresses to the various departments** for faster administration, so they can be directed to the relevant persons immediately.

Please send your mails to the assigned e-mail address in the following cases:

Orders, further orders, order changes	megrendeles@qualicont.com
Shipment, Damaged/missing package/sample	korvizsgalat_szervezes@qualicont.com
Questions related to schemes and surveys	coordinator@qualicont.com
Questions and requests related to evaluations	ertekeles@qualicont.com
Objection, complaint	kifogastetel@qualicont.com

Certainly you can still use the email address mail@qualicont.com.

CHANGES IN THE PROCEDURE AND/OR CONTENT OF THE SCHEMES/SURVEYS:

- Introducing **750. Molecular genetics schemes together** (730+740+746+747): ordering molecular genetics schemes together offers lower participation fee.
- **411Dk. Bacteriology Direct Smear scheme can be ordered individually**, not only as part of the 411. Bacteriology panel as before.
- **The content of the 503. Cervical cytology scheme is expanded, and the new name of the scheme is "Diagnostics of cervical cytology".**
- **Previous pilot schemes are not pilot any more from 2024:**

  4111. Bacteriology (A) schemes by organ system
  Urine, faeces, throat swab, vaginal culture, urine culture, ear culture, nose swab, eye culture, pus, sputum, CSF, blood samples

  4121. Mycology (A) schemes by organ system
  Urine, faeces, throat swab, vaginal culture, urine culture, ear culture, nose swab, eye culture, pus, sputum, CSF, blood samples

  505. Diagnostic cytology
  This scheme is still available free of charge.

  748. Interpretation of molecular genetic schemes
  This scheme is still available free of charge.

Any additional needs (e.g. frequency, sample number, content) beyond the advertised schemes should be written to QualiCont and it will be fulfilled if it is possible!

CONDITIONS FOR PARTICIPATING IN SURVEYS

How to apply?

Taking part in the schemes offered by QualiCont Nonprofit Kft. in the **Scheme Catalogue** and in the **Order Form** is possible **via the Distributors of QualiCont Kft. or contact the QualiCont office directly if there is no official Distributor of QualiCont in your country.**

In order to benefit from quick communication, please **give your email address** by all means!

IMPORTANT!

Most of the schemes can be ordered monthly with 1 sample, too (12 months x 1 sample). If there are at least 5 participants for the scheme in the required survey, the QualiCont tries to organise it by all means!

Step-by-Step Guide:

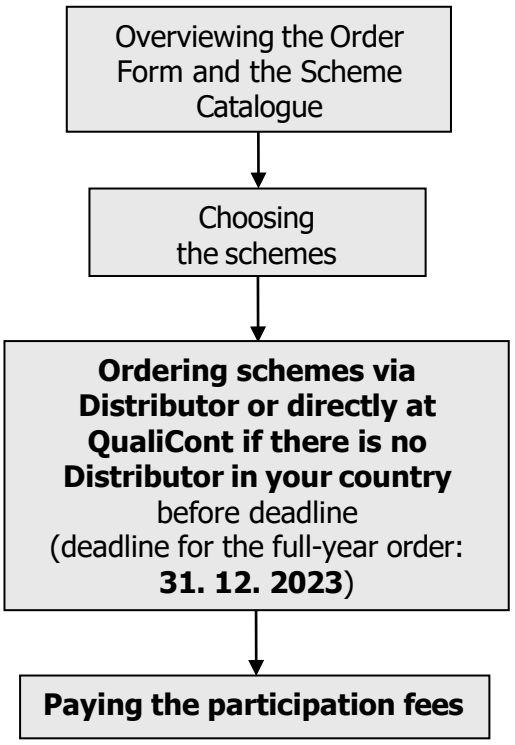
1. Registering/Signing a contract

Registration is possible via the Distributor of QualiCont Kft. or contact the QualiCont office directly if there is no official Distributor of QualiCont in your country.

2. Ordering external quality assessment schemes

QualiCont offers 125 schemes in 2024.
QualiCont guarantees to fulfil full-year orders for 2024 only if the application arrives to QualiCont before the **31st of December 2023**.
Although orders can be placed for a survey during the year. As continuous participation in the external quality assessment is necessary for proper and responsible laboratory operation, registering for **participation in the full-year scheme is suggested.**

Ordering process



Applications **received with a delay** and **orders submitted during the year** can only be handled by the Provider during the following survey if the order is received no later than **1 month before the start of the scheduled date of the survey** and if sufficient control sample is available.

ATTENTION!
When placing orders, be sure to check whether your certificates for each proficiency test cover the entire year and your needs!
It may happen that QualiCont is not able to accept orders afterwards in all cases.

3. Type of the documentation

The whole process of carrying out surveys (**Manuals, reporting results, evaluations, certificates**) is electronic.

4. Paying the participation fee

Paying the participation fee to the Distributor of QualiCont Kft. or directly to QualiCont if there is no official Distributor in your country is required condition of fulfilment of the service by the Provider.

The participation fee includes

- **the registration fee,**
- the **prices and packaging costs** of the survey samples,
- **documents electronically available** via I-QC:
  - computer **assessment** of one result per parameter and per sample (traditional, graphic and individual, long-term evaluations);
  - summarised evaluations;
  - Final Report in the case of accredited schemes;
  - written evaluation, if needed
  - **Certificates** (Participation and Performance);
  - Annual Certificates of Efficiency (annual, individual ones)
- more data reporting through I-QC,
- handling objections and comments.

The participation fee does not include:

- fee of further assessments,
- certified copies of certificates,
- issuance of an extraordinary (not full-year or additional) certificate.

Detailed information about these services is available in the '**Special services**' part of the Scheme Catalogue. Please specify your needs in the Order Form's section of the same name.

Cancelling surveys

Cancellation of any ordered survey can be accepted up to **one month before** the scheduled date of the **next of surveys** at the latest.

Handling different needs

If there is any special request, it is possible to choose a **transportation method different** from the one specified in the Scheme Catalogue under the condition that the Customer bears its cost.

Failure to carry out surveys/ handling changes during the year

If **QualiCont fails to carry out a scheme partially or in its entirety** through the suppliers' fault, it **pays back** the cost of the service not provided.

Liability

For the entire survey and all its processes, including changes arising during the year (e.g. the content and implementation of the surveys is modified due to the replacement of a sample provider), **QualiCont takes responsibility and reserves the right to change.**

QualiCont informs the participants via its website or if necessary, through email or phone about possible changes in the content and implementation of surveys.

The participants' code number

QualiCont uses code numbers to identify the participants.

In the course of carrying out surveys, the code number should be used for all communication between the participants and the Provider.

Processing confidential data

QualiCont handles all data and information, including participants' data and the measurement results of the proficiency testing schemes, confidentially, which means that the participant's code number and any other information that is suitable for identification (name, address) cannot be included on any document accessible by any third party, e.g. summary available for other survey participants and other issued documents.

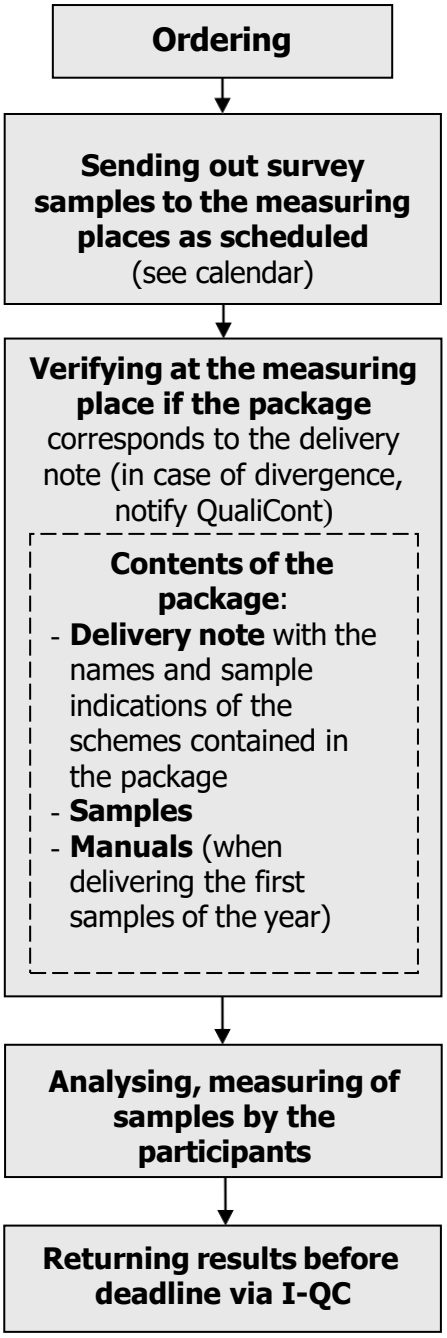
QualiCont hands any information about the surveys to any third party only with the permission of the affected participant.

