

EXTERNAL QUALITY ASSESSMENT 2023 | PRODUCT CATALOGUE

LABQUALITY

EXTERNAL QUALITY ASSESSMENT

Product Catalogue 2023

4	Service information
5	Updates for 2023
6	Clinical chemistry
6	» Allergology
6	» Basic chemistry
7	» Cardiac markers
8	» Diabetes analysis
8	» Endocrinology
9	» General long-term clinical chemistry, known concentration
9	» General short-term clinical chemistry, unknown concentration
10	» Special chemistry
12	» Specific proteins
13	» Tumour markers
13	» Urine analysis
15	Percentile and flagger programs
16	Haematology
16	» Blood transfusion serological tests
16	» Cell count and cell morphology
17	» Coagulation
19	Blood banks and transfusion medicine
19	Point-of-Care
20	Immunology
21	Microbiology
21	» Bacterial Serology
22	» Bacteriology
25	» Mycology
25	» Parasitology
26	» Virology
30	Nucleic acid detection
31	Multiplex
32	Pathology
32	» Preanalytics
32	» Diagnostics
32	» Technology
33	Preanalytics
34	Others
34	» Andrology
34	» Clinical physiology
34	» Genetics
34	» Laboratory instruments
35	Pre- and postanalytical EQA programs
36	Alphabetical scheme directory

Service information

Labquality – EQAS

Labquality is a Finnish independent external quality assessment provider. Labquality has more than 50 years of experience in helping clinical laboratories and POCT sites to 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, who 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 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 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 available via national partners globally. 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 next year before the end of November to ensure the participation to 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 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 via 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 guarantees an advanced experience.

Certificate

Certificate of participation will be provided upon request at the end of the calendar year. 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

Scheme code and name		Rounds (delivery months)											
1234 Scheme name		1	2	3	4	5	6	7	8	9	10	11	12
POCT	Specimens:	•				•				•		•	
	Examinations:	Notes:											
Additional info													
EQA ³ = 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 8)
- 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
- 5940 Coeliac disease, antibodies
- 5560 Puumala virus, antibodies
- 5635 Dengue virus, antibodies and antigen 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*

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 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
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
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
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
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
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.											
POCT	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.											
POCT	2691 Natriuretic peptides 2, B-type, BNP	•			•			•			•		
	Specimens: 2 liquid samples, 3 mL Examinations: BNP	Notes: For clinical laboratories and POCT sites											
POCT	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	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
POCT EQA ³	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.											
POCT	1261 Haemoglobin A1c, liquid samples		•		•		•		•		•		•
	Specimens: 2 liquid blood samples, 0.5 mL Examinations: HbA1c	Notes: Not suitable for Afinion instruments.											
POCT	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.											
POCT	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
NEW	2706 Salivary Cortisol			•						•			
	Specimens: 1 liquid sample and lyophilized synthetic urine sample containing bacteria	Examinations: Salivary cortisol											
EQA ³	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	NEW
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
2704 ACTH, Adrenocorticotrophic hormone						•					•	
Specimens: 1 liquid urine, 10 mL Examinations: ACTH and Cortisol												

2301, 2301S Hormones B: Steroid and peptide hormones													EQA ³
	1	2	3	4	5	6	7	8	9	10	11	12	
3		●		●		●		●		●		●	
<p>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.</p> <p>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, TBG,</p>													
<p>pre- and/or post-analytical indicators</p> <p>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.</p>													

	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												

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, thyreotropin, 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, thyreotropin, 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.												

2050 Serum B and C (2-level)												
3	1	2	3	4	5	6	7	8	9	10	11	12
		●		●		●		●		●	●	
<p>Specimens: 2 liquid human serum samples covering a wide concentration range, 3–5 mL</p> <p>Examinations: Alanine aminotransferase, albumin, alfa-1-antitrypsine, 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,</p>												
<p>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</p> <p>Notes: Comparison of two different concentration ranges simultaneously. Reference method values available occasionally for some of the analytes.</p>												

