

LABQUALITY

THE PATH TO PERFECT QUALITY

EXTERNAL QUALITY ASSESSMENT

2023

PRODUCT CATALOGUE

LABQUALITY

EXTERNAL QUALITY ASSESSMENT

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Service information

Labquality – EQAS

Labquality is an independent Finnish external quality assessment provider. Labquality has more than 50 years of experience in helping clinical laboratories and POCT sites develop and maintain their performance. Labquality's EQA schemes are internationally recognized high quality programs. The EQA programs have a clinical scope with an educational touch. Part of the EQA production is outsourced to expert laboratories and national partners.

Integrated EQA service (EQA³)

Labquality is the first EQA provider that has integrated pre-analytical, analytical and post-analytical phases to its EQA programs. Advanced and traditional EQA schemes have been designed to fully support the total quality management system of the participating laboratories and fulfill ISO 15189 requirements concerning the extra-analytical phases. In addition to the samples, the integrated schemes include pre- and/or post-analytical questionnaires concerning the scope of the scheme.

Quality management

Labquality's management system is certified according to ISO 9001 (DQS) and the main EQA schemes are accredited according to ISO 17043 (PT02/FINAS). The scope of accreditation is available on the FINAS website: www.finas.fi, and the accreditation status of the EQA schemes is available on our website: www.labquality.fi/en. The list of accredited schemes will be provided upon request.

EQA service availability

Labquality has customers in over 50 countries in Europe, Asia, America and North Africa. Service is localized by 40 national partners. All digital schemes, including pre-analytical schemes and diagnostic schemes for anatomic pathology, are available globally. With only a few exceptions all schemes are globally available through national partner. For direct customers, the program selection is limited to the schemes with stable and non-hazardous sample materials.

Enrolment and prices

Labquality has annual programs and pricing. Participants shall place their orders for the following year before the end of November to ensure their participation in all needed EQA rounds. Enrolment is possible during the calendar year, but only part of the EQA rounds may be available. To place an order, please contact our national partner in your country or Labquality's customer service at info@labquality.com

Distributions

Labquality's specimen logistics system is accepted and continuously audited as part of accreditation according to the ISO 17043 (PT02/FINAS) standard. Specimens are shipped according to the annual schedule. Labquality retains the right to make changes in the schedule.

LabScala EQA portal

Partners and participants are able to handle the whole EQA process from orders to reports through a modern web based software, LabScala. The EQA process is designed to go along with the laboratory process from pre-analytics to post-analytics. Easy availability and user-friendly interface guarantee an advanced experience.

Certificate

A certificate of participation will be provided upon request at the end of the calendar year. The certificate refers to EQA reports to evaluate the performance of the participant.

Customer service

Please contact Labquality's international partners (listed on our website: www.labquality.fi/en) or our customer service: info@labquality.fi

How to use the catalogue

The diagram illustrates the layout of a scheme card in the catalogue. The card is divided into several sections:

- Header:** Contains the 'Scheme code and name' (1234 Scheme name) and 'Results processed' (1).
- POCT:** A vertical label on the left side of the card.
- Specimens/Examinations:** A section for listing the types of tests.
- Notes:** A section for additional information.
- Rounds (delivery months):** A horizontal bar with 12 numbered slots (1-12). Slots 1, 5, 9, and 11 contain a dot, indicating when results are processed.

Legend:

- EQA³** = Integrated EQA service
- NEW** = New product
- POCT** = Suitable for Point-of-Care testing sites
- VIRTUAL** = Virtual microscopy

Results processed: The number shows how many results from different analyzers or tests within the same laboratory are allowed depending on scheme, when the sample volume is sufficient. Schemes marked with * allow multiple results reporting only, if they are analyzed with different methods.

Updates for 2023

New schemes and products

- 2704 ACTH and Cortisol (p 9)
- 2706 Salivary cortisol (p 9)
- 2754 Faecal elastase (p 11)
- 5250 Interferon Gamma Release Assay (IGRA) for *Mycobacterium tuberculosis* (p 20)
- 5261 Fungal infections, nucleic acid detection (p 25)
- 5556 HSV1&2/VZV/*T. pallidum*, nucleic acid detection (p 26)
- 5965 CXCL13 Chemokine (p 21)
- 5230 *Mycobacterium tuberculosis*, drug resistance (p 23)
- 2115 Haemoglobin, 1-level HemoCue 801 and HemoCue 301 (p 7)

Changes in distribution schedule

- 2200 Lipids and lipoproteins and 2202 - Lipoprotein a (4 rounds /year)
- 2109 Bilirubin, conjugated (4 rounds /year)
- 5612 *Chlamydia trachomatis* and *Neisseria gonorrhoeae* nucleic acid detection
- 5302 Sexually transmitted diseases multiplex, nucleic acid detection
- 2132 C-reactive protein (CRP), POCT
- 5560 Puumala virus, antibodies
- 5635 Dengue virus, antibodies and antigen detection
- 5562 Multiple respiratory virus, nucleic acid detection

Discontinued schemes

- 5850 Brucella antibodies
- 2733 Erythrocyte sedimentation rate: iSED

Changes in scope, specimens or parameters

- 5300 Respiratory infections multiplex, nucleic acid detection
New parameter: *Legionella pneumophila*
- 5472 Faecal parasites multiplex, nucleic acid detection
Discontinued parameter: *Entamoeba dispar*
- 5681 SARS-CoV-2 antigen detection
Samples: Number of samples increased from two to three

Planned pilot schemes

Information about pilot studies and schedules are updated on our website
<https://www.labquality.fi/en/external-quality-assessment/new-round/>
Pilot studies are EQA schemes under development.

Virology: Monkeypox virus, nucleic acid detection (planned for late 2022)

Microbiology: Blood culture pathogens (sepsis), multiplex, nucleic acid detection

Mycology: Fungal infection, native and fluorescence virtual microscopy

Haematology: Flow cytometry: Immunophenotyping, lymphocyte subsets

Clinical chemistry

The clinical chemistry portfolio covers areas of allergology, basic chemistry, cardiac markers, diabetes analysis, endocrinology, special chemistry, specific proteins, tumour markers and urine analysis. For routine chemistry needs, schemes with both one and two level samples enabling assessment of more than 50 analytes are available. A wide selection of schemes specifically tailored for POCT devices are also available, including e.g. those for drug abuse screening, glucose meters and troponin detection.

Clinical chemistry » Allergology

	1	2	3	4	5	6	7	8	9	10	11	12
2675 Allergen component [UK NEQAS]			•		•	•		•		•		•
Specimens: 2 liquid human serum samples for allergen component tests Examinations: Allergen component test which covers recombinant allergens as well as the ISAC system	Notes: Participation to all rounds required. Should be ordered until the beginning of November. Limited availability.											
2681 Allergy in vitro diagnostics [SKML]		•			•			•		•		
Specimens: 3 liquid human serum samples for specific IgEs with 3 allergens, 2 mixes and total IgE in each and some allergen components, 0.5 mL Examinations: Total IgE, specific IgEs, allergen mixes and allergen components	Notes: Participation to all rounds required. Should be ordered until the beginning of November. All samples are distributed in February.											
2670 Allergy in vitro diagnostics [UK NEQAS]			•		•	•		•		•		•
Specimens: 2 liquid human serum samples for specific IgEs with 4 allergens in each specimen, 0.5 mL each and 1 serum specimen for total IgE, 0.5 mL Examinations: Total IgE and specific IgEs	Notes: Participation to all rounds required. Should be ordered until the beginning of November. Limited availability.											
2680 Eosinophil cationic protein			•		•	•		•		•		•
Specimens: 1 lyophilized human serum sample, 0.3 mL Examinations: ECP	Notes: Results are processed in connection with total IgE results of scheme 2670.											
2685 Tryptase [UK NEQAS]		•		•	•		•		•		•	
Specimens: 2 liquid human serum samples Examinations: Tryptase	Notes: Participation to all rounds required. Should be ordered until the beginning of November. Limited availability.											

Clinical chemistry » Basic chemistry

	1	2	3	4	5	6	7	8	9	10	11	12
2100 Basic chemistry, POCT analyzers		•			•			•			•	
Specimens: 2 human serum samples, 1 mL Examinations: Alanine aminotransferase, albumin, alkaline phosphatase, amylase (total and pancreatic), aspartate aminotransferase, calcium, chloride, HDL cholesterol, cholesterol, creatinekinase, creatinine,	gamma glutamyltransferase, glucose, lactate dehydrogenase, magnesium, phosphorus, potassium, sodium, total protein, triglycerides, urea, uric acid Notes: For clinical laboratories and POCT sites. Only for dry chemistry analyzers. If you are not sure whether your device is a POCT meter or an analyzer, please contact our customer service.											
2730 Erythrocyte sedimentation rate			•		•				•		•	
Specimens: 1 artificial blood cell suspension, ~ 4 mL Examinations: ESR	Notes: Not suitable for Algor iSed											

2731 Erythrocyte sedimentation rate: Alifax-analyzers; Greinertube	3	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 3 test tubes containing synthetic latex solution, 3 mL				•		•				•		•		
		Examinations: ESR												
2732 Erythrocyte sedimentation rate: Alifax-analyzers; Sarstedt tube	3	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 3 test tubes containing synthetic latex solution, 3 mL				•		•				•		•		
		Examinations: ESR												
2750 Faecal occult blood, qualitative	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 2 preparations that include human haemoglobin, 0.5 mL		•				•				•		•		
Examinations: Qualitative detection of Hb in human faeces		Notes: For clinical laboratories and POCT sites												
2749 Faecal occult blood, quantitative	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 2 liquid samples including human haemoglobin. In June and Dec possibly lyophilized or artificial stool sample preparations including human haemoglobin. Examinations: Quantitative determination of Hb in human faeces (iFOB/FIT)				•		•				•		•		
		Notes: The liquid samples assess the analytical process only, the other sample forms assess both the preanalytical and analytical processes. For clinical laboratories and POCT sites.												
2114 Haemoglobin, 1-level, POCT	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT EQA ³
Specimens: 1 bovine sample, 1 mL				•		•				•		•		
Examinations: Haemoglobin		Notes: Only for POCT devices. Not suitable for Diaspect, HemoCue 301 or HemoCue 801.												
2115 Haemoglobin, 1-level HemoCue 801 and HemoCue 301	3	1	2	3	4	5	6	7	8	9	10	11	12	NEW
Specimens: 1 bovine sample, 1 mL				•		•				•		•		
Examinations: Haemoglobin		Notes: Only for HemoCue 801 and HemoCue 301.												
2113 Haemoglobin, 3-level samples, cell counters and analyzers	3	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 3 human whole blood control samples, 1 mL (low, medium and high concentration)										•				
		Examinations: Haemoglobin linearity with three samples. Reference values will be provided in the summary report.												
		Notes: For cell counters and analyzers												
2112 Haemoglobin, 3-level samples, POCT	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 bovine or human samples, 1 mL (low, medium and high concentration)										•				
		Examinations: Haemoglobin linearity with three samples												
		Notes: Only for POCT devices. Not suitable for Diaspect.												

Clinical chemistry » Cardiac markers

1541 CRP, low concentration	3	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 1 human serum sample			•		•		•			•		•		
Examinations: CRP		Notes: CRP, low concentration sample is included in product 2541 Myocardial markers and CRP												
2540 Myocardial markers	3	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 liquid samples, 0.5 mL			•		•		•			•		•		
Examinations: CK MB mass, myoglobin, quantitative troponin I, quantitative troponin T. Not for CKMB activity!		Notes: Suits clinical laboratory analyzers. See also scheme 2530 Troponin I and T, detection for POCT. If you are not sure whether your device is a POCT meter or an analyzer, please contact our customer service.												

	1	2	3	4	5	6	7	8	9	10	11	12
2541 Myocardial markers and CRP, low concentration		•		•		•			•		•	
Specimens: 2 liquid samples for myocardial markers, 0,5 mL, and one for CRP 1 mL Examinations: CK-MB mass, myoglobin, quantitative troponin I, quantitative troponin T and CRP, low concentration. Not for CKMB activity!	Notes: Suits clinical laboratory analyzers. See also scheme 2530 Troponin I and T, detection for POCT. If you are not sure whether your device is a POCT meter or an analyzer, please contact our customer service.											