QualiCont Nonprofit Kft. – **next to confidentiality** – is obliged to present the documents related to the proficiency tests to the accreditation and certification organisations, however, they may not pass it on to third parties, they are obliged to treat all information they come to know during the QualiCont audit as confidential.

SHIPMENT OF SAMPLES

Carried out according to the schedule announced in the **Scheme Catalogue**, the **Order Form** and the **Calendar.**

Together with the **first sample shipment,** QualiCont sends out a **Manuals**, which contains the necessary information for the **storage** and **processing** of the survey samples. **Keep it during the whole year!** Information necessary for **reporting results** is available electronically on **I-QC** at each result sheet or in an uniform document after logging into I-QC system by entering your individual code and clicking on the *Documents* menu. **Please check if the sample package corresponds to the delivery note!** If something is **missing from the package** or arrived broken, **please contact the Distributor or QualiCont immediately** (before the submission deadline) to allow **corrections**!
The filler material in the package should be thrown away only after the contents of the package are checked by item. It may happen that the samples are also thrown away together with the filler material.



Survey samples

In each case, QualiCont provides such control samples to the participants that remain stable until the end of the survey, i. e. until the end of the answering of objections. Exceptions are those samples which, due to the nature of the component to be measured, must be analysed within a short time. The stability of the survey test 'samples' cannot be interpreted in the case of the schemes performed with digital images or questionnaires.

Damaged samples

QualiCont Kft. is unable to take responsibility for damages incurred ***during shipment***, but – if possible – replaces the damaged samples free of charge.

If the sample damage occurs ***at the participant*** (it breaks or disappears there), QualiCont can only replace it for an additional fee!

Quality complaints about the sample

Please keep the remains of the samples as prescribed to help resolve any potential complaints submitted after QualiCont reported the evaluations.
If **quality complaints** arise about the samples (e.g. metrology issues, sample issues, uncertain matrix effect etc.), **return the sample to the address of the QualiCont immediately!**

REPORTING RESULTS

Respecting submission deadlines is a must for faster assessment!

The **deadline of result submission** is **10 workdays** for schemes **sent** for **six times a year** and for **microbiology** schemes. For **other schemes** it is **20 workdays.**

Reporting and assessment of results:

Reporting of results is possible by using the web application called **I-QC**, which is available on **QualiCont Nonprofit Kft.'s website. You can use the same program to check evaluations** electronically.

Participating measuring places can use an **online interface** accessible via an individual code to report results, then check and download Individual and Summarised evaluations along with Certificates of Participation and Performance. **In the I-QC program, each participant has access only to their own data.**

Participants **can check, download and print the result sheets and the evaluation documents via the I-QC program.**

ATTENTION!

The participants are responsible for all the information they report. The QualiCont takes responsibility for the processing the data!

It is important that when you submit results to a scheme for the first time in the year, context data (method, reagent, instrument) should be checked whether they are correct. I-QC program saves the settings, so your results will be evaluated in the right group throughout the year!

Handling of results submitted with a delay:

1. Handling of results submitted past the deadline, but before evaluations are issued

   Survey results submitted past the reporting deadline, but before the issuance of evaluations may be accepted and eligible for assessment if the participant can provide a reason for its delayed submission and submits the measurement results together with the measurement documents. The request is **examined by the Evaluation group and a decision is made** accordingly.

Processing and evaluation of results

REPORTING OF RESULTS

- Reporting and validation of results by participants.
- Entering electronically submitted results from the web-based reporting system into QualiCont's internal data processing system.
- Data verification.

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EVALUATION

1. publishing **pre-assessments** (expected results and statistics) online
2. verifying and entering target values
3. comparing results to each other and to target values based on various algorithms
4. expert opinions

↓

ISSUING EVALUATIONS

1. issuing the evaluations and the certificates of the **schemes organised in 6 surveys/year within 15 workdays** of the submission deadline
2. issuing evaluations and certificates for **all the other schemes within 3 months;** the evaluations and the certificates can be seen on the internet immediately after their issuance and for all participants at the same time

↓

ANALYSING EVALUATIONS

This is a must for quality improvement!
Taking the necessary corrective actions in the measuring place.
(submission of objections)

2. Management of results before evaluations are issued

   QualiCont performs **data examination** to ensure that the **evaluation groups** are as **homogeneous** as possible, considering the fact that **administrative errors** may also **lead to a misrepresentation of the overall performance of a measurement system and the proficiency testing scheme.** The data examination identifies incomplete reporting of results and robust discrepancies that are obvious, typically administrative in nature. It shall inform the concerned laboratories, giving them the opportunity to make the correction within the specified time limit.

3. Management of results submitted after evaluations had been issued

   Measurement results submitted past the issuance of evaluations are only accepted by QualiCont if the participant can provide reasonable cause for the late submission of results, as well as credible measurement documentation – measurement reports – to substantiate the results to be assessed.

   The documentation is **examined by the Managing Director, who decides** whether it should be accepted.

EVALUATION

You can find detailed information about the types of target values, the evaluation process and the way published performance evaluations are displayed in a publication called **'Evaluations'**, which is available for participants as an electronic document in the I-QC program, accessible with their individual code in the *Documents* menu.

Evaluation process:

STATISTICS become available immediately after the result reporting deadline **in I-QC program**. These are simple statistical analyses of the measurement results in the database at any given time, which enables quick detection and correction of any measurement errors.
Corrective action can be taken until no later than 1 week before issuance of the final evaluation.
In case of certain schemes, typically tests that have a serious impact on life, such as blood group serology (A), as well as certain microbiological tests, the expected results are published by the Provider within two weeks of the result submission deadline.

In the evaluation process, **after entering the target values**, QualiCont Kft. uses its own proprietary software to compare measurement results amongst themselves and to target values and to make individual evaluations and various summaries.
In the case of the accredited surveys, a document called 'Final Report' contains information about the traceability of the target values.
QualiCont determines **acceptable ranges** by taking into consideration professional expectations, expert recommendations and available international experience.

Interpretation of results is **facilitated by** various **graphic summaries**.

Evaluation issuance deadline:

The schemes organised in 12 and 6 surveys/year are evaluated within 15 workdays of the result submission deadline, with the evaluations being issued and becoming available for participants in I-QC.

In case of **schemes organised in 4 surveys/year**, evaluations are uploaded **no later than the sample shipment of the next survey.**

In case of **schemes organised in 2-3 surveys/year**, the evaluation deadline is a **maximum of 3 months**.

In case of **pathological schemes**, the **evaluations** are issued and uploaded into the Pathology scheme no later than the **sample shipment of the next survey.**

If, for any reason, a change other than the above occurs, the concerned participants will be informed.

The following assessments are issued for the participants:

Per survey:

- **Individual evaluation** and **Summary**,
- **Final Report** (in case of all accredited and many other schemes), in which the Provider summarises all information regarding the proficiency testing.
  Schemes with a lower number of participants, regardless of whether they are accredited or not, come with a **summary chart**, sorted by method and reagent for better comparability of results.
- **Graphic – short term, long term – evaluations** (where applicable) can be viewed electronically and printed out using the I-QC system.
- Publication of **pre-assessments and expected results/values.**
- **Summary report sheet (Individual numerical evaluation with summarised data)**

Evaluations are available via the I-QC web application!

QualiCont informs the participants of the issuance and availability of evaluations via email.

Evaluation conditions:

The Provider is only able to evaluate results that are returned to the office before the **deadline**, **validated within the I-QC web application.**

Please take care to:

- Provide additional information of the measurement results accurately.
- Specify or select the right measurement unit next to the results.

Providing additional data (method, device, reagent, cut off etc.):

Providing additional data is important for correct evaluation. Without this information, certain schemes (e.g. 196, 292 etc.) cannot be evaluated, in cases where results and target values depend strictly on used reagents, methods and devices, the classification of the quantitative measured value into a category can be done knowing the cut-off value (e.g. scheme 178 etc.).

Assessment of a single result:

If a participant provides results only for one sample, the provided result will be assessed by QualiCont, but if the participant does not provide a reason for the missing result when reporting, the Certificate of Performance shows letter 'n' for the missing result even if the single provided result is accepted.

Evaluation of a small number of measurement results:

If the number of the submitted results for a given measurement system is lower than 5 and the result is method/measurement system dependent and cannot be classified as belonging to any method/measurement system group and there are no target values determined on the basis of measurements by an expert laboratory commissioned by the manufacturer/supplier or QualiCont, the result is not qualified.