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, pCO ₂ , pH, pO ₂ , potassium, sodium, urea, base excess, HCO ₃												
	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												
	8702 Chromogranin A (Noklus)	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 3 genuine human serum samples						Once a year						
	Examinations: P-Cystatin C, P-Creatinine, P-eGFR												
	Notes: Participation to all rounds required.												
	8805 Cystatin C, Creatinine and eGFR [DEKS]	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 human plasma samples with reference target values, 0.75 mL						2 times						
	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
	3		•						•				
Specimens: 2 lyophilized faecal specimens, 0.5 mL													
Examinations: Elastase													
2753 Gastric biomarkers	1 2 3 4 5 6 7 8 9 10 11 12												
	3					•					•		
Specimens: 2 lyophilized samples, 3 mL													
Examinations: Pepsinogen I, Pepsinogen II, Gastrin-17, Helicobacter pylori Ab													
2150 Haemoxymeters	1 2 3 4 5 6 7 8 9 10 11 12												
	1			•					•				
Specimens: 2 liquid (1.2 mL) samples													
Examinations: FO2Hb, FCOHb, FMETHb, ctHb, sO2													
Notes: Order one sample set for each analyzer													
8816 Homocysteine [DEKS]	1 2 3 4 5 6 7 8 9 10 11 12												
	1	5 times											
Specimens: 2 human plasma or serum samples													
Examinations: P-Homocysteine													
Notes: Participation to all rounds required.													
8815 Methyl Malonic acid [DEKS]	1 2 3 4 5 6 7 8 9 10 11 12												
	1	5 times											
Specimens: 2 human serum samples													
Examinations: P-Methylmalonat													
Notes: Participation to all rounds required.													
2651 Nasal swab cells	1 2 3 4 5 6 7 8 9 10 11 12												
	1											•	
Specimens: 4 digital images of MGG and methylene eosin stained samples													
Examinations: Eosinophils, neutrophils													
2652 Sputum cells	1 2 3 4 5 6 7 8 9 10 11 12												
	3											•	
Specimens: 4 digital images of MGG and methylene eosin stained samples													
Examinations: Eosinophils, neutrophils													
2640 Synovial fluid crystals	1 2 3 4 5 6 7 8 9 10 11 12												
	3			•					•				
Specimens: 2-3 slides prepared from patient samples													
Examinations: Sodium urate monohydrate and calcium pyrophosphate dihydrate crystals													
2410 Therapeutic drugs	1 2 3 4 5 6 7 8 9 10 11 12												
	3			•		•			•			•	
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, paracetamol (acetaminophen), phenobarbital, phenytoin, phenytoin free, primidone, procainamide, quinidine, salicylate, theophylline, tobramycin, tricyclics, valproic acid, valproic acid free, vancomycin													
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													
Notes: Target values for 25(OH)D vitamin metabolite are provided.													
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													
Notes: Only in connection with scheme 2480.													
2525 5-hydroxyindoleacetic Acid (5-HIAA)	1 2 3 4 5 6 7 8 9 10 11 12												
	3			•						•			
Specimens: 2 serum samples													
Examinations: 5-HIAA													

NEW

EQA³

Clinical chemistry » Specific proteins

POCT	2020 C-reactive protein (CRP) for analyzers	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 liquid serum or plasma samples, 1 mL			•		•		•		•		•		•
	Examinations: CRP													
	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.													
POCT	2132 C-reactive protein (CRP), POCT	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 human plasma samples, 1 mL			•		•		•		•		•	•	
	Examinations: CRP													
	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]	1	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 human plasma samples, varying concentration of CDT		•		•		•			•		•		•
	Examinations: CDT													
	Notes: Participation to all rounds required.													
	2751 Faecal calprotectin	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 lyophilized faecal specimens, 0.5 mL			•			•			•			•	
	Examinations: Calprotectin													
	Notes: Participation to all rounds required.													
	2281 Interleukin-6	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2-3 lyophilized samples			•			•			•			•	
	Examinations: IL-6													
	Notes: Participation to all rounds required.													
EQA ³	2200 Lipids and lipoproteins	3	1	2	3	4	5	6	7	8	9	10	11	12
	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,													
	lipoprotein apo A2, lipoprotein apo B, lipoprotein (a), triglycerides, pre- and/or post-analytical indicators													
	2202 Lipoprotein a	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 1 liquid or lyophilized human serum preparation			•			•				•			•
	Examinations: Lp(a)													
	Notes: Participation to all rounds required.													
	2280 Procalcitonin	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 lyophilized samples					•						•		
	Examinations: Procalcitonin													
	Notes: Only for quantitative methods													
	2160 Proteins in cerebrospinal fluid	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 1 cerebrospinal fluid sample 1-3 mL and 1 human serum sample, 1 mL					•					•			
	Examinations: Cerebrospinal fluid: Albumin, IgG, total protein, IgG index.													
	Serum: Albumin, IgG.													
EQA ³	2240 Proteins, electrophoresis	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 liquid or lyophilized human serum samples, 1 mL			•			•			•			•	
	Pre- and/or post-analytical cases in part of the rounds.													
	Examinations: Electrophoresis, contains immunofixation, pre- and/or post-analytical indicators													
	2230 Proteins, immunochemical determinations	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2 liquid human serum samples, 1 mL		•			•		•			•			
	Examinations: Alpha-1-antitrypsin, alpha-2-macroglobulin, albumin, ceruloplasmin, complement C3, complement C4, haptoglobin, hemopexin,													
	IgA, IgG, IgLcKappa, IgLcLambda, IgLcKappa free, IgLcLambda free, IgM, orosomucoid, pre-albumin, RBP, transferrin, transferrin receptor.													

Clinical chemistry » Tumour markers

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

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

2700, 2700S Tumour markers	3	1	2	3	4	5	6	7	8	9	10	11	12
Specimens: 2 liquid human serum samples, 2 mL		•			•				•			•	
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													
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													

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

Clinical chemistry » Urine analysis

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

3300 Drug of abuse screening in urine	3	1	2	3	4	5	6	7	8	9	10	11	12
Specimens: 2 authentic samples, 5 mL		•				•				•			
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													
Notes: For clinical laboratories and POCT sites. Expert laboratory confirmatory results are provided. Results are reported as positive or negative.													

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

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

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

	1	2	3	4	5	6	7	8	9	10	11	12
3100 Urine strip test A		•		•				•		•		
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.												