	1	2	3	4	5	6	7	8	9	10	11	12
2690 Natriuretic peptides 1, B-type, NT-ProBNP	•			•			•			•		
Specimens: 2 liquid samples, 3 mL Examinations: NT-ProBNP	Notes: Suits both clinical laboratories and POCT sites. Also suitable for Roche Cardiac Reader and cobas h232.											

	1	2	3	4	5	6	7	8	9	10	11	12
2691 Natriuretic peptides 2, B-type, BNP	•			•			•			•		
Specimens: 2 liquid samples, 3 mL Examinations: BNP	Notes: For clinical laboratories and POCT sites											

	1	2	3	4	5	6	7	8	9	10	11	12
2530 Troponin I and Troponin T, POCT		•		•		•			•		•	
Specimens: 2 fresh human samples or 2 liquid samples, 0,5 mL Examinations: Detection of troponin I and troponin T Notes: Qualitative and quantitative results are processed	Notes: This scheme is only for POCT, scheme 2540 is for analyzers. If you are not sure whether your device is a POCT meter or an analyzer, please contact our customer service.											

Clinical chemistry » Diabetes analysis

	1	2	3	4	5	6	7	8	9	10	11	12
2570, 2580, 2590 Glucose meters		•			•				•		•	
Device specific product codes: 2570 for all glucose meters except Contour, HemoCue and On Call Plus 2580 for HemoCue meters 2590 for Contour meters	Specimens: 1 whole blood or plasma sample, 1 mL Examinations: Glucose Notes: 5 results processed with one order if sample volume is sufficient and devices belong to the same product group.											

	1	2	3	4	5	6	7	8	9	10	11	12
1261 Haemoglobin A1c, liquid samples		•		•		•		•		•		•
Specimens: 2 liquid blood samples, 0,5 mL Examinations: HbA1c	Notes: Not suitable for Afinion instruments.											

	1	2	3	4	5	6	7	8	9	10	11	12
1263 Haemoglobin A1c, liquid samples, POCT				•		•				•		•
Specimens: 2 liquid blood samples, 0,5 mL Examinations: HbA1c	Notes: Only for POCT devices. Not suitable for Afinion instruments.											

	1	2	3	4	5	6	7	8	9	10	11	12
2526 Ketones (beta-hydroxybutyrate), POCT			•						•			
Specimens: 2 serum samples, 0,4 mL Examinations: beta-hydroxybutyrate	Notes: For POCT sites and clinical laboratories. 3 results processed with one order if sample volume is sufficient.											

Clinical chemistry » Endocrinology

	1	2	3	4	5	6	7	8	9	10	11	12
2300, 2300S Hormones A: Basic analytes of hormone and immunochemistry		•		•	•	•		•		•	•	•
Specimens: 2 human serum samples with differing concentrations, 3 mL each. Liquid serum sample (one level) included in Apr and Oct rounds. Pre- and/or post-analytical cases in part of the rounds Examinations: Ferritin, folate, hCG (total, intact), T3, free T3, T4, free T4, TSH, vitamin B12, active vitamin B-12, pre- and/or post-analytical indicators	Notes: 2300S is a limited version of the scheme available for laboratories performing testing of 1-5 analytes. For additional set of samples, order scheme 1300. Product 2300S does not include reporting from multiple analyzers or methods.											

	1	2	3	4	5	6	7	8	9	10	11	12
1300 Hormones A, extra set of samples		•		•	•	•		•		•	•	•
Specimens: 2 human serum samples, 3 mL	Notes: Only in connection with scheme 2300											

	1	2	3	4	5	6	7	8	9	10	11	12
2301, 2301S Hormones B: Steroid and peptide hormones		•		•		•		•		•		•
Specimens: 2 human serum samples with differing concentrations, 3 mL. Liquid serum sample (one level) included in Apr, Aug and Dec rounds. Pre- and/or postanalytical cases in part of the rounds.												
Examinations: Androstenedione, aldosterone, C-peptide, cortisol, DHEAS, estradiol, FSH, gastrin, growth hormone, IGF-1, insulin, LH, progesterone, 17-OH-progesterone, prolactin, SHBG, testosterone, free testosterone, TBC,												
	pre- and/or post-analytical indicators											
	Notes: Reference values for 1 analyte in liquid serum will be provided. 2301S is a limited version of the scheme available for laboratories performing testing of 1-5 analytes. For additional set of samples, order scheme 1301. Product 2301S does not include reporting from multiple analyzers or methods.											

EQA³

	1	2	3	4	5	6	7	8	9	10	11	12
1301 Hormones B, extra set of samples		•		•		•		•		•		•
Specimens: 2 human serum samples, 3 mL												
	Notes: Only in connection with scheme 2301											

	1	2	3	4	5	6	7	8	9	10	11	12
2250 Parathyroid hormone, intact			•							•		
Specimens: 2 lyophilized human serum samples, 3 mL												
	Examinations: PTH, intact											

	1	2	3	4	5	6	7	8	9	10	11	12
2704 ACTH and cortisol						•					•	
Specimens: 2 lyophilized human serum samples, 3 mL												
	Examinations: Adrenocorticotrophic hormone (ACTH) and Cortisol											

	1	2	3	4	5	6	7	8	9	10	11	12
2706 Salivary Cortisol			•						•			
Specimens: To be confirmed: 2 liquid or lyophilized simulated salivary samples												
	Examinations: Salivary cortisol											

NEW

Clinical chemistry » General long-term clinical chemistry, known concentration

	1	2	3	4	5	6	7	8	9	10	11	12
1031 DayTrol, human serum	•	•	•	•	•	•	•	•	•	•	•	•
Specimens: 1 lyophilized human serum sample, 5 mL												
Examinations: Alanine aminotransferase, albumin, alkaline phosphatase, amylase, aspartate aminotransferase, bilirubin, calcium, chloride, cholesterol, cholesterol HDL, creatine phosphokinase, creatinine, gamma-glutamyltransferase, glucose, iron, lactate, lactate dehydrogenase, lithium, magnesium, osmolality, phosphorus, potassium, protein, sodium,												
	thyrotropin, thyroxine, thyroxine free, transferrin, transferrin receptor, triglycerides, urea, uric acid											
	Notes: This program combines internal and external quality assessment. Same sample is analyzed daily or weekly basis. Monthly averages and CV% 's are compared with other participants. Minimum order quantity of 10 bottles per year. Monthly reporting is included											

Clinical chemistry » General short-term clinical chemistry, unknown concentration

	1	2	3	4	5	6	7	8	9	10	11	12
1072, 1072S Serum A, lyophilized samples	•	•	•	•	•	•	•	•	•	•	•	•
Specimens: Lyophilized serum sample, 3 mL, samples are selected to cover a wide concentration range												
Examinations: Alanine aminotransferase, albumin, alkaline phosphatase, alpha-1-antitrypsin, alpha-1-glykoprotein, amylase, amylase (pancreatic), aspartate aminotransferase, bilirubin, calcium, calcium (ionized, actual), calcium (ionized, pH 7.4), chloride, cholesterol, cholesterol HDL, cholesterol LDL, cortisol, creatine phosphokinase, creatinine, ferritin, gamma-glutamyltransferase, glucose, haptoglobin, IgA, IgE, IgG, IgM,												
	iron, lactate, lactate dehydrogenase, lithium, magnesium, oroso-mucoid, osmolality, phosphorus, potassium, protein, selenium, sodium, thyrotropin, thyroxine, thyroxine free, TIBC, transferrin, transferrin receptor, triglycerides, urea, uric acid											
	Notes: Samples for multiple rounds shipped simultaneously. Monthly processing of results included. 1072S is a limited version of the scheme available for laboratories performing testing of 1-5 analytes. Product 1072S does not include reporting from multiple analyzers or methods.											

	1	2	3	4	5	6	7	8	9	10	11	12
2050 Serum B and C (2-level)		•		•		•		•		•	•	
Specimens: 2 liquid human serum samples covering a wide concentration range, 3-5 mL												
Examinations: Alanine aminotransferase, albumin, alfa-1-antitrypcine, alfa-1-glycoprotein, alkaline phosphatase, amylase, pancreas amylase, aspartate aminotransferase, bilirubin, ferritin, phosphate, glucose, glutamyltransferase, haptoglobin, IgA, IgE, IgG, IgM, potassium, calcium, ionized calcium, ionized calcium pH corrected (7.4), chloride, cholesterol,												
	HDL cholesterol, LDL cholesterol, cortisol, creatine kinase, creatinine, copper, lactate, lactate dehydrogenase, lipase, lithium, magnesium, sodium, osmolality, protein, iron binding capacity, iron, selenium, zinc, transferrin, transferrin receptor, triglycerides, tri-iodio-thyronine, thyrotropin, tyroxine, free tyroxine, urea, uric acid											
	Notes: Comparison of two different concentration ranges simultaneously. Reference method values available occasionally for some of the analytes.											

EQA³

Clinical chemistry » Special chemistry

POCT

2610 Acid-base status and electrolytes

1	2	3	4	5	6	7	8	9	10	11	12
	•		•				•			•	

Specimens: 3 buffered artificial samples, 2.5 mL
Examinations: Chloride, creatinine, glucose, ionized calcium, ionized magnesium, lactate, pCO₂, pH, pO₂, potassium, sodium, urea, base excess, HCO₃.

Notes: Order one sample set for each analyzer. For clinical laboratories and POCT sites.

2510 Alcohol in whole blood: Ethanol + methanol + isopropanol

1	2	3	4	5	6	7	8	9	10	11	12
		•							•		

Specimens: Ethanol: 2-level whole blood samples. Methanol and isopropanol: 1-level whole blood samples.

Examinations: Ethanol, methanol, isopropanol

2516 Alcohol in whole blood: Ethylene glycol

1	2	3	4	5	6	7	8	9	10	11	12
		•							•		

Specimens: 1-level whole blood samples

Examinations: Ethylene glycol

2511 Alcohol in serum: Ethanol + methanol + isopropanol + acetone

1	2	3	4	5	6	7	8	9	10	11	12
		•							•		

Specimens: Ethanol: 2-level serum samples. Methanol, isopropanol and acetone: 1-level serum samples.

Examinations: Ethanol, methanol, isopropanol, acetone

2517 Alcohol in serum: Ethylene glycol

1	2	3	4	5	6	7	8	9	10	11	12
		•							•		

Specimens: 1-level serum samples

Examinations: Ethylene glycol

2105 Ammonium ion

1	2	3	4	5	6	7	8	9	10	11	12
			•				•				•

Specimens: 2 serum based or buffered samples

Examinations: Ammonium ion

2210 Angiotensin convertase (ACE)

1	2	3	4	5	6	7	8	9	10	11	12
				•							

Specimens: 1 liquid and 1 lyophilized human serum sample, 1 mL

Examinations: ACE

2520 Bile acids

1	2	3	4	5	6	7	8	9	10	11	12
		•								•	

Specimens: 2 pooled human serum samples, 0.5 mL

Examinations: Bile acids

2109 Bilirubin, conjugated

1	2	3	4	5	6	7	8	9	10	11	12
	•		•				•		•		

Specimens: 2 lyophilized or liquid samples

Examinations: Total bilirubin, conjugated bilirubin

2040 Bilirubin, neonatal

1	2	3	4	5	6	7	8	9	10	11	12
	•		•		•		•		•		•

Specimens: 2 lyophilized or liquid samples

Examinations: Bil, neo

8805 Cystatin C, Creatinine and eGFR [DEKS]

1	2	3	4	5	6	7	8	9	10	11	12		
					2 times								

Specimens: 2 human plasma samples with reference target values, 0.75 mL

Examinations: P-Cystatin C, P-Creatinine, P-eGFR

Notes: Participation to all rounds required.