Certificates

QualiCont Nonprofit Kft. issues **six types of certificates**:

- **'Certificate of Participation'**, listing all parameters assigned to specific schemes where at least one result was reported by the participant.
- **'Certificate of Performance'** for each scheme in which the parameters are listed with 'y' and 'n' marks, depending on whether the result(s) of the parameter is (are) within the acceptable range.
  The **Certificate of Performance** does not qualify the participant, it only gives information whether the result of the given parameter complied with the system of requirements set by the Provider or not.

For most proficiency tests, once a year, after the evaluation of the last survey of a scheme, QualiCont issues the following **certificates of efficiency/performance**, in which the percentage of the acceptance rate of the evaluated measurement results in the current year is announced for each program and/or parameter:

- **Annual Certificate of Efficiency**
- **Annual Certificate of Efficiency by parameters**
  The above two certificates can be downloaded from 'Evaluations' section in the given year, at the last survey of the given scheme.
- **Summary annual performance certificate**
- **Summary annual performance certificate by parameter**
  The above two summary certificates are available by clicking on the download arrow in the header of the given year at the 'Evaluations' section.

With the certificates of effectiveness QualiCont intends to help the accreditation preparation and work of the laboratories.

Issuance of certificates:

QualiCont Nonprofit Kft. issues Certificates of performance and participation **with a time limit and exclusively to participants of the scheme** after the evaluation of each survey. ***Certificates*** **are published** electronically to **all measuring places** automatically.

No subsequent certificate can be issued for the same time period! Certified copies can be issued after payment of a processing fee!

For the following schemes, QualiCont currently **issues only Certificates of Participation**:

413. Detection of bacteria from blood culture (A)
414. Detection of multi-resistant pathogens (A)
418. Detection of bacterial enteral pathogens (A)
419. Detection of bacterial respiratory pathogens (A)
501-502. Pathology
503. Diagnostics of cervical cytology
902. Preanalytics

The authenticity of certificates, which can be downloaded via I-QC, is certified by the web address (electronic access route) of the original document found at the bottom of the page, which can be accessed using the measuring place's own code.

Validity of the certificates:

The duration of validity of the Certificates of Participation and Performance **varies depending on the frequency of surveys**:

- for schemes with **1 shipment per year**, the validity is for **14 months**,
- for schemes with **2 shipment per year**, it is for **10 months**,
- for schemes with **3 to 6 shipment per year**, it is for **6 months**,
- for schemes **with 12 shipment per year**, it is for **3 months**.

The dates of Certificates of Participation and Performance are identical, which is the result submission deadline for the proficiency testing in question.

Analysis of evaluations

One of the most important elements of external quality assessment is the analysis of the assessments issued by the EQA Provider. This step is often skipped, even though **this is the basis of developing quality work** by

- exploring potential errors,
- taking corrective actions and
- implementing them.

QualiCont runs checks before and after issuing evaluations!
Please do the same!

Corrective action, remarks, suggestions, objections

It is possible to make remarks and request corrective action relating to the evaluations and implementation of surveys.
Any claims and complaints are **accepted** by QualiCont **only in writing**, primarily using the **'Complaint sheet'** or **in any other informal written form** (via letter, email, customer service).

Written objections to specific evaluations are accepted by the Provider within 15 workdays of the email notification about the publication of the evaluation!

QualiCont responds to objections and remarks in writing. In the case of simple **administrative errors** (e. g. incorrect data entry, method/reagent clarification), the response deadline is **15 workdays.**

If an **expert** or a reference laboratory needs to be involved, responding to an objection **takes longer**.

ATTENTION!

After managing an **objection**, the specific statistics of the measurement may change, and a versioned version of the **Summary** and the **Final Report** is published, **which invalidates the previous edition**.

SPECIAL SERVICES

In case the measuring place is not capable of determining the correct results in assessing patient test substances or the obtained result with the test substance is doubtful, QualiCont Kft. – with the help of an expert laboratory – offers a service which includes analysing test results and assessing the correct result and providing the correct assessment at the request of the measuring place. The costs are determined on the basis of an individual agreement.

Certified copies (of certificates)

Certified copies of certificates can be requested for an additional processing fee!

Individual performance certificate

Issuing further performance certificates/ individual effectiveness analysis is possible at the request of participants for an additional fee.

Further evaluations

If a participant wants the EQA sample to be tested and assessed at the same site of the same measuring place with different devices and methods, further evaluation has to be required. For this, the additional method/device are need to be specified.

Repeating a survey

If enough number of samples is available, it is possible to repeat a survey at a participant's request by sending an additional sample and paying the full survey fee.

Interlaboratory comparison tests

It is possible to organise interlaboratory comparison tests that are not available among QualiCont's proficiency tests. QualiCont draws up quotes and testing plans for specific requests.

SURVEYS

PREANALYTICS

902. Preanalytics case study (electronical survey)

	3.	9.
Start of the scheme	05.03.	03.09.
Deadline of result reporting	09.04.	03.10.
Deadline of evaluation publication	09.07.	03.01.

Content of the scheme:
Evaluation of examples from the daily routine laboratory practice with the help of a questionnaire: identifying the possible analytical errors based on the written case or the laboratory measurement results.

Other information:
The **participation** is available for **free for every participant** that orders any of the QualiCont schemes.

CLINICAL CHEMISTRY/ IMMUNE CHEMISTRY

MONTHLY SCHEMES

1 sample/survey, monthly

It is possible to order the scheme for **at least 10 surveys**! The whole year's samples (12 pieces) are be sent together in January.
Individual evaluation, summary and graphic evaluation, a certificate of participation, and an **annual compliance evaluation** are issued once a year, after closing the last survey of the year.

	1.	2.	3.	4.	5.	6.
Sample shipment	January					
Deadline of result reporting	30. 01.	15. 02.	15. 03.	15. 04.	15. 05.	15. 06.
Deadline of evaluation publication	15. 02.	28. 02.	30. 03.	30. 04.	30. 05.	30. 06.
	7.	8.	9.	10.	11.	12.
Deadline of result reporting	15. 07.	15. 08.	15. 09.	15. 10.	15. 11.	15. 12.
Deadline of evaluation publication	30. 07.	30. 08.	30. 09.	30. 10.	30. 11.	30. 12.

1001. Clinical chemistry (wet) (+AST, +CRP) (A) (1 sample/survey – monthly)

Survey samples:
1 sample, 5 ml lyophilized serum each

Parameters:
Apolipoprotein A1, Apolipoprotein B, Alpha-amylase, Alpha-HBDH, Albumin, Albumin (elpho), Alkaline phosphatase, Bilirubin (direct), Bilirubin (total), Bicarbonate, Calcium, Chloride, Cholesterol, Cholinesterase (ChE), CK, Copper, Creatinine, C-reactive protein (CRP), Gamma globulins (elpho), Gamma-GT, GLDH, Glucose, GOT/ASAT, GPT/ALAT, HDL Cholesterol, IgA, IgE, IgG, IgM, Inorganic phosphate, Ionized calcium, Iron, Lactate, LDH, LDL Cholesterol, Lipase, Lithium, Magnesium, O-Streptolysin (ASO), Osmolality, Pancreatic amylase, Potassium, Sodium, TIBC (total iron-binding capacity), Total protein, Transferrin, Triglycerides, Urea, Uric acid, UIBC (Unsaturated Iron Binding Capacity)

1001A Clinical chemistry (wet) (A) (1 sample/survey – monthly)

Survey samples:
1 sample, 5 ml lyophilized serum each

Parameters:
Alpha-amylase, Alpha-HBDH, Albumin, Albumin (elpho), Alkaline phosphatase, Bile acids, Bilirubin (direct), Bilirubin (total), Bicarbonate, Calcium, Chloride, Cholesterol, Cholinesterase (ChE), CK, Copper, Creatinine, Gamma globulins (elpho), Gamma-GT, Glucose, GOT/ASAT, GPT/ALAT, GLDH, HDL Cholesterol, IgA, IgG, IgM, Inorganic phosphate, Iron, Lactate, LAP, LDH, Lipase, Lithium, Magnesium, Osmolality, Pancreatic amylase, Potassium, Sodium, TIBC (Iron-Binding Capacity), Total protein, Transferrin, Triglycerides, Urea, Uric acid, UIBC (Unsaturated Iron Binding Capacity)

1451. Glycated proteins I. (A) (1 sample/survey)

Survey samples:
1 sample, 0.5 ml lyophilized haemolysate

Parameters: Haemoglobin A_1, Haemoglobin A_{1C}

1481. Abnormal haemoglobins (ß-Thalassemia) (1 sample/survey)

Survey samples:
1 sample 0.2 ml lyophilized haemolysate

Parameters: Haemoglobin A_2, Haemoglobin F, Haemoglobin S, Haemoglobin C, Interpretation

Aim and content of the scheme:
Determination (in %) of different haemoglobin types - abnormal haemoglobins - by HPLC instrument and interpretation of results.

