Verein für medizinische Qualitätskontrolle
Association pour le contrôle de Qualité médical
Associazione per il controllo di qualità medico

Instructions and patient details survey 2025-4

General information
A list of all analyses with the corresponding samples can be found on www.MQZH.ch under «Offer».

Sample handling
Unless otherwise stated, our proficiency test samples can be used as patient material. Refrigerated samples must be removed from the refrigerator about 15-30 minutes (exception blood gas ampoules 5 hrs) before analysis to equilibrate them at room temperature. Ready-to-use samples only need to be mixed afterwards. Our samples are partly of human origin and are handled and disposed of with the same care as patient samples.

Sample analysis
- The samples must be analyzed using the same method that you use for the patient samples.
- Multiple determinations are only allowed if this is also done for patient samples.
- Samples must not be forwarded to other laboratories.

Results submission
- If the results are not submitted via the online system, the protocol sheet must be signed by the responsible laboratory manager/physician
- The results may only be discussed with colleagues from other laboratories once the proficiency test has been completed.

Administration
- Please do not forget to keep a copy of your results until you have received and checked the evaluation.
- We advise you to keep the samples until you have received the results. In the event of unsatisfactory results, you can re-analyse your samples.

The following device-specific instructions can be found in german at www.MQZH.ch under "Instructions":

A1cNOW		Kolbenhubpipette
ABL90 Flex+		LapPad
ABL800 Flex Serie		Lumira DX
ABL80 Flex CO-OX		Mikrobiologie NAT (B11-B36)
AFIAS		MicroINR / MicroINR Expert
Afinion		MiniiSED
Blutsenkung		Microsemi
AQT90 Flex		Mythic
Celltac Alpha MEK/1303/1305		Piccolo Xpress
Cholestec LDX		QuickRead go
Coagu Chek XS / Pro II		Schnelltests
Cobas b101		Spotchem EZ SP-4430 / D-Concept
Cobas h232		Statsensor Xpress / Stat_Strip
Cobas Pulse		Triage Meter Pro
DCA Vantage		Uricult (B2)
EPOC		Xprecia
Eurolyser Cube		Virusamplifikation (V2-V6)
Fuji Dri-chem		Zybio Z3
Hemoscreen		

Information about the specific samples

B1 Strep A Test

You will receive sample B1 as a liquid (it simulates the patient's nose, throat, etc.). Be sure to use the swab included in your rapid test pack and dip it into the sample B1. Then process the swab as if it were a patient sample.

B9 Bacteriology

Open the screw cap and disinfect the grey rubber. Reconstitute the samples with 0.5 ml 0.9% NaCl by injecting the liquid through the grey rubber using a sterile syringe.

B10 Gram stain

Material: Meningitis
Diagnosis: Cerebrospinal fluid

NEW: Please specify the appropriate code.

Code		Code	
210	Gram-positive cocci	222	Gram-positive rods branched
211	Gram-positive cocci in clusters	223	Gram-positive rods plump
212	Gram-positive cocci in tetrads	224	Gram-negative rods
213	Gram-positive cocco in long chains	225	Gram-negative curved rods
214	Gram-positive cocci in short chains	226	Gram-negative rods fusiform
215	Gram-positive diplococci	230	Yeastcells
216	Gram-negative cocci	231	Pseudohyphes
217	Gram-negative diplococci	232	Gram-labile rods
220	Gram-positive rods	233	No bacteria
221	Gram-positive coryneform rods		

B31 SARS CoV-2, NAT

Sample B31 can be diluted 1:2 with NaCl if the amount of sample material is insufficient.

G1, G3, G4, G18-G22, Coagulation

Pipette 1 ml distilled water into the vial, close and mix gently. Allow to stand for 30 minutes at room temperature. Mix again carefully by hand before measurement. Measure within 2 hours.

G06, D-Dimers

The sample must be mixed particularly carefully before analysis. To do this, turn the sample 20-30 times and tip it upside down.

H4 Blood parasites

Possible codes:

100	No parasites found
101	Plasmodium
102	Plasmodium falciparum
103	Plasmodium malariae
104	Plasmodium vivax
105	Plasmodium ovale
106	Trypanosoma sp.
107	Mikrofilaria
199	Others:

H6, H7 Hemogram automatic 5-Part / Retikulocytes

These proficiency test samples are analysed in the same way as patient samples. Please measure the samples immediately after receipt**!**

H13, Cell counts Body Fluid

The sample must be mixed particularly carefully before analysis.

H15, ESR miniiSED

Important: Store the sample at room temperature. Place the tubes on a mechanical rocker or rotator for approx. 30 minutes before use. Do not cover the barcode on the sample. The barcode must be scanned.