2754 Faecal elastase	1	2	3	4	5	6	7	8	9	10	11	12	NEW
Specimens: 2 lyophilized faecal specimens, 0.5 mL	3		•						•				
2753 Gastric biomarkers	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized samples, 3 mL	3					•					•		
2150 Haemoxymeters	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 liquid (1.2 mL) samples Examinations: FO2Hb, FCOHb, FMETHb, ctHb, sO2	1		•						•				
8816 Homocysteine [DEKS]	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 human plasma or serum samples Examinations: P-Homocysteine	1												
8815 Methyl Malonic acid [DEKS]	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 human serum samples Examinations: P-Methylmalonat	1												
2651 Nasal swab cells	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 4 digital images of MGG and methylene eosin stained samples	1											•	
2652 Sputum cells	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 4 digital images of MGG and methylene eosin stained samples	1											•	
2640 Synovial fluid crystals	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2-3 slides prepared from patient samples	3		•						•				
2410 Therapeutic drugs	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 liquid or lyophilized human serum samples, 5 mL Examinations: Amikasin, amitriptyline, carbamazepine, carbamazepine free, cyclosporine, digoxin, disopyramide, ethosuximide, flecainide, gentamycin, lidocaine, lithium, methotrexate, NAPA, netilmycin, nortriptyline,	3		•		•			•			•		
2480 Vitamin A, E and D metabolites	1	2	3	4	5	6	7	8	9	10	11	12	EQA ³
Specimens: 2 liquid human serum samples, 1 mL. Pre- and/or post-analytical cases in part of the rounds. Examinations: Vitamin A, vitamin E, 25(OH)D-vitamin, 1,25(OH)2-D-vitamin, pre- and/or post-analytical indicators	3			•							•		
2481 Vitamin A, E and D metabolites, extra set of samples	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 liquid human serum samples, 5 mL				•							•		
2525 5-hydroxyindoleacetic Acid (5-HIAA)	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 serum samples	3			•						•			

Clinical chemistry » Specific proteins

	1	2	3	4	5	6	7	8	9	10	11	12
2020 C-reactive protein (CRP) for analyzers		•		•		•		•		•		•
Specimens: 2 liquid serum or plasma samples, 1 mL Examinations: CRP	3 Notes: Scheme is designed only for clinical chemistry analyzers. Order scheme 2132 for POCT CRP meters. If you are not sure whether your device is a POCT meter or an analyzer, please contact our customer service.											
2132 C-reactive protein (CRP), POCT		•		•		•		•		•	•	
Specimens: 2 human plasma samples, 1 mL Examinations: CRP	3 Notes: Only for quantitative POCT CRP meters. If you are not sure whether your device is a POCT meter or an analyzer, please contact our customer service.											
2140 Decalotransferrin [EQUALIS]	•		•		•			•		•		•
Specimens: 2 human plasma samples, varying concentration of CDT Examinations: CDT	1 Notes: Participation to all rounds required.											
2751 Faecal calprotectin		•			•			•			•	
Specimens: 2 lyophilized faecal specimens, 0.5 mL	3 Examinations: Calprotectin											
2281 Interleukin-6		•			•			•			•	
Specimens: 2-3 lyophilized samples	3 Examinations: IL-6											
2200 Lipids and lipoproteins		•			•				•			•
Specimens: 2 fresh human serum samples, 0.5-1 mL. Pre- and/or post-analytical cases in part of the rounds. Examinations: Cholesterol, HDL cholesterol, LDL cholesterol, lipoprotein apo A1,	3 lipoprotein apo A2, lipoprotein apo B, lipoprotein (a), triglycerides, pre- and/or post-analytical indicators Notes: Separate round for Lp(a), see scheme 2202											
2202 Lipoprotein a		•			•				•			•
Specimens: 1 liquid or lyophilized human serum preparation	3 Examinations: Lp(a)											
2280 Procalcitonin				•						•		
Specimens: 2 lyophilized samples Examinations: Procalcitonin	3 Notes: Only for quantitative methods											
2160 Proteins in cerebrospinal fluid				•					•			
Specimens: 1 cerebrospinal fluid sample 1-3 mL and 1 human serum sample, 1 mL	3 Examinations: Cerebrospinal fluid: Albumin, IgG, total protein, IgG index. Serum: Albumin, IgG.											
2240 Proteins, electrophoresis		•			•			•			•	
Specimens: 2 liquid or lyophilized human serum samples, 1 mL. Pre- and/or post-analytical cases in part of the rounds.	3 Examinations: Electrophoresis, contains immunofixation, pre- and/or post-analytical indicators											
2230 Proteins, immunochemical determinations	•			•		•			•			
Specimens: 2 liquid human serum samples, 1 mL Examinations: Alpha-1-antitrypsin, alpha-2-macroglobulin, albumin, ceruloplasmin, complement C3, complement C4, haptoglobin, hemopexin,	3 IgA, IgG, IgLcKappa, IgLcLambda, IgLcKappa free, IgLcLambda free, IgM, orosomuroid, pre-albumin, RBP, transferrin, transferrin receptor.											

Clinical chemistry » Tumour markers

	1	2	3	4	5	6	7	8	9	10	11	12
2703 Anti-Müllerian hormone		•			•			•			•	
Specimens: 2 liquid human serum samples, 1 mL	Examinations: Anti-Müllerian hormone											

	1	2	3	4	5	6	7	8	9	10	11	12
2226 Prostate specific antigen		•		•			•			•		
Specimens: 2 liquid human serum samples, 1 mL	Examinations: PSA, complexed PSA, free PSA, free/total PSA ratio											

	1	2	3	4	5	6	7	8	9	10	11	12
2700, 2700S Tumour markers		•			•			•			•	
Specimens: 2 liquid human serum samples, 2 mL	Notes: 2700S is a limited version of the scheme available for laboratories performing testing of 1–5 analytes. Product 2700S does not include reporting from multiple analyzers or methods											
Examinations: AFP, CA 125, CA 153, CA 199, CEA, ferritin, hCG (total, intact, beta-subunit), PSA, PSA free, PSA free/total index, TG, TG antibodies, beta-2-microglobulin, NSE, HE4												

	1	2	3	4	5	6	7	8	9	10	11	12
2701 Tumour markers, extra set of samples		•			•			•			•	
Specimens: 2 liquid human serum samples, 2 mL	Notes: Only in connection with scheme 2700											

Clinical chemistry » Urine analysis

	1	2	3	4	5	6	7	8	9	10	11	12
3240 Albumin and creatinine in urine				•						•		
Specimens: 2 liquid human urine samples with spiked albumin and creatinine, 4 mL	Examinations: Albumin, creatinine, albumin-creatinine ratio											
	Notes: Only for quantitative methods											

	1	2	3	4	5	6	7	8	9	10	11	12
3300 Drug of abuse screening in urine		•				•			•			
Specimens: 2 authentic samples, 5 mL	Notes: For clinical laboratories and POCT sites. Expert laboratory confirmatory results are provided. Results are reported as positive or negative.											
Examinations: Alpha-PVP, Amphetamine, Barbiturates, Benzodiazepines, Buprenorphine, Cannabinoids, Carbamazepine, Cocaine +metabolites, Codeine, Dextropropoxyphene, EDDP, Fencyclidine, Fentanyl, Gammahydroxybutyrate (GHB), Ketamine, LSD, MDMA, MDPV, Metamphetamine, Methaqualone, Methadone +metabolites, Methylphenidate, Morphine, Opiates Oxycodone, Paracetamol, Pregabalin, Salicylate, Tricyclic- antidepress. Tramadol												

	1	2	3	4	5	6	7	8	9	10	11	12
3270 Pregnancy test			•		•				•		•	
Specimens: 2 fresh urine samples, 1 mL	Notes: For clinical laboratories and POCT sites											
Examinations: Qualitative hCG												

	1	2	3	4	5	6	7	8	9	10	11	12
3170 Urine bacterial screening with automated analyzers				•							•	
Specimens: 1 liquid sample and lyophilized synthetic urine sample containing bacteria.	Examinations: Bacterial, erythrocytes and leukocytes counting											

	1	2	3	4	5	6	7	8	9	10	11	12
3200 Urine, identification of cells and other particles (digital images)		•			•			•			•	
Specimens: 4 digital images	Examinations: Identification of cells and other particles											

1 2 3 4 5 6 7 8 9 10 11 12

3160 Urine quantitative chemistry

3

1	2	3	4	5	6	7	8	9	10	11	12
		•		•				•			•

Specimens: 1 liquid urine, 10 mL

Examinations: Albumin, amylase, calcium, chloride, cortisol-free, creatinine, glucose, inorganic phosphate, magnesium, osmolality, pH, potassium, protein, relative density, sodium, urea, uric acid

POCT

1 2 3 4 5 6 7 8 9 10 11 12

3100 Urine strip test A

3

1	2	3	4	5	6	7	8	9	10	11	12
	•		•				•		•		

Specimens: 1 lyophilized urine sample with varying concentrations, 15 mL

Examinations: Glucose, ketone bodies, leukocytes, nitrite, pH, protein, blood (erythrocytes), relative density

Notes: For clinical laboratories and POCT sites. Water for dissolution available, see scheme 3101, should be ordered separately.

POCT

1 2 3 4 5 6 7 8 9 10 11 12

3101 Urine strip test A, 15 mL water for sample dissolution

1	2	3	4	5	6	7	8	9	10	11	12
	•		•				•		•		

Specimens: 15 mL water for dissolution of samples of scheme 3100

Notes: Only in connection with scheme 3100

1 2 3 4 5 6 7 8 9 10 11 12

3130 Urine strip test B, particle count and estimation of density

3

1	2	3	4	5	6	7	8	9	10	11	12
		•		•				•			•

Specimens: 1 lyophilized urine, 15 mL

Examinations: Particle count: erythrocytes and leukocytes. Estimation of density: creatinine, relative density, osmolality. Strip tests: glucose, ketone bodies, leukocytes, nitrite, pH, protein, blood (erythrocytes).

Notes: Also suitable for automatic analyzers (erythrocytes and leukocytes counting). The arbitrary concentrations of the obtained strip test results will only be collected in order to avoid different groupings of positive categories used by different strip tests and user laboratories. Water for dissolution of the lyophilized sample available, see scheme 3131, should be ordered separately.

1 2 3 4 5 6 7 8 9 10 11 12

3131 Urine strip test B, 15 mL water for sample dissolution

1	2	3	4	5	6	7	8	9	10	11	12
		•		•				•			•

Specimens: 15 mL water for dissolution of lyophilized samples of scheme 3130

Notes: Only in connection with scheme 3130

Clinical chemistry and haematology

Clinical chemistry and haematology » **Percentiler and flagger programs**

	1	2	3	4	5	6	7	8	9	10	11	12
3501 Flagger program (Noklus)											•	
<p>Specimens: The percentage of patient results outside the reference limits</p> <p>Examinations: ALP, ALT, AST, bilirubin, BUN, calcium, cholesterol, chloride, creatinine, CRP, ferritin, folate, FT4, GGT, glucose, Hb, HbA1c, HDL-cholesterol, IgA, IgG, IgM, IgA, K, LDH, MCV, magnesium, Na, phosphate, PLT, protein, PSA, PTH, RBC, triglycerides, TSH, urea, uric acid, vitamin B12, vitamin D, WBC</p> <p>Notes: Each participant will receive log in information giving access to the laboratories results and allowing dynamic on-line monitoring of mid-to long-term stability of performance and flagging rate. Laboratories can choose to participate in The Percentiler program only.</p>												

	1	2	3	4	5	6	7	8	9	10	11	12
3500 Percentiler program (Noklus)											•	
<p>Specimens: results from selected patient groups are used to calculate instrument-specific daily medians</p> <p>Examinations: ALP, ALT, AST, bilirubin, BUN, calcium, cholesterol, chloride, creatinine, CRP, ferritin, folate, FT4, GGT, glucose, Hb, HbA1c, HDL-cholesterol, IgA, IgG, IgM, IgA, K, LDH, MCV, magnesium, Na, phosphate, PLT, protein, PSA, PTH, RBC, triglycerides, TSH, urea, uric acid, vitamin B12, vitamin D, WBC</p> <p>Notes: Participating laboratories calculate, and report instrument-specific medians based on patient results. The total number of patient results is also reported. Ideally, patient medians are reported daily, but less frequent reporting is also possible. Results are exported to a central database by standardized e-mails.</p>												

Haematology

The haematology selection consists of schemes for blood transfusion serology, cell count and morphology as well as coagulation tests. Specialties include the Erythrocyte sedimentation rate for Alifax as well as the White blood cell count and INR schemes for POCT. Units performing blood transfusions find EQA schemes for hepatitis B and C, HIV as well as other infectious diseases under the microbiology portfolio. **Schemes related to blood parasites can be found under the parasites chapter.**

Haematology » Blood transfusion serological tests

	1	2	3	4	5	6	7	8	9	10	11	12
4420 ABO and Rh grouping		•			•			•			•	
Specimens: 2 whole blood samples, 4 mL Examinations: ABO & Rh reaction strengths and interpretation	Notes: There is possibility to insert results for full ABO RhD group, confirmation group without using the plasma and a group for a newborn.											
4460 Antibody screening and compatibility testing		•			•			•			•	
Specimens: 2 whole blood samples (4 mL) and 4 red blood cell suspensions (3 mL)	Examinations: Reaction strengths and interpretation											
4440 Antiglobulin test, direct		•			•			•			•	
Specimens: 2 red blood cell suspensions, 3 mL	Examinations: Reaction strengths and interpretation											
4480 Column agglutination methods: grading of reactions and patient cases										•		
Specimens: 3-5 cases and digital images (DiaMed and Grifols cards) Examinations: Interpretation of the cases and reaction strengths of the digital images	Notes: Post-analytical scheme.											