	1	2	3	4	5	6	7	8	9	10	11	12
3101 Urine strip test A, 15 mL water for sample dissolution		•		•				•		•		
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			•		•				•			•
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			•		•				•			•
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>												
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.											
	1	2	3	4	5	6	7	8	9	10	11	12
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											
	1	2	3	4	5	6	7	8	9	10	11	12
4440 Antiglobulin test, direct		•			•			•			•	
Specimens: 2 red blood cell suspensions, 3 mL	Examinations: Reaction strengths and interpretation											
	1	2	3	4	5	6	7	8	9	10	11	12
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.											

EQA³

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

VIRTUAL

	1	2	3	4	5	6	7	8	9	10	11	12
4230–4240 Leucocyte differential count, 5-part, automated	3			•			•			•		•
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	3			•			•			•		•
Analyzer specific product codes: 4150: Siemens Advia 4154: ABX Pentra 4151: Cell-Dyn 4000, Sapphire 4155: Cell-Dyn 3200, 3500, 3700, Ruby 4152: Coulter Gens, LH750 4156: Mindray 4153: Sysmex												
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	1			•			•			•		•
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	3			•						•		
Specimens: 1 blood cell suspension, 2 mL Examinations: Leucocytes												
Notes: The scheme is for HemoCue WBC Systems												POCT

	1	2	3	4	5	6	7	8	9	10	11	12
4190 White blood cell differential count: HemoCue, POCT	3					•						•
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)												POCT

Haematology » Coagulation

	1	2	3	4	5	6	7	8	9	10	11	12
4330 Activated partial thromboplastin time, INR and fibrinogen	3		•			•			•		•	
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	3		•			•			•		•	
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	3		•			•			•		•	
Specimens: 2 liquid commercial plasma samples, 0.5 mL Examinations: D-Dimer												
Notes: For clinical laboratories and POCT sites												POCT

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

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														
	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%														
	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.

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

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

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

5050 Bacteriological staining, direct (digital images)	3	1	2	3	4	5	6	7	8	9	10	11	12
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	1	2	3	4	5	6	7	8	9	10	11	12
Specimens: 2 lyophilized samples. Brief case histories 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	1	2	3	4	5	6	7	8	9	10	11	12
Specimens: 2 lyophilized samples. Brief case histories 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	1	2	3	4	5	6	7	8	9	10	11	12
Specimens: 2 lyophilized samples. Brief case histories 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	3	1	2	3	4	5	6	7	8	9	10	11	12
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	1	2	3	4	5	6	7	8	9	10	11	12
Specimens: <i>Clostridioides difficile</i> , culture and toxin detection		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: <i>Clostridioides difficile</i> , extra set of samples		Notes: Only in connection with scheme 5200											
5201 <i>Clostridioides difficile</i> , nucleic acid detection	1	1	2	3	4	5	6	7	8	9	10	11	12
Specimens: <i>Clostridioides difficile</i> , nucleic acid detection		Notes: 5200 includes also this examination											
5191 Faecal bacterial pathogens multiplex, nucleic acid detection	1	1	2	3	4	5	6	7	8	9	10	11	12
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	3	1	2	3	4	5	6	7	8	9	10	11	12	NEW
Specimens: 2 simulated samples, 1 mL														
Examinations: <i>Mycobacterium tuberculosis</i> nucleic acid detection, rifampicin susceptibility and isoniazid susceptibility														
5190 Faecal culture	1	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized mixtures of bacteria														
Examinations: Culture and direct nucleic acid detection. Pathogens included are <i>Aeromonas</i> , <i>Campylobacter</i> , <i>Plesiomonas</i> , <i>Salmonella</i> , <i>Shigella</i> and <i>Yersinia</i> .														
5080 General Bacteriology 1 (aerobes and anaerobes)	1	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.														
Examinations: Isolation of pathogens and antimicrobial susceptibility testing, pre- and/or post-analytical cases														
Notes: 5080 includes 5081, General Bacteriology 2														
5081 General Bacteriology 2 (aerobes)	1	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.														
Examinations: Isolation of pathogens and antimicrobial susceptibility testing, pre- and/or post-analytical cases														
Notes: 5080 General Bacteriology 1 includes 5081														
5041 Gram stain, blood culture	1	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.														
Examinations: Staining and microscopy														
5040 Gram stain, colonies	1	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 3 air-dried, unfixed microbe suspensions on a slide														
Examinations: Staining and microscopy														
5596 <i>Helicobacter pylori</i> , antigen detection in faeces	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 samples: lyophilized faecal or swab														
Examinations: Antigen detection														
Notes: For clinical laboratories and POCT sites														
5597 Legionella, antigen detection in urine	3*	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 simulated urine samples														
Examinations: Legionella antigen detection														
5220 Mycobacterial culture and stain	1	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														
detection, acid-fast staining and microscopy														
Notes: See also product 5250 IGRA for <i>M. tuberculosis</i>														
5221 Mycobacterial nucleic acid detection	1	1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized samples														
Examinations: Direct nucleic acid detection														
Notes: 5220 includes also this examination. For additional set of samples, order scheme 5222														
5222 Mycobacteria, extra set of samples		1	2	3	4	5	6	7	8	9	10	11	12	
Specimens: 2 lyophilized samples														
Notes: Only in connection with scheme 5220 or 5221														