1451+1481. HbA1C + Abnormal haemoglobins

Survey samples: 2 samples, 0.5 ml + 0.2 ml lyophilized haemolysates each

Parameters: Haemoglobin A_1, Haemoglobin $A_{1C,}$ Haemoglobin A_2, Haemoglobin F, Haemoglobin S, Haemoglobin C, Interpretation

Aim and content of the scheme:
Determination (in %) of different haemoglobin types - abnormal haemoglobins and interpretation of results.

General chemistry

100. Clinical chemistry (wet) (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 5 ml lyophilized serum each

Parameters:
Alpha-amylase, Alpha-HBDH, Albumin, Albumin (elpho), Alkaline phosphatase, Bile acids, Bilirubin (direct), Bilirubin (total), Bicarbonate, Calcium, Chloride, Cholesterol, Cholinesterase (ChE), CK, Copper, Creatinine, Gamma globulins (elpho), Gamma-GT, Glucose, GOT/ASAT, GPT/ALAT, GLDH, HDL Cholesterol, IgA, IgG, IgM, Inorganic phosphate, Iron, Lactate, LAP, LDH, Lipase, Lithium, Magnesium, Osmolality, Pancreatic amylase, Potassium, Sodium, TIBC (Iron-Binding Capacity), Total protein, Transferrin, Triglycerides, Urea, Uric acid, UIBC (Unsaturated Iron Binding Capacity)

100eGFR. Clinical chemistry: eGFR (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Content of the scheme:
Calculating eGFR with the given creatinine values and case history.
Two cases are sent per survey.

Other information:
The **participation** is available for **free for every participant** that orders **scheme 100., 1001A or 1001. Clinical chemistry.**

It is also **available** for those that do not participate in scheme **100., 1001A or 1001. Clinical Chemistry**, but only for extra cost.

110. Neonatal bilirubin (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 2 ml lyophilized serum each

Parameters: Neonatal bilirubin

130. Faecal diagnostics: Calprotectin

	5.	11.
Start of the scheme	21.05.	12.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Survey samples:
2 samples, 0.2 ml lyophilized faecal sample each

Parameters:
Calprotectin (quantitative and qualitative)
Elastase (quantitative and qualitative)

131. Faecal diagnostics: FOB (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 liquid samples

Parameters:
Haemoglobin (quantitative and qualitative)

141. Electrophoresis (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 lyophilized serum

Parameters: Albumin (chemistry), Albumin (electrophoretic), Alpha1-globulins, Alpha2-globulins, Beta globulins, Gamma globulins, Total protein

151. Lipids/lipoproteins (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 3 or 5 ml lyophilized serum each

Parameters: Apolipoprotein A1, Apolipoprotein B, Cholesterol, HDL Cholesterol, LDL Cholesterol, Lp(a), Phospholipids, Triglycerides

Diabetes surveys

145. Glycated proteins I. (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples: 2 samples, 0.5 ml lyophilized haemolysates each

Parameters:
Haemoglobin A_1, Haemoglobin A_{1C}

146. Glycated proteins II. Fructosamine (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 1 ml lyophilized serum each

Parameters: Fructosamine

Myocardiac markers

244. High sensitive CRP (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples: 2 samples, 1 ml liquid samples each

Parameter: High sensitive CRP

760. Myocardiac markers (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, lyophilized plasma or 1.5 ml liquid samples each

Parameters:
BNP, CK-MB, CK-MB Mass, CK total, Homocysteine, Myoglobin, NT-pro BNP, Troponin-I, Troponin-T

Other information:
Troponin-I and Troponin-T can be measured from the samples by POCT devices, too!

Special surveys

148. Abnormal haemoglobins (ß-Thalassemia)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 0.2 ml lyophilized haemolysates each

Parameters: Haemoglobin A_2, Haemoglobin F, Haemoglobin S, Haemoglobin C, Interpretation

Aim and content of the scheme:
Determination (in %) of different haemoglobin types - abnormal haemoglobins - by HPLC instrument and interpretation of results.

162. Haemoglobin fractions

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 samples, 1.2 ml liquid each

Parameters:
Fraction CO-Hb, Fraction Met-Hb, Fraction O_2Hb, Total haemoglobin

195. Therapeutic drugs (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 5 ml lyophilized serum each

Parameters: Amikacin, Caffeine, Carbamazepine, Cyclosporin, Digoxin, Ethosuximide, Gentamicin, Lithium, Methotrexate, Paracetamol, Phenobarbital, Phenytoin, Primidone, Salicylate, Theophylline, Tobramycin, Valproic acid, Vancomycine

196. Therapeutic drugs, hormones (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 5 ml lyophilized each

Parameters:
11-deoxycortisol, 17-alpha-hydroxyprogesterone, 25-OH-Vitamin D, Acetaminophen, ACTH, Aldosterone, Amikacin, Beta-HCG, Calcitonin, Carbamazepine, Chloramphenicol, Cortisol, C-Peptide, Desipramine, DHEA, DHEA-S, Digoxin, Estradiol, Estriol, Estrion (free), Ferritin, FSH, Gastrin, Gentamicin, HCG (total), HCG (total+ß), HGH, IgE, Imipramine, Insulin, LH, Lithium, Nortriptyline, Phenobarbital, Phenytoin, Primidone, Progesterone, Prolactin (2. IRP WHO 83/562), Prolactin (3. IRP WHO RS 84/500), Propranolol, PTH intact 2nd generation, PTH biointact (1-84) 3rd generation, Quinidine, Salicylate, Testosterone (free), Testosterone (total), Theophylline, Tobramycin, Valproic acid, Vancomycin, Vitamin B12 (cobalamine)

199. Complex immunoassay III. (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 samples, 3 ml lyophilized each

Parameters:
Therapeutic drugs, hormones:
17-alpha-hydroxyprogesterone, 25-OH-Vitamin D, Aldosterone, AMH (Anti-Müllerian hormone), Androstenedione, Vitamin B12 (cobalamine), C-Peptide, DHEA-S, Digoxin, **EPO**, Ferritin, Folic acid, FSH, HCG (total), HGH, IgE, Insulin Like Growth Factor (IgF-I), Insulin, Cortisol, LH, Methylmalonic acid, Estradiol, Progesterone, Prolactin, PTH intact 2nd generation, PTH biointact (1-84) 3rd generation, SHBG, Testosterone (total)

Thyroid hormones and antibodies:
Anti-Thyreoperoxidase (Anti-TPO), Anti-Thyreoglobulin (Anti-TG), Free T3, Free T4, Total T3, Total T4, Thyreogolobulın, TSH
Tumour markers:
Alpha1-fetoprotein (AFP), CA 125, CA 15-3, CA 19-9, CEA, HE4, Beta2-microglobulin, Beta-HCG, Free PSA, PSA (total), PSA-complex
Cardiac markers:
BNP, CK-MB, CK-MB Mass, Homocysteine, NT-pro BNP, Troponin-I, Troponin-T, Myoglobin

241. Plasma proteins (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 1 ml serum each

Parameters: Albumin, Alpha-1-antitrypsin, Alpha-1-glycoprotein, Alpha-2-macroglobulin, Beta2-microglobulin, C3 complement, C4 complement, Coeruloplasmin, CRP, Ferritin, Haptoglobin, Hemopexin, IgA, IgE, IgG, IgM, **O-Streptolysin (ASO),** Prealbumin, **Rheumatoid factor (RF),** Soluble transferrin receptor (sTfR), Transferrin

243. Gammopathies

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 1 ml plasma each

Parameters:
Gammopathies, IgA, IgG, IgM, Kappa/lambda (ratio), Free light chains type kappa, Free light chains type lambda

292. Tumour markers (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 3 ml serum each

Parameters: Alpha1-fetoprotein (AFP), Beta-HCG, Beta2-microglobulin, CA 15-3, CA 19-9, CA 72-4, CA 125, CEA, Cyfra 21-1, HCG (total), HCG (total+ß), HE4, HER2, NSE, PSA-complex, Free PSA, PSA (total), ROMA, S100, SCC, Thyreoglobulin, TPA, TPS

293. Thyroid tumour markers (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 2 ml lyophilized serum each

Parameters: 1,25-(OH)2-Vitamin D, 25-OH-Vitamin D, Anti-Thyreoglobulin (Anti-TG), Anti-thyreoperoxidase (Anti-TPO), C-Peptide, Insulin, Insulin Like Growth Factor I (IGF-I), Osteocalcin, Procalcitonin, PTH intact 2nd generation, PTH biointact (1-84) 3rd generation

294. Thyroid hormones (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 5 ml lyophilized serum or 3 ml liquid samples each

Parameters:
Free T3, Free T4, Total T3, Total T4, TSH

295. Thyroid gland antibodies (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 1 ml lyophilized plasma each

Parameters:
Anti-Thyreoglobulin (Anti-TG) (quantitative and qualitative), Anti-Thyreoperoxidase (Anti-TPO) (quantitative and qualitative), TRAK/THYBIA (quantitative and qualitative), TSI/TSAB

298. Fertility, gravidity

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
Set 1: 2 samples, 2 ml lyophilized serum each
Set 2: 2 samples, 1 ml lyophilized serum each

Parameters:
Set 1: Alpha1-fetoprotein (AFP), AMH (Anti-Müllerian hormone), HCG (total), PAPP-A, Free ß-chain HCG
Set 2: Estriol (free)*

***Other information:**
For testing **free Estriol** plus separate samples are sent **for free**, **but can be ordered only together with Scheme 298!**
Please fill your claim in the Order form!