Haematology » Cell count and cell morphology

	1	2	3	4	5	6	7	8	9	10	11	12
4100 Basic blood count, 1-level sample	•	•	•	•	•	•	•	•	•	•	•	•
Specimens: 1 blood cell suspension, 3 mL	Examinations: Hb, HCT, MCH, MCHC, MCV, PLT, RBC, RDW (red cell distribution width), WBC, cumulative patient means of MCH, MCHC, MCV											
4110 Basic blood count, 2-level samples	•	•	•	•	•	•	•	•	•	•	•	•
Specimens: 2 blood cell suspensions, 3 mL	Examinations: Hb, HCT, MCH, MCHC, MCV, PLT, RBC, RDW (red cell distribution width), WBC, cumulative patient means of MCH, MCHC, MCV											
4180 Leucocyte differential count and evaluation of blood cell morphology, virtual microscopy					•					•		
Specimens: 2-3 patient cases as virtual slide images	Examinations: Leucocyte differential count and evaluation of red blood cells											
4200-4201 Leucocyte differential count, 3-part, automated			•			•			•			•
Analyzer specific product codes: 4200: ABX, Advia, Cell-Dyn, Coulter, Medonic, Mindray, Nihon Kohden Celltac MEK 4201: Sysmex	Specimens: 1 blood cell suspension, 2-4 mL Examinations: Absolute numbers of leucocytes, lymphocytes, mononuclear cells and granulocytes											

	1	2	3	4	5	6	7	8	9	10	11	12
4230–4240 Leucocyte differential count, 5-part, automated			●			●			●			●
Analyzer specific product codes:												
4230: Siemens Advia	4235: Coulter ACT5-diff											
4231: Cell-Dyn	4236: Mindray											
4232: Coulter	4237: Nihon Kohden Celltac MEK											
4233: Sysmex XE, XS, XT, XN	4239: Mythic											
4234: ABX Pentra, Yumizen	4240: Coulter DxH 560 AL											
	Specimens: 1 blood cell suspension, 2–4 mL											
	Examinations: Leucocytes, basophils, eosinophils, granulocytes, lymphocytes and monocytes											

	1	2	3	4	5	6	7	8	9	10	11	12
4150–4156 Reticulocyte count, automated			●			●			●			●
Analyzer specific product codes:												
4150: Siemens Advia	4153: Sysmex											
4151: Cell-Dyn 4000, Sapphire, Alinity HQ	4154: ABX Pentra, Yumizen											
4152: Coulter Gens, LH750	4155: Cell-Dyn 3200, 3500, 3700, Ruby											
	4156: Mindray											
	Specimens: 2 stabilized red blood cell suspensions, 2–4 mL											
	Examinations: Reticulocyte count											

	1	2	3	4	5	6	7	8	9	10	11	12
4140 Reticulocyte count, manual methods			●			●			●			●
Specimens: 1 stabilized red blood cell suspension, 2 mL												
Examinations: Reticulocyte count												

	1	2	3	4	5	6	7	8	9	10	11	12
4130 White blood cell count: HemoCue, POCT			●						●			
Specimens: 1 blood cell suspension, 2 mL												
Examinations: Leucocytes												
Notes: The scheme is for HemoCue WBC Systems												

	1	2	3	4	5	6	7	8	9	10	11	12
4190 White blood cell differential count: HemoCue, POCT						●						●
Specimens: 1 blood cell suspension, 2 mL												
Examinations: Leucocytes, neutrophils, lymphocytes, monocytes, basophils, eosinophils												
Notes: The scheme is for HemoCue WBC Diff analyzers (5-part)												

Haematology » Coagulation

	1	2	3	4	5	6	7	8	9	10	11	12
4330 Activated partial thromboplastin time, INR and fibrinogen		●			●			●			●	
Specimens: 2 lyophilized plasma samples, 0.5–1 mL												
Examinations: Coagulation time in seconds, fibrinogen, INR												

	1	2	3	4	5	6	7	8	9	10	11	12
4387 Anticoagulants: LMW-Heparin/antiFXa		●			●			●			●	
Specimens: 2 lyophilized plasma samples, 0.5–1 mL												
Examinations: LMW-heparin/antiFXa												

	1	2	3	4	5	6	7	8	9	10	11	12
4388 D-dimer		●			●			●			●	
Specimens: 2 liquid commercial plasma samples, 0.5 mL												
Examinations: D-Dimer												
Notes: For clinical laboratories and POCT sites												

	1	2	3	4	5	6	7	8	9	10	11	12
4335 INR, CoaguChek, i-STAT and Siemens Xprecia, POCT					●						●	
Specimens: Liquid or lyophilized sample												
Examinations: Prothrombin time in INR unit												
Notes: Only for CoaguChek, i-STAT and Siemens Xprecia meters												

POCT	4337 INR, EuroLyzer, POCT	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 1 lyophilized plasma sample Examinations: Prothrombin time in INR unit	Notes: Only for EuroLyzer INR meter												

POCT	4340 INR, LabPad, POCT	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 1 dried whole blood sample Examinations: Prothrombin time in INR unit	Notes: Only for LabPad INR meters												

POCT	4338 INR, MicroINR, LumiraDX and CoagSense, POCT	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: Lyophilized whole blood sample or lyophilized plasma sample Examinations: Prothrombin time in INR unit	Notes: Only for microINR, LumiraDX and CoagSense meters												

POCT	4300 Prothrombin time	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 lyophilized plasma samples, 0.5–1 mL	Examinations: Prothrombin time, PT%												

POCT	4386 Special coagulation	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 lyophilized plasma samples, 0.5–1 mL	Examinations: Thrombin time, Antithrombin, Factor VIII, Protein C, Protein S												

EQA schemes for blood banks

Blood transfusion serology

- 4420 ABO and Rh grouping
- 4460 Antibody screening and compatibility testing
- 4440 Antiglobulin test, direct
- 4480 Column agglutination methods: grading of reactions and patient cases

Bacterial serology

- 5880 Syphilis serology

Bacteriology

- 5100 Blood culture
- 5101 Blood culture, screening

Virology, serological tests

- 5650 Cytomegalovirus, antibodies
- 5092 Hepatitis A, antibodies
- 5093 Hepatitis B, s-antigen antibodies, quantitative
- 5094–5096 Hepatitis B and C, serology
- 5091 HIV, antibodies and antigen detection
- 5089 Human T-cell lymphotropic virus, antibodies
- 5660 Parvovirus B19, antibodies

Virology, molecular tests

- 5679 Hepatitis B virus, nucleic acid detection (DNA)
- 5678 Hepatitis C virus, nucleic acid detection (RNA)
- 5680 HIV-1, nucleic acid detection (RNA)

EQA services for POCT sites

Patient outcome is associated with obtaining a reliable test result regardless of where the testing is performed. To ensure high quality of care and patient safety, it is imperative that point-of-care testing (POCT) is subjected to the same quality requirements as conventional laboratory analyses.

Labquality offers a range of EQA schemes suitable for POCT sites. These services are intended for all testing units including home/community nursing, hospital wards, pediatric clinics, surgical units, occupational healthcare, outpatient clinics and medical centers.

Clinical chemistry

- 2610 Acid-base status and electrolytes
- 3240 Albumin and creatinine in urine
- 2100 Basic chemistry, POCT analyzers
- 2132 C-reactive protein (CRP), POCT
- 3300 Drug of abuse screening in urine
- 2750 Faecal occult blood, qualitative
- 2749 Faecal occult blood, quantitative
- 2570, 2580, 2590 Glucose meters
- 1263 Haemoglobin A1c, liquid samples, POCT
- 2114 Haemoglobin, 1-level, POCT
- 2112 Haemoglobin, 3-level samples, POCT
- 2526 Ketones (beta-hydroxybutyrate), POCT
- 2690 Natriuretic peptides 1, B-type, NT-ProBNP
- 2691 Natriuretic peptides 2, B-type, BNP
- 3270 Pregnancy test
- 2530 Troponin I and Troponin T, detection, POCT
- 3100 Urine strip test A
- 2115 Haemoglobin, 1-level HemoCue 801 and HemoCue 301

Haematology

- 4388 D-Dimer
- 4335 INR, CoaguChek, i-STAT and Siemens Xprecia, POCT
- 4337 INR, EuroLyzer, POCT
- 4340 INR LAbPad, POCT
- 4338 INR, MicroINR, LumiraDX and CoagSense, POCT
- 5430 Malaria, antigen and nucleic acid detection
- 4130 White blood cell count: HemoCue, POCT
- 4190 White blood cell differential count: HemoCue, POCT

Microbiology

- 5640 EBV mononucleosis, POCT
- 5635 Dengue virus, antibodies and antigen detection
- 5860 *Helicobacter pylori*, antibodies
- 5596 *Helicobacter pylori*, antigen detection in faeces
- 5090 HIV, antibodies and antigen detection, POCT
- 5671 Influenza virus A+B, antigen detection
- 5597 Legionella, antigen detection in urine
- 5430 Malaria, antigen and nucleic acid detection
- 5980 *Mycoplasma pneumoniae*, antibodies
- 5560 Puumala virus, antibodies
- 5673 Respiratory adenovirus, antigen detection
- 5098 Rotavirus and adenovirus, antigen detection
- 5672 RS virus, antigen detection
- 5677 SARS-CoV-2, antibodies
- 5681 SARS-CoV-2 antigen detection
- 5676 SARS-CoV-2 nucleic acid detection
- 5595 *Streptococcus pyogenes*, group A, antigen detection in pharyngeal sample
- 5599 *Streptococcus agalactiae* (GBS), nucleic acid detection
- 5598 *Streptococcus pneumoniae*, antigen detection in urine
- 5099 Tick-borne encephalitis virus, antibodies
- 5473 *Trichomonas vaginalis*, detection

Preanalytics

- 7801 Preanalytics, urine and blood sample collection
- 7804 Preanalytics, POCT in chemistry

Immunology

This program includes schemes for immunodiagnostic tests such as those for coeliac disease, rheumatoid factor and thyroid gland autoantibodies. All of the schemes involve analysis of liquid human serum or plasma samples. For allergy diagnostics, review the allergology program in the clinical chemistry portfolio.