5240	Mycobacterial stain	1			•			•			•			•
Specimens: 2 fixed smears on slides			Examinations: Acid-fast staining and microscopy											

5120	Neisseria gonorrhoeae (Gc), culture and susceptibility testing	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				•		•				•		•
Specimens: 2 lyophilized mixtures of bacteria			Examinations: Culture			Notes: 5190 also includes 5180								

5599	Streptococcus agalactiae (GBS), nucleic acid detection	3*				•		•			•		•	
Specimens: 2 swab samples. Samples also include normal flora.			Notes: See also product 5594 for S. agalactiae (GBS) culture.											
Examinations: Direct nucleic acid detection														

5594	Streptococcus agalactiae (GBS), culture	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	Streptococcus pneumoniae, antigen detection in urine	3*			•		•				•			•
Specimens: 3 simulated urine specimens			Examinations: S. pneumoniae antigen detection											

5595	Streptococcus pyogenes (Group A), antigen detection in pharyngeal sample	3*			•		•				•			•
Specimens: 3 simulated pharyngeal samples			Notes: For clinical laboratories and POCT sites. Three results if used different kits.											
Examinations: Antigen detection														

5593	Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample	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		•				•			•			•
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 Acinetobacter and P. aeruginosa) by culture and/or direct nucleic acid detection method											

5071	Surveillance for multidrug resistant bacteria, MRSA	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 Staphylococcus aureus) by culture and/or direct nucleic acid detection method											

5072	Surveillance for multidrug resistant bacteria, VRE	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			•		•		•			•	
Specimens: 3 lyophilized mixtures of bacteria			Examinations: Culture and identification of group A, C and G streptococci										
5060	Urine culture, quantitative screening	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.										
5065	Urine culture, quantitative screening, identification and susceptibility	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.										

EQA³EQA³

Microbiology » Mycology

5261	Fungal infections, nucleic acid detection	1				•						•	
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.										
5260	Fungal culture	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.										

NEW

Microbiology » Parasitology

5472	Faecal parasites multiplex, nucleic acid detection	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	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										
5462	Malaria screening, Giemsa stain	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	3		•			•				•		
Specimens: 2 methanol fixed or May-Grünwald-Giemsa stained smears. Brief case histories are also given.			Examinations: Preliminary screening of malaria plasmodia										

POCT

	VIRTUAL	5460 Parasites in blood, Giemsa stain	3	1	2	3	4	5	6	7	8	9	10	11	12
		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	5470 Parasites in blood, Giemsa stain, virtual microscopy	5	1	2	3	4	5	6	7	8	9	10	11	12
		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													
	VIRTUAL	5461 Parasites in blood, MGG stain	3	1	2	3	4	5	6	7	8	9	10	11	12
		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	5471 Parasites in blood, MGG stain, virtual microscopy	5	1	2	3	4	5	6	7	8	9	10	11	12
		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													
		5440 Parasites in faeces	1	1	2	3	4	5	6	7	8	9	10	11	12
		Specimens: 3 stool samples in formalin. Brief case histories also given.													
		Examinations: Screening and identification of intestinal parasites (ova and parasites)													
	VIRTUAL	5450 Parasites in faeces, virtual microscopy	5	1	2	3	4	5	6	7	8	9	10	11	12
		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)													
	EQA ³	5420 Toxoplasma, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12
		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	5473 Trichomonas vaginalis, detection	3*	1	2	3	4	5	6	7	8	9	10	11	12
		Specimens: 3 simulated samples													
		Examinations: Detection of Trichomonas vaginalis antigen and nucleic acid (NAT)													