320. Procalcitonin (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 2 ml lyophilized serum each

Parameter: Procalcitonin (qualitative, semi quantitative, quantitative, interpretation)

321. AST (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 samples, 1 ml liquid serum or 5 ml lyophilized serum each

The content of the scheme:
Antibodies against streptococcal antigens: Streptokinase (qualitative and quantitative), Streptodornase (qualitative and quantitative), O-Streptolysin (qualitative and quantitative)

322. CRP (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 1 ml liquid serum or 5 ml lyophilized serum each

Parameter: C-reactive protein (qualitative and quantitative)

323. Rheumatoid factor (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 1 ml liquid serum or 5 ml lyophilized serum each

Parameter:
Rheumatoid factor (qualitative and quantitative)

700. Ethanol (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 3 ml liquid serum each

Parameter: Ethanol

801. Ammonia (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 3 ml liquid serum each

Parameter: Ammonia

780. Ethanol, Ammonia (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples: 2 samples, 3 ml liquid serum each

Parameters: Ethanol, Ammonia

Urine chemistry

171. Urine chemistry, qualitative (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 10 ml liquid human urine each

Parameters: Ascorbic acid, Bilirubin, Erythrocyte (RBC), Glucose, HCG, Ketone bodies, Leucocyte (WBC), **Microalbumin**, Nitrite, pH, Specific gravity, Protein, Urobilinogen
Microscopic sediment examination:
Erythrocyte (RBC) in the sediment, Leucocyte (WBC) in the sediment, Crystals in the sediment, Bacterium in the sediment, Epithelial cells in the sediment, Cylinders in the sediment

Additional information:
The test samples are basically intended for semi-quantitative urine chemistry with diagnostic test strips.

The results displayed on the test strip should be reported. In proficiency testing, different results may be obtained from a given sample based on the sensitivity and specificity of the different test strips, and this is taken into account in the target values and the acceptable range. Therefore, **the test strip results should be reported regardless of the sediment test results!**

In daily routine work, a correct result is reported for human samples, i.e. after the sediment test, the false positive or false negative result of the test strip for cellular elements should be adjusted if necessary.

If two sets of samples are required for the determination, please order double amount!

172. Urine sediment test (electronic)

	3.	9.
Start of the scheme	05.03.	03.09.
Deadline of result reporting	09.04.	03.10.
Deadline of evaluation publication	09.07.	03.01.

Survey samples: 2 digital images

Content of the survey:
Identification of urine sediment elements. Scheme is performed only electronically!

173. Urine chemistry, quantitative (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 5 ml lyophilized urine each

Parameters:
Alpha-amylase, Calcium, Chloride, Creatinine, Glucose, Magnesium, Microalbumin, Osmolality, Phosphate (anorganic), Potassium, Sodium, Total protein, Urea, Uric acid

178. Narcotic drugs in human urine, qualitative and quantitative (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 10 ml lyophilized urine each

Parameters:
Amphtamines: Amphetamine, Methamphetamine, MDMA (Ecstasy), Methylphenidate
Barbiturates: Barbiturate-Phenobarbital
Benzodiazepines: Benzodiazepin-lorazepam
Cannabinoids: 11-nor-delta-9-THC-carbonic acid
Cocaines: Benzoylecgonine, Cocaine
Opiates/Opioides:
Opiates (total), Buprenorphine, EDDP, Methadone, Morphine, Phentanyl, Oxycodone, Tramadol, 6-acetylmorphine, LSD, Phencyclidine, Pregabaline, Tricyclic antidepr.

POCT

When ordering the schemes please mark the type of the Instrument you measure the EQA samples with!

147. Glycated proteins – POCT (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples: 2 samples, 0.5 ml lyophilized haemolysates each

Parameter: Haemoglobin A_{1C}

161. Blood gas analysis (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 2.5 ml aqueous solution each
Parameters: Chloride, Glucose, Ionized calcium, Lactate, Magnesium, pCO2, pH, pO2, Potassium, Sodium

	3.	5.	9.	11.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

286. Haemostasis (INR) – POCT (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples: 2 lyophilized plasma samples

Parameter: INR

Additional information:
For each measuring system there is different kind of sample, so please give the used POCT system by all means!

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

321P. Streptococcus, A antigen detection – POCT (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 samples, 1 ml liquid each

Parameters: Streptococcus A antigen

326. CRP – POCT (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 samples, 1 ml serum each

Parameter: C-reactive protein (qualitative and quantitative)

327. Detection of Helicobacter pylori antigen – POCT

Survey samples:
2 samples, 1 ml faecal sample each

Parameter:
Detection of Helicobacter pylori antigen

328. Detection of Clostridium difficile Ag and toxin – POCT

Survey samples: 2 sample, 1 ml sample each

Parameter: Detection of Clostridium difficile GDH, toxin A and B

762. Cardiac markers

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 1.5 ml liquid serum each

Parameters: BNP, CK-MB, CK-MB Mass, D-Dimer, hsCRP, Myoglobin, NT-pro BNP, Troponin-I (qualitative and quantitative), Troponin-T (qualitative and quantitative)

800. Glucose (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 1 ml liquid sample each

Parameter: Glucose

Additional information:
HemoCue and Lifescan systems are included!

HAEMATOLOGY

211. Blood cell count (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples: 2 samples, 2 ml preserved, coagulation-inhibited blood
Parameters: Erythrocytes, Haematocrit (centrifugated, PCV) Haematocrit (electronic), Haemoglobin, Leucocytes (WBC) count, MCV, Platelet count, MCH, MCHC, MPV, RDW-CV, RDW-SD, Mentzer-index

Additional information: The survey sample is not recommended for *Abbott Cell Dyn (3200, 4000, Sapphire, Ruby)* devices.

613S. Blood cell count and WBC differentiation by automata (CBC and WBC diff.) (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples: 2 samples, 2 ml preserved, coagulation-inhibited plasma-like fluid controls, which are suitable for every 3 or 5 part. diff. automated device to measure the basic parameters of blood cell count and testing leucocyte types.

During ordering please indicate the type of the instrument: 3 or 5 part. diff.!

Parameters:
Leucocytes (WBC) count, Leucocyte types in % and absolute value: Neutrophil granulocytes, Eosinophil granulocytes, Basophil granulocytes, Lymphocytes, Monocytes, Other WBC, Mid cells (Eo, Baso, Mono) in % and absolute value, Erythrocytes, Haemoglobin, Haematocrit (electronic), MCV, MCH, MCHC, Platelet count, MPV, RDW-CV, RDW-SV, Mentzer-index

WBC% is evaluated by instrument groups. It is possible to apply with the following instruments: *Diagon D-cell, Erba Elite, Horiba Nexsus, Mindray, Nihon Kohden, Orphee Mythic, Siemens Advia, Sysmex XT/XE/XS/XN*

Please specify the type of Mindray instrument. For e.g. Mindray BC 6200.

In case of Coulter and ABX the special samples mean extra cost for the participants.

212. Blood smear analysis (with Virtual Microscopy)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 blood smear or digital pictures of a peripheral blood smear, short case history

The content of the scheme:
Blood cell differentiation of leukocytes in %, morphology of erythrocytes, leucocytes and platelets. Probable diagnosis.

Additional information:
This scheme basically runs online through the **Virtual Microscopy program**, developed by QualiCont. This web application supports digital cell counting. This solution ensures the same quality of smear for each participant.

It is still possible to order smear, but only for extra cost.

The program requires the following hardware to run properly:
30 Mbit/s download speed; 10 Mbit/s upload speed; Chrome 62+ (suggested), Firefox 56+, Safari 10+, Internet Explorer 11+, Edge 16+ system requirements in compliance with browser.