	1	2	3	4	5	6	7	8	9	10	11	12
NEW EQA ³	5250 Interferon Gamma Release Assay (IGRA) for <i>Mycobacterium tuberculosis</i>		3			•		•			•	
	Specimens: 2-3 lyophilized samples and a preanalytical case description including questions				Examinations: TblNFg quantitative result and qualitative interpretation. The scheme is not suitable for the TB T-Spot test.							
EQA ³	5935 ANCA and GbmAb		3*			•			•			
	Specimens: 2 liquid human serum or plasma samples, 0.5 mL				Pre- and/or post-analytical cases in part of the rounds.							
	Examinations: Anti-neutrophilic cytoplasmic Ab, Myeloperoxidase Ab, Proteinase-3 Ab and Glomerular basement membrane Ab.				Notes: Quantitative results are also processed (Pr3Ab, MPOAb, GbmAb)							
EQA ³	5900 Antinuclear antibodies		3				•				•	
	Specimens: 3 liquid human serum or plasma samples, 0.6 mL				Pre- and/or post-analytical cases in part of the rounds.							
	Examinations: ANA, ENAAb, RNPAb, SmAb (SmDAb and/or SmBAb), SSAAb, SSBAb, Scl70Ab, CENP-B, CENP-A, Jo1Ab, dsDNA, HistAb, RibP Ab, RNAPol III Ab				Notes: Extractable antinuclear antigens and double-stranded deoxyribonucleic acid are included							
	5938 Autoimmune diagnostics, IFA interpretation (digital images)		3					•				
	Specimens: 3-5 cases (digital images)				Examinations: Interpretation (ANA, ANCA and EMA images)							
	5930 Autoimmune liver disease and gastric parietal cell antibodies		3					•				•
	Specimens: 2 liquid human serum or plasma samples, 0.4 mL				Examinations: Liver kidney microsomal antibodies, Smooth muscle antibodies, Mitochondrial antibodies, Gastric parietal cell antibodies							
EQA ³	5940 Coeliac disease, antibodies		3			•			•			•
	Specimens: 2 liquid human serum or plasma samples, 0.7 mL				Notes: Quantitative results are also processed (tTGAbA, tTGAbG, DGPAbA, DGPAbG). Scheme is not suitable for POCT.							
	Examinations: Endomysium antibodies, tissue transglutaminase antibodies, deamidated gliadin peptide antibodies, interpretation of the Total IgA concentration of the sample. Pre- and/or post-analytical cases in part of the rounds.											
	5937 Phospholipid antibodies		3					•				
	Specimens: 2 liquid human serum or plasma samples, 0.5 mL				beta-2-glycoprotein antibodies (IgG and IgM).							
	Examinations: Phospholipid antibodies, Cardiolipin antibodies (IgG and IgM),				Notes: Quantitative results are also processed							
	5820 Rheumatoid factor and citrullic peptide antibodies		3		•			•		•		
	Specimens: 2 liquid human-derived samples, 0.7 mL				Examinations: Qualitative and quantitative RF, CCPAb							
EQA ³	5920 Thyroid gland antibodies		3				•		•		•	
	Specimens: 2 liquid human serum or plasma samples, 0.4 mL				Pre- and/or post-analytical cases in part of the rounds.							
	Examinations: Thyroglobulin antibodies and thyroid peroxidase antibodies.				Notes: Quantitative results are also processed							
	5913 TSH receptor antibodies		3				•				•	
	Specimens: 2 liquid human serum or plasma samples, 0.4 mL				Notes: Quantitative results are also processed							
	Examinations: Thyroid stimulating hormone receptor antibodies											

Microbiology

The microbiological EQA programs are suitable for clinical laboratories and POCT sites performing testing in the areas of bacterial serology, bacteriology, mycology, parasitology and virology. While the selection includes schemes for antigen detection, antibody detection, culture, microscopy, and PCR tests, solutions for versatile needs are available. Authentic single donor samples are included in multiple schemes.

Microbiology » Bacterial Serology

	1	2	3	4	5	6	7	8	9	10	11	12	
5840 Antistreptolysin Specimens: 2 liquid human serum or plasma samples, 0.4 mL Authentic, commutable, single donor samples.		•			•			•			•		
3*	Examinations: Qualitative and quantitative ASO												
5950 <i>Bordetella pertussis</i>, antibodies Specimens: 2 liquid human serum samples, 0.3 mL	•			•				•			•		
3	Examinations: <i>B. pertussis</i> IgA, IgG & IgM antibodies, Pertussis toxin IgA, IgG & IgM, post-analytical clinical interpretation												EQA ³
5960 <i>Borrelia burgdorferi</i>, antibodies, European origin Specimens: 2 liquid human serum or plasma samples, 0.5 mL Authentic, commutable, single donor samples.	•			•				•			•		
3	Examinations: <i>B. burgdorferi</i> IgG, IgM and total antibodies, post-analytical clinical interpretation												EQA ³
5965 CXCL 13 Chemokine Specimens: 2 liquid samples	•					•							
3	Examinations: Chemokine CXCL13 detection												NEW
5620 <i>Chlamydia pneumoniae</i>, antibodies Specimens: 3 liquid serum or plasma samples, 0.4 mL			•			•			•			•	
3	Examinations: <i>C. pneumoniae</i> IgA, IgG, IgM antibodies, post-analytical clinical interpretation												EQA ³
5851 <i>Francisella tularensis</i>, antibodies Specimens: 3 liquid human serum or plasma samples, 0.5 mL				•						•			
3	Examinations: <i>Francisella tularensis</i> IgG, IgM and total antibodies												
5860 <i>Helicobacter pylori</i>, antibodies Specimens: 2 liquid human serum or plasma samples, 0.4 mL Examinations: <i>H. pylori</i> IgA, IgG and total antibodies, quantitative and			•			•			•			•	
3	Examinations: qualitative tests, post-analytical clinical interpretation												EQA ³
	Notes: For clinical laboratories and POCT sites												POCT
5980 <i>Mycoplasma pneumoniae</i>, antibodies Specimens: 2 liquid human serum or plasma samples, 0.3 mL Authentic, commutable, single donor samples.		•			•				•		•		
3*	Examinations: <i>M. pneumoniae</i> IgG, IgM and total antibodies, post-analytical clinical interpretation												EQA ³
	Notes: For clinical laboratories and POCT sites												POCT
5880 Syphilis serology Specimens: 2 liquid human serum samples, 0.6 mL Authentic, commutable, single donor samples.		•				•				•		•	
3*	Examinations: Cardiolipin, <i>Treponema pallidum</i> antibodies, post-analytical clinical interpretation												EQA ³

5050 Bacteriological staining, direct (digital images)	1	2	3	4	5	6	7	8	9	10	11	12
3				•						•		
Specimens: 3 cases, 3–9 digital images	Examinations: Interpretation of digital images taken from direct bacteriological Gram staining of clinical samples											

5100 Blood culture	1	2	3	4	5	6	7	8	9	10	11	12
1			•		•					•		•
Specimens: 2 lyophilized samples. Brief case histories are also given. Fresh blood is needed for specimen preparation. The samples intended for susceptibility testing may include both international quality control strains and susceptible or resistant clinical strains.	Examinations: Culture, identification, antimicrobial susceptibility Notes: Fresh blood is needed but not included in the shipment											

5101 Blood culture, screening	1	2	3	4	5	6	7	8	9	10	11	12
1			•		•					•		•
Specimens: 2 lyophilized samples. Brief case histories are also given. Fresh blood is needed for sample preparation.	Examinations: Culture, preliminary identification using Gram staining. The scheme is also suitable for stem cell banks screening only for possible growth. Notes: Fresh blood is needed but not included in the shipment											

5150 Cerebrospinal fluid, bacterial culture	1	2	3	4	5	6	7	8	9	10	11	12
1		•			•					•		•
Specimens: 2 lyophilized samples. Brief case histories are also given. Examinations: Culture and identification. The scheme is also suitable for laboratories performing screening and reporting merely a preliminary identification.	Notes: See also scheme 5303 Meningitis-encephalitis multiplex, nucleic acid detection											

5612 <i>Chlamydia trachomatis</i> and <i>Neisseria gonorrhoeae</i> nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12
3			•		•				•			•
Specimens: 3 simulated swab/urine samples, 2 mL Examinations: Detection of <i>C. trachomatis</i> and <i>N. gonorrhoeae</i> nucleic acid	Notes: See also scheme 5302 Sexually transmitted diseases multiplex, nucleic acid detection											

5200 <i>Clostridioides difficile</i>, culture and toxin detection	1	2	3	4	5	6	7	8	9	10	11	12
1		•			•				•			•
Specimens: 2 lyophilized mixtures of bacteria	Examinations: This scheme includes <i>C. difficile</i> culture, antigen detection (GDH), toxin detection and direct nucleic acid detection. Hypervirulent <i>C. difficile</i> strains also included.											

5202 <i>Clostridioides difficile</i>, extra set of samples	1	2	3	4	5	6	7	8	9	10	11	12
		•			•				•			•
Specimens: 2 lyophilized mixtures of bacteria	Notes: Only in connection with scheme 5200											

5201 <i>Clostridioides difficile</i>, nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12
1		•			•				•			•
Specimens: 2 lyophilized mixtures of bacteria	Examinations: <i>C. difficile</i> direct nucleic acid detection. Hypervirulent <i>C. difficile</i> strains also included. Notes: 5200 includes also this examination											

5191 Faecal bacterial pathogens multiplex, nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12
1				•		•				•		•
Specimens: 3 samples. Either lyophilized mixtures of bacteria and/or simulated samples, 1 mL. Examinations: Direct nucleic acid detection. Pathogens included are Aeromonas, Campylobacter, <i>E. coli</i> EHEC (stx1/stx2), <i>E. coli</i> EAEC, <i>E. coli</i> EIEC,	<i>E. coli</i> EPEC, <i>E. coli</i> ETEC, Plesiomonas, Salmonella, Shigella and Yersinia. Notes: During the period of one calendar year, a comprehensive selection of listed pathogens will be covered.											

5230 <i>Mycobacterium tuberculosis</i> , drug resistance	1	2	3	4	5	6	7	8	9	10	11	12	NEW
Specimens: 2 simulated samples, 1 mL	3		•			•			•			•	
5190 Faecal culture	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized mixtures of bacteria	1			•		•				•		•	
5080 General Bacteriology 1 (aerobes and anaerobes)	1	2	3	4	5	6	7	8	9	10	11	12	EQA ³
Specimens: 4 lyophilized mixtures of microbes: both pathogens and normal flora. The samples intended for susceptibility testing may include both international quality control strains and susceptible or resistant clinical strains. Brief case histories are also given. Pre- and/or post-analytical cases in part of the rounds.	1		•		•				•			•	
5081 General Bacteriology 2 (aerobes)	1	2	3	4	5	6	7	8	9	10	11	12	EQA ³
Specimens: 2 lyophilized mixtures of microbes: both pathogens and normal flora. The specimens intended for susceptibility testing may include both international quality control strains and susceptible or resistant clinical strains. Brief case histories are also given. Pre- and/or post-analytical cases in part of the rounds.	1		•		•				•			•	
5041 Gram stain, blood culture	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 air-dried, unfixed microbe suspensions on slides. Brief case histories also given.	1	•		•			•			•			
5040 Gram stain, colonies	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 3 air-dried, unfixed microbe suspensions on a slide	1	•		•			•			•			
5596 <i>Helicobacter pylori</i> , antigen detection in faeces	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 samples: lyophilized faecal or swab Examinations: Antigen detection	3		•			•			•			•	
5597 Legionella, antigen detection in urine	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 simulated urine samples	3*		•		•				•			•	
5220 Mycobacterial culture and stain	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized samples and 2 fixed smears on slides Examinations: Detection of <i>Mycobacterium tuberculosis</i> , <i>Mycobacterium tuberculosis</i> complex and atypical mycobacteria: culture, direct nucleic acid	1		•			•			•			•	
5221 Mycobacterial nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized samples Examinations: Direct nucleic acid detection	1		•			•			•			•	
5222 Mycobacteria, extra set of samples	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized samples			•			•			•			•	

5240 Mycobacterial stain	1	2	3	4	5	6	7	8	9	10	11	12
	1		•			•			•			•
Specimens: 2 fixed smears on slides												
Examinations: Acid-fast staining and microscopy												

5120 <i>Neisseria gonorrhoeae</i> (Gc), culture and susceptibility testing	1	2	3	4	5	6	7	8	9	10	11	12
	1		•		•			•				•
Specimens: 2 lyophilized mixtures of microbes. The samples intended for susceptibility testing may include both international quality control strains and susceptible or resistant clinical strains.												
Examinations: Culture, identification and antimicrobial susceptibility testing. Also suitable for laboratories performing preliminary screening.												