Microbiology » Virology

NEW	5556	HSV1&2/VZV/ <i>T. pallidum</i> , nucleic acid detection	1	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 2-3 samples simulating swab samples taken from genital lesions		Examinations: Nucleic acid detection of HSV1, HSV2, VZV, <i>Treponema pallidum</i>												
EQA ³	5651	CMV and EBV, nucleic acid detection, quantitative	3	1	2	3	4	5	6	7	8	9	10	11	12
	Specimens: 5 samples simulating plasma, 1.5 mL		Notes: Quantitative result processing												
	Examinations: CMV and EBV NAT (quantitative).														
EQA ³	5650	Cytomegalovirus, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12
	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	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT	EQA ³
Specimens: 3 human serum or plasma samples, 0.5 mL. Authentic, commutable samples from a single human donor or occasionally simulated samples.			Examinations: Dengue virus IgG and IgM antibodies, Dengue virus antigen (NS1) and post-analytical clinical interpretation													
5640	EBV mononucleosis, POCT	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT	
Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: MonAb Notes: For clinical laboratories and POCT sites													
5641	EBV mononucleosis, specific antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12		EQA ³
Specimens: 3 liquid human plasma samples, 1.4 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: EBNA AbG, EBV VCA AbG, EBV VCA AbM, IgG Avidity and post-analytical clinical interpretation													
5092	Hepatitis A, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12		EQA ³
Specimens: 3 liquid human plasma samples, 0.6 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: HAVAb, HAVAbM, HAVAbG and post-analytical clinical interpretation													
5094–5096	Hepatitis B and C, serology, specimen volume 0.6 mL / 1.2 mL / 2.0 mL	3	1	2	3	4	5	6	7	8	9	10	11	12		EQA ³
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.			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													
Examinations: HBcAb, HBcAbM, HBeAb, HBeAg, HBsAb (qual), HBsAg, HCVAb, HCVAbCt and post-analytical clinical interpretation																
5093	Hepatitis B, s-antigen antibodies, quantitative	3	1	2	3	4	5	6	7	8	9	10	11	12		
Specimens: 2 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: HBsAb (anti-HBs), quantitative													
5679	Hepatitis B virus, nucleic acid detection (DNA)	3*	1	2	3	4	5	6	7	8	9	10	11	12		
Specimens: 3 lyophilized or liquid plasma samples, 1.2 mL			Examinations: HBV DNA, quantitative and/or qualitative nucleic acid detection													
5678	Hepatitis C virus, 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: HCV RNA, quantitative and/or qualitative nucleic acid detection													
5682	Hepatitis E, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12		EQA ³
Specimens: 3 liquid human plasma samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.			Examinations: Hepatitis E virus IgG and IgM antibodies, post-analytical clinical interpretation.													
5555	Herpes simplex 1 and 2, 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			Examinations: HSV IgG (qualitative/quantitative), HSV IgM, HSV-1 IgG, each. Authentic commutable samples: each batch originates from a HSV-2 IgG single humandonor. Occasionally simulated samples.													

	5680	HIV-1, nucleic acid detection (RNA)	3*			•		•				•		•	
	Specimens: 3 lyophilized or liquid plasma samples, 1.2 mL			Examinations: HIV-1 RNA, quantitative and/or qualitative nucleic acid detection											
				1	2	3	4	5	6	7	8	9	10	11	12
EQA ³	5091	HIV, antibodies and antigen detection	3		•			•			•			•	
	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.											
				1	2	3	4	5	6	7	8	9	10	11	12
POCT	5090	HIV, antibodies and antigen detection, POCT	3*		•			•			•			•	
	Specimens: 3 liquid human plasma 0.5 mL Examinations: HIVAb and HIVAgAb primary tests (POCT)			Notes: Scheme 5091 is for clinical laboratories											
				1	2	3	4	5	6	7	8	9	10	11	12
	5086	Human papillomavirus, nucleic acid detection	3	•			•			•			•		
	Specimens: 2 simulated samples, 1 mL Examinations: High-risk human papillomavirus NAT, hrHPVNAT			Notes: Suitable for nucleic acid methods used in cervical cancer screening											
				1	2	3	4	5	6	7	8	9	10	11	12
EQA ³	5089	Human T-cell lymphotropic virus, antibodies	3		•			•			•			•	
	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.											
				1	2	3	4	5	6	7	8	9	10	11	12
	5670	Influenza virus A+B and RS virus, nucleic acid detection	3		•									•	
	Specimens: 5 artificial samples. 1 mL Examinations: InfANAT, InfBNAT, RSVNAT			Notes: See also scheme 5300 Respiratory infections multiplex, nucleic acid detection											
				1	2	3	4	5	6	7	8	9	10	11	12
POCT	5671	Influenza virus A+B, antigen detection	3*		•									•	
	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.											
				1	2	3	4	5	6	7	8	9	10	11	12
EQA ³	5668	Measles virus, antibodies	3	•			•			•			•		
	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											
				1	2	3	4	5	6	7	8	9	10	11	12
	5562	Multiple respiratory virus, nucleic acid detection	3		•					•				•	
	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).											
				1	2	3	4	5	6	7	8	9	10	11	12
EQA ³	5669	Mumps virus, antibodies	3	•			•			•			•		
	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											
				1	2	3	4	5	6	7	8	9	10	11	12
	5675	Norovirus, nucleic acid detection	3			•			•			•			•
	Specimens: 3 simulated samples, 1 mL			Examinations: Norovirus NAT, genogroups GI and GII											