Remarks: However, the program may run by insufficient hardware conditions and by other browsers as well, but problems might occur in some functions. Before you start your own hardware I, please try to use it with your extant system and if you have any problem, please contact QualiCont for consultation, and thereafter carry out the necessary developments.

The images of smears can be still **viewed** on the Virtual microscope **after evaluation**.

215. Reticulocyte analysis I.

	3.	9.
Start of the scheme	05.03.	03.09.
Deadline of result reporting	09.04.	03.10.
Deadline of evaluation publication	09.07.	03.01.

Survey samples:
2 blood smears for Microscopy analysis

Parameters:
Reticulocyte count (% and absolute value)

216. Reticulocyte analysis II. (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 whole blood sample for testing with instrument (Flow cytometer)

Parameters:
Reticulocyte count (% and absolute value)

221. Haemostasis I. (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 1 ml lyophilized plasma each

Parameters:
Activated partial thromboplastin time (APTT), APTT rate, INR, Prothrombin time (PT)

222. Haemostasis II. (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 1 ml lyophilized plasma each

Parameters:
Fibrinogen, Thrombin time (TT), TI rate

221+222. Haemostasis I+II. (A)

	1.	3.	5.	7.	9.	11.
Start of the scheme	16.01.	05.03.	21.05.	02. 07.	03.09.	12.11.
Deadline of result reporting	31.01.	22.03.	06.06.	17. 07.	19.09.	28.11.
Deadline of evaluation publication	21.02.	16.04.	28.06.	06. 08.	10.10.	17.12.

Survey samples:
2 samples, 1 ml lyophilized plasma each

Parameters:
Activated partial thromboplastin time (APTT), APTT rate, Fibrinogen, INR, Prothrombin time (PT), Thrombin time (TT), TT rate

Additional information:
Combined order of scheme 221. and 222. enables favourable participation fee.
In this case 1 set of samples is included for the 2 schemes, in which the parameters of both schemes are involved. The evaluation of the 2 schemes is done separately in scheme 221. and 222.

225. Haemostasis V. (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples:
2 samples, 1 ml lyophilized plasma each

Parameters:
Antithrombin III., Protein C, Protein S

226. Haemostasis VI. (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	12.11.
Deadline of result reporting	09.04.	20.06.	03.10.	12.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	04.03.

Survey samples: 2 samples 1.5 ml liquid sample, or lyophilized plasma each

Parameter: D-Dimer (quantitative)

Additional information:
The sample is suitable for measurements with POCT devices as well.

231. Blood group serology (A)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	25.11.
Deadline of result reporting	09.04.	20.06.	03.10.	10.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	28.02.

Survey samples: 2 samples, 6 ml fresh human blood clothed in coagulation each

Parameters: AB0 blood grouping, Rh-factor D, A-subclasses, Rh-phenotyping, Irregular antibody screening, Direct Coombs-testing, Kell antigen, Antibody identifying

2311. Blood group serology (A) (1 sample/survey)

	3.	5.	9.	11.
Start of the scheme	05.03.	21.05.	03.09.	25.11.
Deadline of result reporting	09.04.	20.06.	03.10.	10.12.
Deadline of evaluation publication	17.05.	02.09.	11.11.	28.02.

Survey samples: 1 sample, 6 ml fresh human blood clothed in coagulation

Parameters: AB0 blood grouping, Rh-factor D, A-subclasses, Rh-phenotyping, Irregular antibody screening, Direct Coombs-testing, Kell antigen, Antibody identifying

240. Sedimentation (A)

	1.	5.	9.	11.
Start of the scheme	16.01.	21.05.	03.09.	12.11.
Deadline of result reporting	31.01.	20.06.	03.10.	12.12.
Deadline of evaluation publication	28.04.	02.09.	11.11.	04.03.

Survey samples: 2 blood samples, 9 ml each

Parameters: Erythrocyte sedimentation

2401. Sedimentation (A) (1 sample/survey)

	1.	5.	9.	11.
Start of the scheme	16.01.	21.05.	03.09.	12.11.
Deadline of result reporting	31.01.	20.06.	03.10.	12.12.
Deadline of evaluation publication	28.04.	02.09.	11.11.	04.03.

Survey samples: 1 blood sample, 9 ml

Parameters: Erythrocyte sedimentation

MOLECULAR BIOLOGY

Molecular genetics

730. Molecular genetics: Qualitative PCR technique

	3.	7.	11.
Start of the scheme	06.03.	02.07.	13.11.
Deadline of result reporting	22.03.	17.07.	28.11.
Deadline of evaluation publication	24.06.	17.10.	28.02.

Survey samples:
1 sample, 0.5 ml

Content of the scheme:
For this analysis, primers are sent together with the necessary basic information for performing the amplification.

Additional information:
The amplification must be carried out using human DNA samples extracted in the participant's laboratory. The documentation of the raw data (e.g. copy of the gel photo and the determination of size of the received fragment(s)) must be reported and are evaluated!

740. Molecular genetics: FV R534Q (Leiden) mutation detection

	3.	7.	11.
Start of the scheme	06.03.	02.07.	13.11.
Deadline of result reporting	22.03.	17.07.	28.11.
Deadline of evaluation publication	24.06.	17.10.	28.02.

Survey samples:
3 samples, water solution of DNA isolated from human leukocytes

The content of the scheme:
Detection of the R534Q [rs6025] (Leiden) mutation in the coagulation Factor V gene.

746. Molecular genetics: Prothrombin gene FII. G20210A variant detection

	3.	7.	11.
Start of the scheme	06.03.	02.07.	13.11.
Deadline of result reporting	22.03.	17.07.	28.11.
Deadline of evaluation publication	24.06.	17.10.	28.02.

Survey samples: 3 samples, water solution of DNA isolated from human leukocytes

The content of the scheme: Analysis of the G20210A [rs1799963] variant in the coagulation Factor II (prothrombin) gene.

747. Molecular genetics: MTHFR gene (C677T) test

	3.	7.	11.
Start of the scheme	06.03.	02.07.	13.11.
Deadline of result reporting	22.03.	17.07.	28.11.
Deadline of evaluation publication	24.06.	17.10.	28.02.

Survey samples: 3 samples, water solution of DNA isolated from human leukocytes

The content of the scheme: Analysis of the C677T (A226V) [rs1801133] frequent polymorphism in the metylenetetrahydro-pholate reductase (MTHFR) gene.

750. Molecular genetics schemes together (730+740+746+747)

Ordering the schemes together allows you to get a favourable participation fee.

748. Interpretation of molecular genetic test results

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	06.06.	28.11.
Deadline of evaluation publication	06.09.	28.02.

The content of the scheme:
The participant identifies the genetic variation, its type and possible pathogenic role based on the obtained human gene sequence fragment. Based on international recommendations, please prepare a report to be sent to the treating physician/genetic consultant.

MICROBIOLOGY/SEROLOGY

Bacteriology, bacterial serology

411. Bacteriology (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 lyophilized bacterial cultures

Task:
Identification of test strains and determination of antibiotic resistance sensitivity. Interpretation of report towards the clinician, information about additional (e.g. epidemiological) tasks.

411Dk. Bacteriology: Direct smear

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
1 digital direct smear (native dye preparation)

Task:
Evaluation of the smear and interpretation for the clinician

4111. Bacteriology (A) (1 sample/survey)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
1 lyophilized bacterial culture

Task:
Identification of test strains and determination of antibiotic resistance sensitivity. Interpretation of report towards the clinician, information about additional (e.g. epidemiological) tasks.

4111. Bacteriology schemes by organ system (A)

Shipment of surveys:					
		3.	5.	9.	11.
4111-UX	Bacteriology - Urine	♦		♦	
4111-SX	Bacteriology - Stool	♦		♦	
4111-TS	Bacteriology - Throat swab	♦		♦	
4111-VC	Bacteriology - Vaginal culture	♦		♦	
4111-UC	Bacteriology - Urethral culture	♦		♦	
4111-EC	Bacteriology - Ear secretion	♦		♦	
4111-NS	Bacteriology - Nose secretion		♦		♦
4111-EZ	Bacteriology - Eye secretion		♦		♦
4111-PX	Bacteriology - Pus		♦		♦
4111-SP	Bacteriology - Sputum		♦		♦
4111-PL	Bacteriology - Punction liquid		♦		♦
4111-BC	Bacteriology - Blood culture		♦		♦

Survey samples:
1 lyophilized bacterial culture

Task:
Identification of test strains and determination of antibiotic resistance sensitivity.

413. Detection of bacteria from blood culture (A)

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	06.06.	28.11.
Deadline of evaluation publication	06.09.	28.02.