5180 Salmonella culture	1	2	3	4	5	6	7	8	9	10	11	12
	1			•		•					•	
Specimens: 2 lyophilized mixtures of bacteria												
Examinations: Culture												
Notes: 5190 also includes 5180												

5599 <i>Streptococcus agalactiae</i> (GBS), nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12
	3*			•		•				•		•
Specimens: 2 swab samples. Samples also include normal flora.												
Examinations: Direct nucleic acid detection												
Notes: See also product 5594 for <i>S. agalactiae</i> (GBS) culture.												

5594 <i>Streptococcus agalactiae</i> (GBS), culture	1	2	3	4	5	6	7	8	9	10	11	12
	1			•		•				•		•
Specimens: 2 lyophilized samples. Samples include pathogens and/or normal flora.												
Examinations: Culture												
Notes: See also product 5599 for direct nucleic acid detection.												

5598 <i>Streptococcus pneumoniae</i> , antigen detection in urine	1	2	3	4	5	6	7	8	9	10	11	12
	3*		•		•					•		•
Specimens: 3 simulated urine specimens												
Examinations: <i>S. pneumoniae</i> antigen detection												

5595 <i>Streptococcus pyogenes</i> (Group A), antigen detection in pharyngeal sample	1	2	3	4	5	6	7	8	9	10	11	12
	3*		•		•					•		•
Specimens: 3 simulated pharyngeal samples												
Examinations: Antigen detection												
Notes: For clinical laboratories and POCT sites. Three results if used different kits.												

5593 <i>Streptococcus pyogenes</i> (Group A), nucleic acid detection in pharyngeal sample	1	2	3	4	5	6	7	8	9	10	11	12
	3*		•		•					•		•
Specimens: 3 simulated pharyngeal samples												
Examinations: Nucleic acid detection.												
Notes: Three results if used different kits.												

5073 Surveillance for multidrug resistant bacteria, gramnegative rods	1	2	3	4	5	6	7	8	9	10	11	12
	1		•			•				•		•
Specimens: 1 lyophilized mixture of microbes; including pathogens and/or normal flora												
Examinations: The scheme is intended for laboratories performing screening of multidrug resistant gramnegative rods (e.g. CPE, ESBL, MDR <i>Acinetobacter</i> and <i>P. aeruginosa</i>) by culture and/or direct nucleic acid detection method												

5071 Surveillance for multidrug resistant bacteria, MRSA	1	2	3	4	5	6	7	8	9	10	11	12
	1		•			•				•		•
Specimens: 1 lyophilized mixture of microbes; including pathogens and/or normal flora												
Examinations: The scheme is intended for laboratories performing screening of MRSA (methicillin resistant <i>Staphylococcus aureus</i>) by culture and/or direct nucleic acid detection method												

5072 Surveillance for multidrug resistant bacteria, VRE	1	2	3	4	5	6	7	8	9	10	11	12
	1	•				•			•		•	
Specimens: 1 lyophilized mixture of microbes; including pathogens and/or normal flora												
Examinations: The scheme is intended for laboratories performing screening of VRE (vancomycin-resistant enterococci) by culture and/or direct nucleic acid detection method												

5140 Throat streptococcal culture	1	2	3	4	5	6	7	8	9	10	11	12
	1		•		•			•			•	
Specimens: 3 lyophilized mixtures of bacteria												
Examinations: Culture and identification of group A, C and G streptococci												

5060 Urine culture, quantitative screening	1	2	3	4	5	6	7	8	9	10	11	12
	1		•			•			•			•
Specimens: 2 lyophilized samples and dilutor. Brief case histories also given. Pre- and/or post-analytical cases in part of the rounds.												
Examinations: Culture and quantitation, pre-and/or post-analytical indicators												
Notes: Scheme 3170 available for urine bacterial screening with automated analyzers.												

EQA³

5065 Urine culture, quantitative screening, identification and susceptibility	1	2	3	4	5	6	7	8	9	10	11	12
	1		•			•			•			•
Specimens: 2 lyophilized samples and dilutor. Brief case histories also given. The samples intended for susceptibility testing may include both international quality control strains and susceptible or resistant clinical strains. Pre- and/or post-analytical cases in part of the rounds.												
Examinations: Culture, quantitation, identification and antimicrobial susceptibility testing, pre-and/or post-analytical indicators												
Notes: Scheme 3170 available for urine bacterial screening with automated analyzers.												

EQA³

Microbiology » Mycology

5261 Fungal infections, nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12
	3			•						•		
Specimens: 3-4 simulated samples. The samples may include yeasts, dermatophytes and moulds. Examinations: Nucleic acid detection according to laboratory's own test selection.												
Notes: Test selection of the participating lab is taken into consideration in result processing.												

NEW

5260 Fungal culture	1	2	3	4	5	6	7	8	9	10	11	12
	1		•		•				•		•	
Specimens: 3 lyophilized samples. Brief case histories also given. The samples include moulds, dermatophytes and yeasts.												
Examinations: Culture and identification. Antimicrobial susceptibility testing of yeast strains.												

Microbiology » Parasitology

5472 Faecal parasites multiplex, nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12
	1	•			•			•			•	
Specimens: 3 lyophilized samples												
Examinations: Nucleic acid detection of <i>Cryptosporidium</i> , <i>Dientamoeba fragilis</i> , <i>Entamoeba histolytica</i> and <i>Giardia lamblia</i> .												

5430 Malaria, antigen and nucleic acid detection	1	2	3	4	5	6	7	8	9	10	11	12
	3*	•			•			•			•	
Specimens: 3 whole blood samples												
Examinations: Antigen and nucleic acid detection. Target antigens: HRP2 and/or pLDH and/or aldolase.												
Notes: For clinical laboratories and POCT sites												

POCT

5462 Malaria screening, Giemsa stain	1	2	3	4	5	6	7	8	9	10	11	12
	3	•			•			•			•	
Specimens: 2 methanol fixed or Giemsa stained smears. Brief case histories also given.												
Examinations: Preliminary screening of malaria plasmodia												

5463 Malaria screening, MGG stain	1	2	3	4	5	6	7	8	9	10	11	12
	3	•			•			•			•	
Specimens: 2 methanol fixed or May-Grünwald-Giemsa stained smears. Brief case histories are also given.												
Examinations: Preliminary screening of malaria plasmodia												

	1	2	3	4	5	6	7	8	9	10	11	12
5460 Parasites in blood, Giemsa stain		•			•			•			•	
Specimens: 2 methanol fixed or Giemsa stained smears. Brief case histories also given.	Examinations: Screening and identification of malaria plasmodia and other blood parasites											

VIRTUAL		1	2	3	4	5	6	7	8	9	10	11	12
	5470 Parasites in blood, Giemsa stain, virtual microscopy											•	
	Specimens: 2 virtual whole slide images of Giemsa stained smears prepared by using a scanner microscope. Brief case histories also given.	Examinations: Screening and identification of malaria plasmodia and other blood parasites											

	1	2	3	4	5	6	7	8	9	10	11	12
5461 Parasites in blood, MGG stain		•			•			•			•	
Specimens: 2 methanol fixed or May-Grünwald-Giemsa stained smears. Brief case histories are also given.	Examinations: Screening and identification of malaria plasmodia and other blood parasites											

VIRTUAL		1	2	3	4	5	6	7	8	9	10	11	12
	5471 Parasites in blood, MGG stain, virtual microscopy											•	
	Specimens: 2 virtual whole slide images of MGG stained smears prepared by using a scanner microscope. Brief case histories also given.	Examinations: Screening and identification of malaria plasmodia and other blood parasites											

	1	2	3	4	5	6	7	8	9	10	11	12
5440 Parasites in faeces		•			•			•			•	
Specimens: 3 stool samples in formalin. Brief case histories also given.	Examinations: Screening and identification of intestinal parasites (ova and parasites)											

VIRTUAL		1	2	3	4	5	6	7	8	9	10	11	12
	5450 Parasites in faeces, virtual microscopy				•						•		
	Specimens: Virtual whole slide images of stool samples in formalin prepared by using a scanner microscope. Brief case histories also given.	Examinations: Screening and identification of intestinal parasites (ova and parasites)											

EQA³		1	2	3	4	5	6	7	8	9	10	11	12
	5420 Toxoplasma, antibodies		•			•			•			•	
	Specimens: 3 liquid human plasma samples, 0.7 mL each. Brief case histories also given. Authentic commutable samples: Each sample batch originates from a single human donor.	Examinations: Toxoplasma IgA, IgG, IgM and total antibodies, IgG avidity, post-analytical clinical interpretation											

POCT		1	2	3	4	5	6	7	8	9	10	11	12
	5473 <i>Trichomonas vaginalis</i>, detection		•		•				•		•		
	Specimens: 3 simulated samples	Examinations: Detection of <i>Trichomonas vaginalis</i> antigen and nucleic acid (NAT)											

Microbiology » Virology

NEW		1	2	3	4	5	6	7	8	9	10	11	12
	5556 HSV1&2/VZV/<i>T. pallidum</i>, nucleic acid detection				•			•					
	Specimens: 2-3 samples simulating swab samples taken from lesions	Examinations: Nucleic acid detection of HSV1, HSV2, VZV, <i>Treponema pallidum</i>											

	1	2	3	4	5	6	7	8	9	10	11	12
5651 CMV and EBV, nucleic acid detection, quantitative			•						•			
Specimens: 5 samples simulating plasma, 1.5 mL Examinations: CMV and EBV NAT (quantitative).	Notes: Quantitative result processing											

EQA³		1	2	3	4	5	6	7	8	9	10	11	12
	5650 Cytomegalovirus, antibodies		•			•				•			•
	Specimens: 3 liquid human plasma samples, 0.7 mL. Authentic commutable samples: each batch originates from a single human donor.	Examinations: Cytomegalovirus IgG, IgM and total antibodies, IgG avidity and post-analytical clinical interpretation											

5635 Dengue virus, antibodies and antigen detection Specimens: 3 human serum or plasma samples, 0.5 mL. Authentic, commutable samples from a single human donor or occasionally simulated samples.	3	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: Dengue virus IgG and IgM antibodies, Dengue virus antigen (NS1) and post-analytical clinical interpretation	POCT EQA³
5640 EBV mononucleosis, POCT Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.	3	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: MonAb Notes: For clinical laboratories and POCT sites	POCT
5641 EBV mononucleosis, specific antibodies Specimens: 3 liquid human plasma samples, 1.4 mL. Authentic commutable samples: each batch originates from a single human donor.	3	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: EBNA AbG, EBV VCA AbG, EBV VCA AbM, IgG Avidity and post-analytical clinical interpretation	EQA³
5092 Hepatitis A, antibodies Specimens: 3 liquid human plasma samples, 0.6 mL. Authentic commutable samples: each batch originates from a single human donor.	3	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: HAVAb, HAVAbM, HAVAbG and post-analytical clinical interpretation	EQA³
5094–5096 Hepatitis B and C, serology, specimen volume 0.6 mL / 1.2 mL / 2.0 mL Specimens: 3 liquid human plasma samples, 0.6 / 1.2 or 2.0 mL. Authentic commutable samples: each batch originates from a single human donor. Examinations: HBcAb, HBcAbM, HBeAb, HBeAg, HBsAb (qual), HBsAg, HCVAb, HCVAbCt and post-analytical clinical interpretation	3	1 2 3 4 5 6 7 8 9 10 11 12	Volume specific product codes: 5094: for 0.6 mL human plasma specimens 5095: for 1.2 mL human plasma specimens 5096: for 2.0 mL human plasma specimens	EQA³
5093 Hepatitis B, s-antigen antibodies, quantitative Specimens: 2 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.	3*	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: HBsAb (anti-HBs), quantitative	
5679 Hepatitis B virus, nucleic acid detection (DNA) Specimens: 3 lyophilized or liquid plasma samples, 1.2 mL	3*	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: HBV DNA, quantitative and/or qualitative nucleic acid detection	
5678 Hepatitis C virus, nucleic acid detection (RNA) Specimens: 3 lyophilized or liquid plasma samples, 1.2 mL	3*	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: HCV RNA, quantitative and/or qualitative nucleic acid detection	
5682 Hepatitis E, antibodies Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.	3	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: Hepatitis E virus IgG and IgM antibodies, post-analytical clinical interpretation.	EQA³
5555 Herpes simplex 1 and 2, antibodies Specimens: 3 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor. Occasionally simulated samples.	3	1 2 3 4 5 6 7 8 9 10 11 12	Examinations: HSV IgG (qualitative/quantitative), HSV IgM, HSV-1 IgG, HSV-2 IgG	

5680	HIV-1, nucleic acid detection (RNA)	3*	1	2	3	4	5	6	7	8	9	10	11	12
					•		•					•		•
Specimens: 3 lyophilized or liquid plasma samples, 1.2 mL			Examinations: HIV-1 RNA, quantitative and/or qualitative nucleic acid detection											

5091	HIV, antibodies and antigen detection	3	1	2	3	4	5	6	7	8	9	10	11	12
				•			•				•			•
Specimens: 3 liquid human plasma 0.7 mL			Examinations: HIVAgAb (combo), HIVAb, HIVAg, HIVAbCt: primary and confirmatory tests, post-analytical clinical interpretation. Positive specimens may include HIV-1 or HIV-2.											