5660	Parvovirus B19, antibodies	3	1	2	3	4	5	6	7	8	9	10	11	12	EQA ³
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	3*	1	2	3	4	5	6	7	8	9	10	11	12	POCT EQA ³
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	3*	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 simulated samples, 1 mL			Examinations: Adenovirus Ag												
5098	Rotavirus and adenovirus, antigen detection	3*	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 simulated samples, 1 mL			Examinations: Rotavirus and adenovirus antigen detection												
5672	RS virus, antigen detection	3*	1	2	3	4	5	6	7	8	9	10	11	12	POCT
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	3	1	2	3	4	5	6	7	8	9	10	11	12	EQA ³
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	3	1	2	3	4	5	6	7	8	9	10	11	12	EQA ³ POCT
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	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT
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	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT
Specimens: 3 simulated samples Examinations: SARS-CoV-2 Ag			Notes: For clinical laboratories and POCT sites												
5676	SARS-CoV-2, nucleic acid detection	3	1	2	3	4	5	6	7	8	9	10	11	12	POCT
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			1	2	3	4	5	6	7	8	9	10	11	12
5665	Varicella-zoster virus, antibodies	3		•			•			•			•	
			Specimens: 3 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.											
5636	Zika virus, antibodies	3					•						•	
			Specimens: 3 liquid human plasma or serum samples, 0.5 mL. Authentic commutable samples: each batch originates from a single human donor.											
5636	Zika virus, antibodies	3	Examinations: Varicella zoster IgG, IgM, total antibodies and post-analytical clinical interpretation											
			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 culture for multidrug resistant bacteria, gramnegative rods
 5071 Surveillance culture for multidrug resistant bacteria, MRSA
 5072 Surveillance culture 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 *Clostridium 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 culture for multidrug resistant bacteria, MRSA
 5072 Surveillance culture for multidrug resistant bacteria, VRE
 5073 Surveillance culture 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 1				•		•				•		•
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 1		•			•			•			•	
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 1					•						•	
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 1		•			•				•		•	
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), Varicella 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 1		•			•				•			•
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 1			•		•			•			•	
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 instructions are provided. 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 gynaecological loci is assessed. Brief case histories and instructions are provided. 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 2022: 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 from representative loci. Brief case histories and instructions are provided. 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 Labquality for evaluation by an expert board. 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.

8817	HIL-index [DEKS]	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					</
------	------------------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

Others

Others » Andrology

	1	2	3	4	5	6	7	8	9	10	11	12
6400 Semen analysis										●		
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				●						●		
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]			●							●		
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]												
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

8817 HIL-index [DEKS]

7806 Preanalytics and process in anatomic pathology

7800 Preanalytics, clinical chemistry

7802 Preanalytics, microbiology

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

Microbiology

5950 Bordetella pertussis, antibodies

5960 Borrelia burgdorferi, antibodies, European origin

5620 Chlamydia pneumoniae, antibodies

5650 Cytomegalovirus, antibodies

5635 Dengue virus, antibodies and antigen detection

5641 EBV mononucleosis, specific antibodies

5080 General Bacteriology 1 (aerobes and anaerobes)

5081 General Bacteriology 2 (aerobes)

5860 Helicobacter pylori, antibodies

5092 Hepatitis A, antibodies

5094–5096 Hepatitis B and C, serology

5682 Hepatitis E, antibodies

5091 HIV, antibodies and antigen detection

5089 Human T-cell lymphotropic virus, antibodies

5668 Measles virus, antibodies

5669 Mumps virus, antibodies

5980 Mycoplasma pneumoniae, antibodies

5660 Parvovirus B19, antibodies

5560 Puumala virus, antibodies

5667 Rubella virus, antibodies

5880 Syphilis serology

5099 Tick-borne encephalitis virus, antibodies

5420 Toxoplasma, antibodies

5060 Urine culture, quantitative screening

5065 Urine culture, quantitative screening, identification
and susceptibility

5665 Varicella-zoster virus, antibodies

5636 Zika virus, antibodies

Alphabetical scheme directory

5-hydroxyindoleacetic Acid (5-HIAA), **11**

A

ABO and Rh grouping, **16**
Acid-base status and electrolytes, **10**
ACTH and Cortisol, **9**
Activated partial thromboplastin time, INR and fibrinogen, **17**
Albumin and creatinine in urine, **13**
Alcohol in whole blood: Ethanol + methanol + isopropanol, **10**
Alcohol in whole blood: Ethylene glycol, **10**
Alcohol in serum: Ethanol + methanol + isopropanol + acetone, **10**
Alcohol in serum: Ethylene glycol, **10**
Allergen component [UK NEQAS], **6**
Allergy in vitro diagnostics [SKML], **6**
Allergy in vitro diagnostics [UK NEQAS], **6**
Ammonium ion, **10**
ANCA and GbmAb, **20**
Angiotensin convertase (ACE), **10**
Antibody screening and compatibility testing, **16**
Anticoagulants: LMW-Heparin/antiFXa, **17**
Antiglobulin test, direct, **16**
Anti-Müllerian hormone, **13**
Antinuclear antibodies, **20**
Antistreptolysin, **21**
Autoimmune diagnostics, IFA interpretation (digital images), **20**
Autoimmune liver disease and gastric parietal cell antibodies, **20**

B

Bacteriological staining, direct (digital images), **22**
Basic blood count, 1-level sample, **16**
Basic blood count, 2-level sample, **16**
Basic chemistry, POCT analyzers, **6**
Bile acids, **10**
Bilirubin, conjugated, **10**
Bilirubin, neonatal, **10**
Blood culture, **22**
Blood culture, screening, **22**
Bordetella pertussis, antibodies, **21**
Borrelia burgdorferi, antibodies, European origin, **21**

C

Cerebrospinal fluid, bacterial culture, **22**
Chlamydia pneumoniae, antibodies, **21**
Chlamydia trachomatis and *Neisseria gonorrhoeae*, nucleic acid detection, **22**
Chromogranin A (Noklus), **10**
Clostridioides difficile, culture and toxin detection, **22**
Clostridioides difficile, nucleic acid detection, **22**
CMV and EBV, nucleic acid detection, quantitative, **26**
Coeliac disease, antibodies, **20**
Column agglutination methods: grading of reactions and patient cases, **16**
C-reactive protein (CRP) for analyzers, **12**
C-reactive protein (CRP), POCT, **12**
CRP, low concentration, **7**
Cystatin C [DEKS], **10**
Cytomegalovirus, antibodies, **26**
CXCL13 Chemokine, **21**