Survey samples:
2 lyophilized bacterial cultures

Task:
Identification of test strains and determination of antibiotic resistance sensitivity. Interpretation of report towards the clinician, information about additional tasks.

414. Detection of multiresistant pathogens (A)

	3.	9.
Start of the scheme	06.03.	04.09.
Deadline of result reporting	22.03.	19.09.
Deadline of evaluation publication	22.06.	19.12.

Survey samples:
2 lyophilized bacterial cultures

Task:
Identification of test strains and determination of antibiotic resistance sensitivity. Interpretation of report towards the clinician, information about additional tasks.

418. Detection of bacterial enteral pathogens (A)

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	06.06.	28.11.
Deadline of evaluation publication	06.09.	28.02.

Survey samples:
1 piece of sample

Task:
Isolation and identification at species level of the enteric bacterial pathogen(s) responsible for the given enteric disease, based on professional guidelines, as well as determination of the antibiotic susceptibility. Interpretation of report towards the clinician, information about additional (e.g. epidemiological) tasks. If no pathogenic bacteria are found in the sample, report what further tests you would ask for.

419. Detection of bacterial respiratory pathogens (A)

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	06.06.	28.11.
Deadline of evaluation publication	06.09.	28.02.

Survey samples: 1 piece of sample

Task:
Isolation and identification at species level of the bacterial respiratory pathogen(s) from the given– occasionally lower and upper respiratory– samples, which can be responsible for the given disease, based on the anamnestic data, as well as determination of the antibiotic susceptibility. Interpretation of report towards the clinician, information about additional (e.g. epidemiological) tasks. If no pathogenic bacteria are found in the sample, report what further tests you would ask for.

334. Bacterial serology: Helicobacter pylori

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	06.06.	28.11.
Deadline of evaluation publication	06.09.	28.02.

Survey samples: 2 samples, 1 ml lyophilized each

The content of the scheme:
Detection of antibodies against *Helicobacter pylori* with EIA and other serological methods.

Additional information: Qualitative results are evaluated in the scheme.

Virus serology

344. Virus serology: Hepatitis B-I. (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples, the content of the scheme:
4 samples, 1 ml lyophilized serum each
2 samples: HbsAg,
2 samples: anti-HbsAg, anti-HBcAg

Additional information:
Qualitative results are evaluated in the scheme.

346. Virus serology: Hepatitis C (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, 2 ml lyophilized serum each

The content of the scheme:
Anti-HCV

Additional information:
Qualitative results are evaluated in the scheme.

3456. Virus serology: Hepatitis panel+HIV

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, 2 ml lyophilized serum each

The content of the scheme:
Anti-HAV total, Anti-HbsAg, Anti-HbcAg, Anti-Hbe, Anti-HCV, HIV 1/2 antibody

Additional information: The qualitative results are evaluated in the scheme.

351. Virus serology: Cytomegalovirus (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, 1 ml lyophilized serum each

The content of the scheme:
Anti-CMV total, Anti-CMV-IgM, Anti-CMV-IgG, CMV-IgG avidity

Additional information: Qualitative results are evaluated in the scheme.

352. Virus serology: Epstein-Barr virus (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, 1 ml lyophilized serum each

The content of the scheme:
Anti-EBNA-IgG (total), Anti-EBNA-IgM,
Anti-EA-IgG, Anti-EA-IgM,
Anti-VCA-IgG, Anti-VCA-IgM,
Anti-EBV-IgG, Anti-EBV-IgM,
Heterophile antibodies (Paul Bunnel)

Additional information: Qualitative results are evaluated in the scheme.

SARS-CoV-2 diagnostics

3400. Virus nucleic acid determination: SARS-CoV-2 (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, 1 ml respiratory VTM sample each

The content of the scheme:
PCR (Polymerase Chain Reaction) and applying other nucleic acid amplification techniques (NAT) for qualitative determination of SARS-CoV-2 virus.

Additional information: Qualitative results are evaluated in the scheme.

Individual and special delivery: in a foam box with refrigerant, express delivery

3401. POCT: SARS-CoV-2 (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
1 set=2 samples, 0.5 ml serum each + VTM

The content of the scheme:
SARS-CoV-2 antibody (IgG, IgM, total antibody) **and antigen** determination and interpretation of results.

Additional information: Qualitative results are evaluated in the scheme.

Individual and special delivery: in a foam box with refrigerant, express delivery

3402. Virus serology: SARS-CoV-2 (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples: 2 samples, 1 ml serum each

The content of the scheme:
SARS-CoV-2 antibody (IgG-, IgG-S, IgG-N**,** IgM, IgA, total antibody) determination (quantitative and/or qualitative) and interpretation of results.

Additional information: Qualitative results are evaluated in the scheme.

Individual and special delivery: in a foam box with refrigerant, express delivery

Mycology

412. Mycology (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, lyophilized or fungus culture on transport medium

Content of the scheme:
Identification of strains involved in fungus infection and determination of antimycotic sensitivity.

4121. Mycology (A) (1 sample/survey)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples: 1 sample, lyophilized or fungus culture on transport medium

Content of the scheme: Identification of strains involved in fungus infection and determination of antimycotic sensitivity.

4121. Mycology schemes by organ system (A)

Shipment of surveys:					
		3.	5.	9.	11.
4121-UX	Mycology - Urine	♦		♦	
4121-SX	Mycology - Stool	♦		♦	
4121-TS	Mycology - Throat swab	♦		♦	
4121-VC	Mycology - Vaginal culture	♦		♦	
4121-UC	Mycology - Urethral culture	♦		♦	
4121-EC	Mycology - Ear secretion	♦		♦	
4121-NS	Mycology - Nose secretion		♦		♦
4121-EZ	Mycology - Eye secretion		♦		♦
4121-PX	Mycology - Pus		♦		♦
4121-SP	Mycology - Sputum		♦		♦
4121-PL	Mycology - Punction liquid		♦		♦
4121-BC	Mycology - Blood culture		♦		♦

Survey samples: 1 lyophilized sample

Task: Identification of strains involved in fungus infection and determination of antimycotic sensitivity.

Infection serology

311. Infection serology: Lues serology (A)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples: 2 samples, serum each

The content of the scheme:
ELISA (polyvalent), ELISA-IgG, ELISA-IgM, FTA-Abs-IgG, FTA-Abs-IgM, Immunoblot-IgG, Immunoblot-IgM, TPHA, TPPA,
CLMIA-IgG and IgM
Antibodies against nontreponemal antigen: VDRL, RPR

Additional information:
Qualitative results are evaluated in the scheme. In case of RPR and VDRL titre is evaluated.

3100. Complex Infection Serology

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, 2 ml liquid serum each

The content of the scheme:
Cytomegalovirus (IgG and IgM, total antibody, avidity),
Epstein Barr Virus VCA IgG, EBV-EBNA-IgG,
Rubella Virus (IgG and IgM, total antibody),
Toxoplasma gondii (IgG and IgM, total antibody),
Treponema pallidum (Syphilis) (IgG+IgM)
Syphilis Rapid Plasma Reagin (RPR+titer)

Additional information:
Qualitative results are evaluated in the scheme.

31001. Complex Infection Serology (1 sample/survey)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
1 sample, 2 ml liquid serum each

The content of the scheme:
Cytomegalovirus (IgG and IgM, total antibody, avidity),
Epstein Barr Virus VCA IgG, EBV-EBNA-IgG,
Rubella Virus (IgG and IgM, total antibody),
Toxoplasma gondii (IgG and IgM, total antibody),
Treponema pallidum (Syphilis) (IgG+IgM)
Syphilis Rapid Plasma Reagin (RPR+titer)

Additional information:
Qualitative results are evaluated in the scheme.

New!

3149. Complex serology (Hepatitis panel + HIV + TORCH)

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2x2 samples
1 sample: Hepatitis panel + HIV (1 ml lyophilized serum)
1 sample: TORCH (2 ml liquid sample)

The content of the scheme:
Hepatitis panel:
Anti-HbsAg, Anti-HCV, Anti-HAV, Anti-HbcAg, Anti-Hbe, Hbe-Ag, HbsAg

HIV:
HIV 1/2 antibody/HIV-1 p24 antigen

TORCH:
Anti-Toxoplasma gondii (IgG and IgM)
Anti-Rubella (IgG and IgM)
Anti-CMV (IgG and IgM)
Treponema pallidum (Syphilis) (IgG+IgM)

Additional information: The qualitative results are evaluated in the scheme.

Parasitology

452. Parasite serology: Toxoplasma gondii

	3.	5.	9.	11.
Start of the scheme	06.03.	22.05.	04.09.	13.11.
Deadline of result reporting	22.03.	06.06.	19.09.	28.11.
Deadline of evaluation publication	21.05.	03.09.	12.11.	05.03.