5090	HIV, antibodies and antigen detection, POCT	3*	1	2	3	4	5	6	7	8	9	10	11	12
				•			•				•			•
Specimens: 3 liquid human plasma 0.5 mL Examinations: HIVAb and HIVAgAb primary tests (POCT)			Notes: Scheme 5091 is for clinical laboratories											

5086	Human papillomavirus, nucleic acid detection	3	1	2	3	4	5	6	7	8	9	10	11	12
			•			•			•				•	
Specimens: 2 simulated samples, 1 mL Examinations: High-risk human papillomavirus NAT, hrHPVNAT			Notes: Suitable for nucleic acid methods used in cervical cancer screening											

5089	Human T-cell lymphotropic virus, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12
				•			•				•			•
Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: HTLVAb: primary and confirmatory tests, post-analytical clinical interpretation. Positive samples may include HTLV-1 or HTLV-2.											

5670	Influenza virus A+B and RS virus, nucleic acid detection	3	1	2	3	4	5	6	7	8	9	10	11	12
				•										•
Specimens: 5 artificial samples. 1 mL Examinations: InfANAT, InfBNAT, RSVNAT			Notes: See also scheme 5300 Respiratory infections multiplex, nucleic acid detection											

5671	Influenza virus A+B, antigen detection	3*	1	2	3	4	5	6	7	8	9	10	11	12
				•										•
Specimens: 3 liquid and/or swab samples. Examinations: InfAAG, InfBAG			Notes: For clinical laboratories and POCT sites. The samples are not suitable for IFA or NAT methods, please see scheme 5670 or 5562.											

5668	Measles virus, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12
			•			•			•				•	
Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: Measles virus IgG and IgM antibodies and post-analytical clinical interpretation											

5562	Multiple respiratory virus, nucleic acid detection	3	1	2	3	4	5	6	7	8	9	10	11	12
				•					•					•
Specimens: The round contains 3 swab samples. Examinations: Influenza A/B virus NAT, RSV NAT and SARS-CoV-2 NAT			Notes: Scheme is not suitable for TMA methods (e.g. Hologic Panther SARS-CoV-2 assay).											

5669	Mumps virus, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12
			•			•			•				•	
Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: Mumps virus IgG and IgM antibodies and post-analytical clinical interpretation											

5675	Norovirus, nucleic acid detection	3	1	2	3	4	5	6	7	8	9	10	11	12
					•			•				•		
Specimens: 3 simulated samples, 1 mL			Examinations: Norovirus NAT, genogroups GI and GII											

5660 Parvovirus B19, antibodies	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12			•			•			•			•	EQA ³
	1	2	3	4	5	6	7	8	9	10	11	12																									
		•			•			•			•																										
Specimens: 3 liquid human plasma or serum samples, 0.4 mL. Authentic commutable samples: each batch originates from a single human donor.	Examinations: Parvovirus IgG, IgM, IgG avidity and post-analytical clinical interpretation																																				

5560 Puumala virus, antibodies	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td>•</td><td></td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12			•			•			•		•		POCT EQA ³
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		•			•			•		•																											
Specimens: 3 liquid human plasma or serum samples, 0.3 mL. Brief case histories are also provided.	Examinations: Puumala virus IgG, IgM, POC tests and specific antibodies, IgG avidity and post-analytical clinical interpretation Notes: For clinical laboratories and POCT sites																																				

5673 Respiratory adenovirus, antigen detection	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12			•			•			•			•	POCT
	1	2	3	4	5	6	7	8	9	10	11	12																									
		•			•			•			•																										
Specimens: 3 simulated samples, 1 mL	Examinations: Adenovirus Ag																																				

5098 Rotavirus and adenovirus, antigen detection	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12			•			•			•			•	POCT
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		•			•			•			•																										
Specimens: 3 simulated samples, 1 mL	Examinations: Rotavirus and adenovirus antigen detection																																				

5672 RS virus, antigen detection	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12		•									•		POCT
	1	2	3	4	5	6	7	8	9	10	11	12																									
	•									•																											
Specimens: 3 liquid and/or swab samples. Examinations: RSVAg	Notes: For clinical laboratories and POCT sites. The samples are not suitable for IFA or NAT methods, please see scheme 5670 or 5562.																																				

5667 Rubella virus, antibodies	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12	•			•			•			•			EQA ³
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•			•			•			•																												
Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.	Examinations: Rubella virus IgG and IgM antibodies, IgG avidity and post-analytical clinical interpretation																																				

5099 Tick-borne encephalitis virus, antibodies	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12			•			•			•			•	EQA ³ POCT
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		•			•			•			•																										
Specimens: 3 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.	Examinations: TBE IgG, IgM, total antibodies and post-analytical clinical interpretation Notes: For clinical laboratories and POCT sites																																				

5677 SARS-CoV-2, antibodies	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12	•			•			•			•			POCT
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•			•			•			•																												
Specimens: 3 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.	Examinations: SARS-CoV-2 Ab, SARS-CoV-2 IgG, SARS-CoV-2 IgM, SARS-CoV-2 IgA Notes: For clinical laboratories and POCT sites																																				

5681 SARS-CoV-2, antigen detection	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12	•			•			•			•			POCT
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•			•			•			•																												
Specimens: 3 simulated samples Examinations: SARS-CoV-2 Ag	Notes: For clinical laboratories and POCT sites																																				

5676 SARS-CoV-2, nucleic acid detection	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td> </tr> <tr> <td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td><td>•</td><td></td><td></td> </tr> </table>												1	2	3	4	5	6	7	8	9	10	11	12	•			•			•			•			POCT
	1	2	3	4	5	6	7	8	9	10	11	12																									
•			•			•			•																												
Specimens: 3 simulated whole genome cDNA samples Examinations: SARS-CoV-2 NAT	Notes: Including variants. Scheme is not suitable for TMA methods (e.g. Hologic Panther SARS-CoV-2 assay).																																				

EQA ³	5665	Varicella-zoster virus, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 3 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: Varicella zoster IgG, IgM, total antibodies and post-analytical clinical interpretation											

EQA ³	5636	Zika virus, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 3 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: Zika virus IgG, Zika virus IgM, clinical interpretation											

EQA schemes including Antimicrobial Susceptibility Testing

Bacteriology and mycology

- 5100 Blood culture
- 5260 Fungal culture
- 5080 General Bacteriology 1
- 5081 General Bacteriology 2
- 5120 *Neisseria gonorrhoeae* (Gc), culture and susceptibility testing
- 5073 Surveillance for multidrug resistant bacteria, gramnegative rods
- 5071 Surveillance for multidrug resistant bacteria, MRSA
- 5072 Surveillance for multidrug resistant bacteria, VRE
- 5065 Urine culture, quantitative screening, identification and susceptibility
- 5230 *Mycobacterium tuberculosis*, drug resistance

EQA schemes suitable for direct nucleic acid testing methods

Bacteriology

- 5612 *Chlamydia trachomatis* and *Neisseria gonorrhoeae*, nucleic acid detection
- 5201 *Clostridioides difficile*, nucleic acid detection
- 5191 Faecal bacterial pathogens multiplex, nucleic acid detection
- 5221 Mycobacterial nucleic acid detection
- 5599 *Streptococcus agalactiae* (GBS), nucleic acid detection
- 5593 *Streptococcus pyogenes* (Group A), nucleic acid detection in pharyngeal sample
- 5071 Surveillance for multidrug resistant bacteria, MRSA
- 5072 Surveillance for multidrug resistant bacteria, VRE
- 5073 Surveillance for multidrug resistant bacteria, gramnegative rods
- 5230 *Mycobacterium tuberculosis*, drug resistance

Multiplex

- 5191 Faecal bacterial pathogens multiplex, nucleic acid detection
- 5472 Faecal parasites multiplex, nucleic acid detection
- 5304 Gastrointestinal viral multiplex, nucleic acid detection
- 5303 Meningitis-encephalitis multiplex, nucleic acid detection
- 5300 Respiratory infections multiplex, nucleic acid detection
- 5302 Sexually transmitted diseases multiplex, nucleic acid detection

Parasitology

- 5472 Faecal parasites multiplex, nucleic acid detection
- 5430 Malaria, antigen and nucleic acid detection
- 5473 *Trichomonas vaginalis*, detection

Virology

- 5556 HSV1&2/VZV/T. *pallidum*, nucleic acid detection
- 5651 CMV and EBV, nucleic acid detection, quantitative
- 5679 Hepatitis B virus, nucleic acid detection (DNA)
- 5678 Hepatitis C virus, nucleic acid detection (RNA)
- 5680 HIV-1, nucleic acid detection (RNA)
- 5086 Human papillomavirus, nucleic acid detection
- 5670 Influenza virus A+B and RS virus, nucleic acid detection
- 5562 Multiple Respiratory Virus, nucleic acid detection
- 5675 Norovirus, nucleic acid detection
- 5676 SARS-CoV-2, nucleic acid detection

Mycology

- 5261 Fungal infections, nucleic acid detection

Multiplex

Multiplex EQA schemes are aimed to support laboratories to fulfill quality requirements of multiplex nucleic acid tests. All schemes include clinically relevant samples specially designed for multiplex nucleic acid testing. The multiplex schemes are annual programs and during the period of one calendar year, a comprehensive selection of listed pathogens will be covered.

	1	2	3	4	5	6	7	8	9	10	11	12
5191 Faecal bacterial pathogens multiplex, nucleic acid detection				●		●				●		●
Specimens: 3 samples. Either lyophilized mixtures of bacteria and/or simulated samples, 1 mL. Examinations: Direct nucleic acid detection. Pathogens included are <i>Aeromonas</i> , <i>Campylobacter</i> , <i>E. coli</i> EHEC (stx1/stx2), <i>E. coli</i> EAEC, <i>E. coli</i> EIEC, <i>E. coli</i> EPEC, <i>E. coli</i> ETEC, <i>Plesiomonas</i> , <i>Salmonella</i> , <i>Shigella</i> and <i>Yersinia</i> .												
Notes: During the period of one calendar year, a comprehensive selection of listed pathogens will be covered.												

	1	2	3	4	5	6	7	8	9	10	11	12
5472 Faecal parasites multiplex, nucleic acid detection		●			●			●			●	
Specimens: 3 lyophilized samples												
Examinations: Nucleic acid detection of <i>Cryptosporidium</i> , <i>Dientamoeba fragilis</i> , <i>Entamoeba histolytica</i> , <i>Giardia lamblia</i> .												

	1	2	3	4	5	6	7	8	9	10	11	12
5304 Gastrointestinal viral multiplex, nucleic acid detection					●						●	
Specimens: 3 simulated samples, 1 mL. Examinations: Direct multiplex nucleic acid detection. Pathogens included are: Adenovirus, Astrovirus, Norovirus, Rotavirus, Sapovirus.												
Notes: During the period of one calendar year, a comprehensive selection of listed pathogens will be covered.												