D

DayTrol, human serum, **9**
D-dimer, **17**
Decalotransferrin [EQUALIS], **12**
Dengue virus, antibodies and antigen detection, **27**
DNA analysis [EQUALIS], **34**
Drug of abuse screening in urine, **13**

E

EBV mononucleosis, POCT, **27**
EBV mononucleosis, specific antibodies, **27**
ECG, interpretation, **34**
ELISA reader photometry control [DEKS], **34**
Eosinophil cationic protein, **6**
Erythrocyte sedimentation rate, **6**
Erythrocyte sedimentation rate: Alifax-analyzers; Greiner tube, **7**
Erythrocyte sedimentation rate: Alifax-analyzers; Sarstedt tube, **7**
Erythrocyte sedimentation rate: iSED, **7**

F

Faecal bacterial pathogens multiplex, nucleic acid detection, **22, 31**
Faecal calprotectin, **12**
Faecal culture, **23**
Faecal elastase, **11**
Faecal occult blood, qualitative, **7**
Faecal occult blood, quantitative, **7**
Faecal parasites multiplex, nucleic acid detection, **25, 31**
Flagger program (Noklus), **15**
Francisella tularensis, antibodies, **21**
Fungal culture, **25**
Fungal infections, nucleic acid detection, **25**

Alphabetical scheme directory

G

Gastric biomarkers, **11**
Gastrointestinal viral multiplex, nucleic acid detection, **31**
General Bacteriology 1 (aerobes and anaerobes), **23**
General Bacteriology 2 (aerobes), **23**
Glucose meters, **8**
Gram stain, blood culture, **23**
Gram stain, colonies, **23**
Gynaecological cytology (liquid based), virtual microscopy, **32**
Gynaecological cytology (smear), virtual microscopy, **32**

H

Haemoglobin A1c, liquid samples, **8**
Haemoglobin A1c, liquid samples, POCT, **8**
Haemoglobin, 1-level HemoCue 801 and HemoCue 301, **7**
Haemoglobin, 1-level, POCT, **7**
Haemoglobin, 3-level samples, cell counters and analyzers, **7**
Haemoglobin, 3-level samples, POCT, **7**
Haemoxymeters, **11**
Helicobacter pylori, antibodies, **21**
Helicobacter pylori, antigen detection in faeces, **33**
Hepatitis A, antibodies, **27**
Hepatitis B and C, serology, specimen volume 0.6 mL / 1.2 mL / 2.0 mL, **27**
Hepatitis B, s-antigen antibodies, quantitative, **27**
Hepatitis B virus, nucleic acid detection (DNA), **27**
Hepatitis C virus, nucleic acid detection (RNA), **27**
Hepatitis E, antibodies, **27**
Herpes simplex 1 and 2, antibodies, **27**
HIL-index [DEKS], **33**
Histological staining techniques, **32**
Histopathology, virtual microscopy, **32**
HIV-1, nucleic acid detection (RNA), **28**
HIV, antibodies and antigen detection, **28**
HIV, antibodies and antigen detection, POCT, **28**
Homocysteine [DEKS], **11**
Hormones A: Basic analytes of hormone and immunochemistry, **8**
Hormones B: Steroid and peptide hormones, **9**
HSV162/VZV/*T. pallidum*, nucleic acid detection, **26**
Human papillomavirus, nucleic acid detection, **28**
Human T-cell lymphotropic virus, antibodies, **28**

I

Interferon Gamma Release Assay (IGRA) for *Mycobacterium tuberculosis*, **20**
Immunohistochemical staining methods, **32**
Influenza virus A+B and RS virus, nucleic acid detection, **28**
Influenza virus A+B, antigen detection, **28**
INR, CoaguChek, i-STAT and Siemens Xprexia, POCT, **17**
INR, EuroLyzer, POCT, **18**
INR, LabPad, POCT, **18**
INR, MicroINR, LumiraDX and CoagSense, POCT, **18**
Interleukin-6, **12**

K

Ketones (beta-hydroxybutyrate), POCT, **8**

L

Legionella, antigen detection in urine, **23**
Leucocyte differential count and evaluation of blood cell morphology, virtual microscopy, **16**
Leucocyte differential count, 3-part, automated, **16**
Leucocyte differential count, 5-part, automated, **17**
Lipids and lipoproteins, **12**
Lipoprotein a, **12**

M

Malaria, antigen and nucleic acid detection, **25**
Malaria screening, Giemsa stain, **25**
Malaria screening, MGG stain, **25**
Measles virus, antibodies, **28**
Meningitis-encephalitis multiplex, nucleic acid detection, **31**
Methyl malonate [DEKS], **11**
Multiple Respiratory Virus nucleic acid detection, **28**
Mumps virus, antibodies, **28**
Mycobacterial culture and stain, **23**
Mycobacterial nucleic acid detection, **23**
Mycobacterial stain, **24**
Mycobacterium tuberculosis, drug resistance, **23**
Mycoplasma pneumoniae, antibodies, **21**
Myocardial markers, **7**
Myocardial markers and CRP, low concentration, **8**