Survey samples:
2 samples, 1 ml lyophilized serum each

The content of the scheme:
Toxoplasmosis (IgG, IgM, IgA, polyvalent, avidity, Toxoplasma gondii interpretation)

Additional information:
Qualitative results are evaluated in the scheme.

AUTOIMMUNE SEROLOGY

These schemes can be ordered only for the whole year!

251. Antinuclear antibodies (ANA, anti-ENA, anti-dsDNA)

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Clinical applicability: Diagnostics and monitoring of systemic autoimmune diseases (ANA)

Survey samples: 2 samples, 0.5 ml lyophilized serum/plasma each

The content of the scheme:
Antinuclear antibody (ANA),
ENA differentiation: Anti-U1-snRNP, Anti-Sm, Anti-Sm-RNP, Anti-SS-A (Ro52), Anti-SS-A (Ro60), Anti-SS-A (total), Anti-SS-B, Anti-Topoisomerase I (anti-Scl 70), Anti-His-tRNA-Synthetase (anti-Jo1), CENP B, ENA screen, Anti-ds-DNA
Fluorescence pattern:
ANA (IgG, IgA, IgM), IIFT, ANA (IgG), IIFT

Additional information: Qualitative results are evaluated in the scheme.

253. Liverspecific autoantibodies/GBM

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Clinical applicability: Diagnostics and monitoring of autoimmune hepatic syndromes and autoimmune Glomerulopathies

Survey samples: 2 samples, 0.5 ml lyophilized serum/plasma each

The content of the scheme:
LKM (liver-kidney-microsomes) antibody, Antibodies against smooth muscles (SMA), mitochondrial (AMA), **Anti GBM**

Additional information: Qualitative results are evaluated in the scheme.

257. ANCA

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Clinical applicability:
Diagnostics and monitoring of Vasculitis

Survey samples: 2 samples, 0.5 ml lyophilized serum/plasma each

The content of the scheme:
Anti Pr-3, Anti MPO, cANCA (IIFT), pANCA (IIFT), atypical ANCA (IIFT), ANCA screen

Additional information: Qualitative results are evaluated in the scheme.

265. Neurological Autoantibodies (Onko-neuronal)

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Clinical applicability: Diagnostics and monitoring of Paraneoplastic Neuropathies

Survey samples: 2 samples, 0.5 ml lyophilized serum/plasma each

The content of the scheme: Onko-neural antibodies: Anti-Hu, Anti-Ri, Anti-Yo

Additional information: Qualitative results are evaluated in the scheme.

271. Coelikalia-specific antibodies

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Clinical applicability: Diagnostics and monitoring of Gluten-Sensitive Enteropathies

Survey samples: 2 samples, 0.5 ml lyophilized serum/plasma each

Content of the scheme: Anti-endomysium IgA (IIFT), Anti-endomysium IgG (IIFT), Anti-transglutaminase IgA, Anti-transglutaminase IgG, Anti-DGP IgA, Anti-DGP IgG

Additional information: Qualitative results are evaluated in the scheme.

273. Rheumatoid factor + CCP

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Clinical applicability: Diagnostics and monitoring of Rheumatoid Arthritis

Survey samples: 2 samples, 0.5 ml lyophilized serum each

Content of the scheme:
Rheumatoid factor (IgM, IgG, IgA),
CCP (cyclic citrulline peptide)

Additional information: Qualitative results are evaluated in the scheme.

275. Antiphospholipid autoantibodies

	5.	11.
Start of the scheme	22.05.	13.11.
Deadline of result reporting	20.06.	12.12.
Deadline of evaluation publication	20.09.	12.03.

Clinical applicability:
Diagnostics and monitoring of Antiphospholipid Syndrome

Survey samples: 2 samples, 0.5 ml lyophilized serum/plasma each

The content of the scheme:
Cardiolipin IgG and IgM,
Cardiolipin screen (IgA/IgG/IgM)
β2-glycoprotein I. IgG and IgM
β2-glycoprotein I. screen (IgA/IgG/IgM)

Additional information: Qualitative results are evaluated in the scheme.

PATHOLOGY

Unstained paraffin slides are sent to the participants.

Task: Routine staining and detection of immunohistochemical marker molecules on the formaldehyde-fixed paraffin embedded sections distributed by QualiCont (*2-2 unstained slides per test/per survey*) and on slides of the similar tissue/tumour created in their own laboratory (in-house).

Reporting of results: The technical details of the stained sections and the methods are to be sent **electronically via Internet**.

The evaluations and the Certificates are available electronically, too.

Shipment of surveys:					
		3.	5.	9.	11.
501	Histotechnology	♦	♦	♦	♦
502	Immunhistochemistry	♦	♦	♦	♦
503	Diagnostics of cervical cytology	♦	♦	♦	♦
505	Diagnostic cytology		♦		♦

501. Histotechnology

The following slides are sent in each survey:

HT/01 – Required sample in every survey
Haematoxylin-eosin stain – **in-house**
(Slide taken from the archive, registered on the number given by the organiser.)

HT/02 – Slides provided by QualiCont in every survey
Haematoxylin-eosin stain – **QualiCont**
(Slide sent by the organiser.)

HT/03 – Slides provided by QualiCont, various stains in every survey
Special-stain – **QualiCont**
(1 from the list below)

- PAS
- Reticulin
- Elastic fibers
- Trichrome
- Amyloid
- Gram
- Giemsa
- Berlin-blue
- Ziehl-Neelsen
- Grocott

502. Immunhistochemistry

The following slides are sent in each survey:

IHC/1
Repeated marker asked usually through 4 consecutive surveys
Immunhistochemical reaction – **QualiCont**
(Slide sent by the organiser.)

IHC/2
Repeated marker asked usually through 4 consecutive surveys
Immunhistochemical reaction – **In-house**
(Own slide.)

IHC/1-2: *(1 from the list below)*

- Epithelial-marker
- Muscle-marker
- Endothelial-marker
- Leukocyte-marker
- Proliferation marker
- Hormone receptor (ER)
- Her-2 oncoprotein

IHC/3 – Various markers by QualiCont in every survey
Immunhistochemical reaction – **QualiCont**
(Slide sent by the organiser.)
IHC/4 – Various markers by QualiCont in every survey
Immunhistochemical reaction – **In-house**
(Own slide.)

IHC/3-4: *(1 from the list above or below)*
Immunhistochemistrical reaction - **QualiCont**

- Hormone receptor (PgR)
- B-lymphocyte
- T-lymphocyte
- Hodgkin-lymphoma
- Prostate-epithelial marker
- Melanoma-marker
- Endocrine marker
- Mesothelioma-marker

Evaluation of slides:

Four independent assessors using a consultation microscope evaluate the slides without influencing each other.

Score: 1-5 (*not acceptable – excellent*)
In case of 3 or lower score, critical remark is given, which refers to the nature of the

error, or its probable cause.
Archiving: database management program

Processing: technical details of staining methods, evaluation data, remarks

Feedback: evaluation sheets, diagrams, statistical analysis

503. Diagnostics of cervical cytology

All smears are available for participants only in digital form.

a., Conventional smear
5 healthy and abnormal conventional smears per survey from routine cytology cases, stained according to Papanicolaou.
Evaluation according to the Bethesda 2014 classification system via QualiCont's online 'Pathology Program'.
After the evaluation, it is possible to review the annotated smears from the reference laboratory on the QualiCont site.
A Certificate of participation is issued by QualiCont.

b., LBC (liquid based sample) ThinPrep smear
5 healthy and abnormal conventional LBC smears per survey from routine cytology cases, stained according to Papanicolaou.
Evaluation according to the Bethesda 2014 classification system via QualiCont's online 'Pathology Program'.
After the evaluation, it is possible to review the annotated smears from the reference laboratory on the QualiCont site.
A Certificate of participation is issued by QualiCont.

c., Conventional and LBC smear
It is possible to evaluate both conventional and liquid-based (LBC) smears according to the practice of the laboratory.

505. Diagnostic cytology

5 Giemsa or HE stained slides are sent each survey on the field of diagnostic cytology (thyroid, urine, breast etc.)

The evaluations of the routine cytological cases from healthy and pathological slides are performed through the QualiCont online 'Pathology web application' according to the topical finding system.

All of the slides are available only in digital format.

All participants receive a certificate of participation by QualiCont.

500. Histotechnology and Immunhistochemistry together

Combined order of the schemes enables favourable participation fee.

504. Histotechnology, Immunhistochemistry and Diagnostics of cervical cytology together

Combined order of the schemes enables favourable participation fee.

I N D E X