	1	2	3	4	5	6	7	8	9	10	11	12
5303 Meningitis-encephalitis multiplex, nucleic acid detection		●			●				●		●	
Specimens: 3 simulated samples, 1 mL. Examinations: Direct multiplex nucleic acid detection. Pathogens included are: <i>Escherichia coli</i> K1, <i>Haemophilus influenzae</i> , <i>Listeria monocytogenes</i> , <i>Neisseria meningitidis</i> , <i>Streptococcus agalactiae</i> , <i>Streptococcus pneumoniae</i> , Cytomegalovirus (CMV), Enterovirus, Epstein-Barr virus (EBV), Herpes simplex virus 1 (HSV1), Herpes simplex virus 2 (HSV2), Human herpesvirus 6 (HHV6), Human parechovirus (HPeV), Varizella zoster virus (VZV) and <i>Cryptococcus neoformans/gattii</i> .												
Notes: During the period of one calendar year, a comprehensive selection of listed pathogens will be covered.												

	1	2	3	4	5	6	7	8	9	10	11	12
5300 Respiratory infections multiplex, nucleic acid detection		●			●				●			●
Specimens: 4 simulated samples, 1 mL Examinations: Direct multiplex nucleic acid detection. Pathogens included are adenovirus, <i>B. parapertussis</i> , <i>B. pertussis</i> , <i>C. pneumoniae</i> , coronavirus (OC43, 229E, NL63, HKU1), enterovirus, influenza virus A/B, <i>L. pneumophila</i> , metapneumovirus, <i>M. pneumoniae</i> , parainfluenza virus 1-4, rhinovirus, RSV A/B, SARS-CoV-2 and <i>S. pneumoniae</i> .												
Notes: During the period of one calendar year, a comprehensive selection of listed pathogens will be covered.												

	1	2	3	4	5	6	7	8	9	10	11	12
5302 Sexually transmitted diseases multiplex, nucleic acid detection			●		●			●			●	
Specimens: 4 simulated swab/urine samples, 2 mL Examinations: Direct multiplex nucleic acid detection. Pathogens included are <i>C. trachomatis</i> , <i>M. genitalium</i> , <i>M. hominis</i> , <i>N. gonorrhoeae</i> , <i>T. vaginalis</i> , <i>U. parvum</i> and <i>U. urealyticum</i> .												
Notes: During the period of one calendar year, a comprehensive selection of listed pathogens will be covered.												

Pathology

Seven high quality schemes are available for pathology laboratories. With changing topics in the rounds, both the routine and more advanced needs are covered. The challenges are realistic and include also less commonly encountered clinically relevant cases. In the cytology and histopathology schemes virtual microscopy is used. With this technology, viewing of several fields of vision and levels of focus are enabled on a computer screen simulating analysis with an optical microscope.

Pathology » Preanalytics

	1	2	3	4	5	6	7	8	9	10	11	12
7806 Preanalytics and process in anatomic pathology					●						●	
Specimens: 3-5 cases with preanalytical and process error(s)												
Examinations: Participants are asked to find preanalytical or laboratory process error(s) in the cases.												
Notes: The scheme is intended for all laboratory staff of pathology laboratories. Scheme is carried out online.												

Pathology » Diagnostics

	1	2	3	4	5	6	7	8	9	10	11	12
6701 Gynaecological cytology (liquid based), virtual microscopy					●							
Specimens: Virtual images of at least 5 Papanicolaou stained slides of liquid based cytology (LBC) samples (ThinPrep). Diagnostics of cellular atypias in samples taken from gynaecological loci is assessed. Brief case histories and												
Examinations: Observations and diagnoses												
Notes: Virtual microscopy program does not work with Internet Explorer.												

	1	2	3	4	5	6	7	8	9	10	11	12
6700 Gynaecological cytology (smear), virtual microscopy			●									
Specimens: Virtual images of at least 5 Papanicolaou stained slides of conventional pap smear samples. The samples are selected from routine cytological material. Diagnostics of cellular atypias in samples taken from												
Examinations: Observations and diagnoses												
Notes: Virtual microscopy program does not work with Internet Explorer.												

	1	2	3	4	5	6	7	8	9	10	11	12
6542 Histopathology, virtual microscopy			●							●		
Topics 2023: 1/2023 Lymphohematopoietic pathology, 2/2023 Prostate												
Specimens: Virtual images of at least 5 slides of miscellaneous tissue. Brief case histories and instructions are provided.												
Examinations: Observations and diagnoses												
Notes: Topics may vary annually												

	1	2	3	4	5	6	7	8	9	10	11	12
6702 Non-gynaecological cytology, virtual microscopy										●		
Specimens: Virtual images of Papanicolaou stained slides of non-gynaecological cytosentrifuge (CCF) or smear preparations or May-Grünwald-Giemsa stained smears or imprint preparations. Images of at least 5 cases												
Examinations: Observations and diagnoses												
Notes: Virtual microscopy program does not work with Internet Explorer.												

Pathology » Technology

	1	2	3	4	5	6	7	8	9	10	11	12
6543 Histological staining techniques				●						●		
Topics: 1/2023 HE, FE 2/2023 PAS, D-PAS, LEDER												
Specimens: Unstained paraffin sections or smears												
Examinations: Staining of the slides. A set of stained slides is returned to												
Notes: Stains vary annually												

	1	2	3	4	5	6	7	8	9	10	11	12
6600, 6600S Immunohistochemical staining methods			●						●		●	
Topics: 1/2023 Unknown tumour: SOX10, Prame, Melan A/Mart-1, CK20, CK7 2/2023 Breast cancer: PR, HER2, ER, Ki-67 and HER2 -ISH* *) also double stain accepted, but no FISH 3/2023 Lymphoma: CD23, bcl2, bcl6, CD35, CD138												
Specimens: Unstained paraffin embedded tissue from different tissue blocks or from one multiblock												
Examinations: Staining of the slides. A set of stained slides is returned to Labquality for evaluation by an expert board.												
Notes: Changes in frequency, antibodies and sample type. Three rounds with distinct topics available annually. Multiblock samples are now included. Participants can select 3 or 5 antibodies of their choice in each round (6600S for 3 antibodies, 6600 for 5).												

Preanalytics

The preanalytical schemes provide laboratories and POCT sites with tools for extending quality assurance beyond the commonly assessed analytical phase. As a result of the improved analytical quality, most errors have been suggested to now occur in the preanalytical phase. Managing all phases of the total testing cycle is equally important to ensure patient safety.

	1	2	3	4	5	6	7	8	9	10	11	12
8817 HIL-index [DEKS]		•			•					•		
1												
Specimens: 2 serum samples, 2 mL.	Examinations: Selected components are asked to be analysed. One of the samples is haemolysed, icteric or lipemic.											

	1	2	3	4	5	6	7	8	9	10	11	12
7806 Preanalytics and process in anatomic pathology					•						•	
5												
Specimens: 3-5 cases with preanalytical and process error(s) Examinations: Participants are asked to find preanalytical or laboratory process error(s) in the cases.	Notes: The scheme is intended for all laboratory staff of pathology laboratories. Scheme is carried out online.											

	1	2	3	4	5	6	7	8	9	10	11	12
7800 Preanalytics, clinical chemistry		•							•			
5												
Specimens: 3 cases with preanalytical error(s) Examinations: Participants are asked to find preanalytical error(s) in the cases	Notes: The scheme is intended for personnel using POCT tests and devices. Scheme is carried out online.											

	1	2	3	4	5	6	7	8	9	10	11	12
7802 Preanalytics, microbiology				•						•		
5												
Specimens: 3 cases with preanalytical error(s) Examinations: Participants are asked to find preanalytical error(s) in the cases	Notes: The scheme is intended for all laboratory staff of clinical microbiology laboratories. Scheme is carried out online.											

	1	2	3	4	5	6	7	8	9	10	11	12
7807 Preanalytics, Pneumatic Sample Transport									•			
3												
Specimens: Two surrogate blood vials (i.e. measurement devices for recording 3-axis acceleration during pneumatic tube system transport (PTS)). Examinations: Vials are sent through the PTS as regular blood samples, no laboratory analysis is performed. Rejection probability of LDH, ASAT and K will be calculated using the cumulative vibration level, laboratory defined analyte-specific hemolysis cutoffs, and a hemolysis model.	Notes: Vials are sent to the participating laboratories during September-October. Laboratories are asked to perform the recordings within one week upon receiving the vials and to return the vials using a courier (shipping costs not included). It is possible to measure 3 different lines from the same PTS manufacturer.											

NEW

	1	2	3	4	5	6	7	8	9	10	11	12
7804 Preanalytics, POCT in chemistry										•		
5												
Specimens: 3 cases with preanalytical error(s) Examinations: Participants are asked to find preanalytical error(s) in the cases	Notes: The scheme is intended for personnel using POCT tests and devices. Scheme is carried out online.											

POCT

	1	2	3	4	5	6	7	8	9	10	11	12
7801 Preanalytics, urine and blood sample collection			•									
5												
Specimens: 3 cases with preanalytical error(s) Examinations: Participants are asked to find preanalytical error(s) in the cases	Notes: The scheme is intended for personnel performing blood and urine sample collection. Scheme is carried out online.											

POCT

Others

Others » Andrology

		1	2	3	4	5	6	7	8	9	10	11	12
6400 Semen analysis	3										•		
	Specimens: 3–6 digital videos and/or digital images Examinations: Concentration, morphology and motility		Notes: Scheme is carried out online										

Others » Clinical physiology

		1	2	3	4	5	6	7	8	9	10	11	12
7130 ECG, interpretation	1				•						•		
	EQA ³	Specimens: 3 digital ECG registrations (images) Examinations: Technical quality and findings		Notes: Scheme is designed for nurses and general practitioners as well as for personnel in POCT units. Participants are evaluated on their responses on technical quality, findings or both if given.									

Others » Genetics

		1	2	3	4	5	6	7	8	9	10	11	12
3865 DNA single nucleotide variation [EQUALIS]	1			•							•		
	Specimens: Whole blood or extracted DNA. Blank samples (water) are sometimes included.		Examinations: DNA-Apolipoprotein E genotype, DNA-Factor 2 (F2) g.20210G>A, DNA-Factor 5 (F5) c.1691G>A, DNA-Hemochromatosis (HFE) c.187C>G; c.845G>A, DNA-Lactase gene (LCT) g.13910C>T, DNA-Methylene tetrahydrofolate reductase (MTHFR) c.677C>T; c.1298A>C										

Others » Laboratory instruments

		1	2	3	4	5	6	7	8	9	10	11	12
8814 ELISA reader photometry control [DEKS]	1	Circulation starts in March											
	Specimens: An ELISA-plate with built-in gray glass filters Examinations: Control for the absorbance scale in ELISA reader		Notes: Absorbance traceable to NIST Control of the absorbance scale of ELISA readers										

External quality assessment for extra-analytical phases

PREANALYTICAL EQA | ANALYTICAL EQA | POSTANALYTICAL EQA

Labquality has two advanced external quality assessment programs for extra-analytical phases of clinical laboratory investigation process. Preanalytical EQA programs are independent schemes for the evaluation of preanalytical phase and Integrated EQA programs includes pre- and/or postanalytical evaluation together with traditional EQA samples.

Pre- and postanalytical EQA programs

Preanalytical EQA programs

- 7800 Preanalytics, clinical chemistry
- 7802 Preanalytics, microbiology
- 7806 Preanalytics and process in anatomic pathology
- 8817 HIL-index [DEKS]
- 7807 Preanalytics, Pneumatic sample transport
- 7804 Preanalytics, POCT in chemistry
- 7801 Preanalytics, urine and blood sample collection

Integrated EQA programs

Clinical chemistry

- 2570, 2580, 2590 Glucose meters
- 2114 Haemoglobin, 1-level, POCT
- 2300, 2300S Hormones A:
Basic analytes of hormone and immunochemistry
- 2301, 2301S Hormones B: Steroid and peptide hormones
- 2200 Lipids and lipoproteins
- 2240 Proteins, electrophoresis
- 2050 Serum B and C (2-level)
- 2480 Vitamin A, E and D metabolites

Clinical physiology

- 7130 ECG, interpretation

Haematology

- 4480 Column agglutination methods:
grading of reactions and patient cases

Immunology

- 5935 ANCA and GbmAb
- 5900 Antinuclear antibodies
- 5920 Thyroid gland antibodies
- 5940 Coeliac disease, antibodies
- 5250 Interferon Gamma Release Assay (IGRA) for
Mycobacterium tuberculosis

Microbiology

- 5950 *Bordetella pertussis*, antibodies
- 5960 *Borrelia burgdorferi*, antibodies, European origin
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