N

Nasal swab cells, **11**
Natriuretic peptides 1, B-type, NT-ProBNP, **8**
Natriuretic peptides 2, B-type, BNP, **8**
Neisseria gonorrhoeae (Gc), culture and susceptibility testing, **24**
Non-gynaecological cytology, virtual microscopy, **32**
Norovirus, nucleic acid detection, **28**

Alphabetical scheme directory

P

Parasites in blood, Giemsa stain, **26**
Parasites in blood, Giemsa stain, virtual microscopy, **26**
Parasites in blood, MGG stain, **26**
Parasites in blood, MGG stain, virtual microscopy, **26**
Parasites in faeces, **26**
Parasites in faeces, virtual microscopy, **26**
Parathyroid hormone, intact, **9**
Parvovirus B19, antibodies, **29**
Percentiler program (Noklus), **15**
Phospholipid antibodies, **20**
Preanalytics and process in anatomic pathology, **32, 33**
Preanalytics, clinical chemistry, **33**
Preanalytics, microbiology, **33**
Preanalytics, Pneumatic Sample Transport, **33**
Preanalytics, POCT in chemistry, **33**
Preanalytics, urine and blood sample collection, **33**
Pregnancy test, **13**
Procalcitonin, **12**
Prostate specific antigen, **13**
Proteins in cerebrospinal fluid, **12**
Proteins, electrophoresis, **12**
Proteins, immunochemical determinations, **12**
Prothrombin time, **18**
Puumala virus, antibodies, **29**

R

Respiratory adenovirus, antigen detection, **29**
Respiratory infections multiplex, nucleic acid detection, **31**
Reticulocyte count, automated, **17**
Reticulocyte count, manual methods, **17**
Rheumatoid factor and citrullin peptide antibodies, **20**
Rotavirus and adenovirus, antigen detection, **29**
RS virus, antigen detection, **29**
Rubella virus, antibodies, **29**

S

Salivary cortisol, **8**
Salmonella, culture, **24**
SARS-CoV-2, antibodies, **29**
SARS-CoV-2, antigen detection, **29**
SARS-CoV-2, nucleic acid detection, **29**
Semen analysis, **34**
Serum A, lyophilized samples, **9**
Serum B and C (2-level), **9**
Sexually transmitted diseases multiplex, nucleic acid detection, **31**
Special coagulation, **18**

Sputum cells, **11**

Streptococcus agalactiae (GBS), nucleic acid detection, **24**

Streptococcus agalactiae (GBS), culture, **24**

Streptococcus pneumoniae, antigen detection in urine, **24**

Streptococcus pyogenes (Group A), antigen detection in pharyngeal sample, **24**

Streptococcus pyogenes (Group A), nucleic acid detection in pharyngeal sample, **24**

Surveillance for multidrug resistant bacteria, gramnegative rods, **24**

Surveillance for multidrug resistant bacteria, MRSA, **24**

Surveillance for multidrug resistant bacteria, VRE, **25**

Synovial fluid crystals, **11**

Syphilis serology, **21**

T

Therapeutic drugs, **11**

Throat streptococcal culture, **25**

Thyroid gland antibodies, **20**

Tick-borne encephalitis virus, antibodies, **29**

Toxoplasma, antibodies, **26**

Trichomonas vaginalis, detection, **26**

Troponin I and Troponin T, detection, POCT, **8**

Tryptase [UK NEQAS], **6**

TSH receptor antibodies, **20**

Tumour markers, **13**

U

Urine bacterial screening with automated analyzers, **13**

Urine culture, quantitative screening, **25**

Urine culture, quantitative screening, identification and susceptibility, **25**

Urine, identification of cells and other particles (digital images), **13**

Urine quantitative chemistry, **14**

Urine strip test A, **14**

Urine strip test B, particle count and estimation of density, **14**

V

Varicella-zoster virus, antibodies, **30**

Vitamin A, E and D metabolites, **11**

W

White blood cell count, HemoCue, POCT, **17**

White blood cell differential count: HemoCue, POCT, **17**

Z

Zika virus, antibodies, **30**



LABQUALITY DAYS

International Congress on Quality in Laboratory Medicine

Labquality Days is one of the largest annual international congresses in Scandinavia focusing on quality in laboratory medicine and medical devices.

The inspiring atmosphere of the annual scientific congress gathers medical laboratory and quality management professionals to exchange ideas and meet colleagues in Helsinki, Finland in February 2023.

The main theme for the 2023 congress is Green and Sustainable Laboratories. The sub-themes consist of Quality in Laboratory and Developing Health Technology.

Come and enjoy the warm scientific atmosphere and spend a few winter days in the beautiful capital of Finland!

More information at www.labqualitydays.com.

Follow us: @Labquality, #LQD2023

Under the auspices of



LABQUALITY

Sales and customer service

Tel. +358 9 8566 8200 | Fax +358 9 8566 8280

info@labquality.fi | www.labquality.com

Kumpulantie 15, FI-00520 Helsinki, Finland

VAT FI01100791