K1 Clinical chemistry

Estimated glomerular filtration rate (eGFR)

In order to assess a patient's renal function, plasma creatinine should be measured and the the eGFR should be calculated. In the protocol sheet, all participants who measure creatinine will find an additional entry for the eGFR. If you do not yet work with the eGFR, you will find further you will find further information and a calculator at www.mqzh.ch.
Patient details: 42-year-old man, skin color white, (weight 120 kg)

K3 HbA1c

Participants with Afinion: Please perform the determination as soon as possible (fresh whole blood)

K29 Calprotectine, K51 Pancreatic elastase

Samples from these interlaboratory tests can be treated as liquid stool samples.
If it is not possible to measure the sample on the day of arrival, please store them at -20°C.

K38 Immunfixation

Specimen description: from different patients.

Codes for immunofixation interpretation: (Please specify the appropriate code.)

Codes	In the immunofixation appears a:
1	monoclonal component type IgA Kappa
2	monoclonal component type IgA Lambda
3	monoclonal component type IgG Kappa
4	monoclonal component type IgG Lambda
5	monoclonal component type IgM Kappa
6	monoclonal component type IgM Lambda
7	Oligoclonal immunoglobulin responses indicate limited heterogeneity of synthesized immunoglobulins
8	Inconspicuous findings, no further investigations
9	In the event of a suspected artifact or unclear findings, possibly further clarification. Please send us your image with the result

K39 Folate in Erythrocytes

The hematocrit of the sample is indicated on the label. Please process the sample immediately after receipt. If you cannot analyze the sample immediately, please store it at -20°.

K48 Creatinin and ketone WB

These proficiency test samples are measured like patient samples. Please measure the samples immediately after receipt**!**

K54 CO-Oxymetry

Cobas b123: Measure the sample in quality controll mode. All other devices: Please contact the manufacturer of the respective device directly for further instructions.

S1 Fecal occult blood

The simulated stool sample is ready for use and used exactly like a patient sample.

U2, urine test strips

Please record your result as for patient samples.. (Submission in numbers or +++ is possible))

U04, Urine sediment

Please record your result as for patient samples.. (Submission in numbers or +++ is possible))

Procedure

Enclosed you will receive 5 photos with images of urine sediment components. The following types of images we will use: PK=phase contrast, HF=bright field.
Your task is to identify the objects marked with an arrow using the two-digit codes below. On the protocol sheet, you will find five entries ("Image 1" to "Image 5") in the "Urine Sediment" section where you can enter the codes.

Sample description: 72-year-old patient, (m).

Urin-Teststrip

Test	Resultat	Unit	Reference
Glucose, ql	**neg**		**neg**
Protein, ql	+		**neg**
Bilirubin	**neg**		**neg**
Urobilinogen	+		**norm**
pH	6.5		**5.0-7.5**
Specific gravity	**1.060**	g/ml	**1.020-1.030**
Erythrozyten, ql	+		**neg**
Ketone	**neg**		**neg**
Nitrite	**neg**		**neg**
Leukocytes	**+**		**neg**

The images are all from the same sample and were taken with a 40x objective.
IMPORTANT: Note the scale at the bottom right to estimate the size of the elements.
More images of this sample can be found on the web at www.mqzh.ch in the photo album.

Codes

10 Erythrocytes normal	**40** Spermatozoa	**60** Bacteria
11 dysmorphic Erythrocytes		**61** Yeast/Fungi
12 Acanthocytes	**50** Hyaline Casts	**62** Trichomonas
	51 Granular Casts	
20 Leucocytes	**52** Waxy Casts	**70** Crystals and salts
	53 Erythorocyte Casts	
30 Squamous Epithelia	**54** Leucocyte Casts	**80** Hair
31 Epithelia (other than squamous-)	**55** Epithelia Casts	**81** Mucus
32 Caudate Epithelia	**56** Pseudocasts	**82** Impurity
33 Round Epithelia	**57** Lipids	**83** Air bubble
34 Transitional Epithelia		**99** Unknown
35 Renal Tubular Epithelial Cells		
36 Decoy Cells		

Several terms are possible for epithelia. Use the term that is common in your laboratory.

U06, Urinsediment Automat

The sample must be mixed thoroughly before analysis. To do this, turn the sample 20-30 times and tip it upside down. Do not shake!

H3 Differential Blood Smear

Patient data

	Age	Gender	Hb	Hk	Lc	Tc	Ec
2025-4 H3A	70	w	104 g/l	0.318 l/l	21.21 G/l	304 G/l	3.79 T/l
2025-4 H3B	36	m	135 g/l	0.4 l/l	6.05 G/l	55 /l	4.29 T/l

Instructions for filling out the H3 Protokoll
If your smear is defective or bad, we will gladly send you another one.

Leukocyte differentiation
For the differentiation of rod and segment nucleated neutrophil granulocytes you have to work according to the thread rule.

Neutrophils (rod + seg), lymphocytes/plasma cells and white precursors (promyelocytes + myelocytes + metamyelocytes) are automatically added together for QUALAB assessment.

For example, if you cannot distinguish the white precursors, it is possible to sum them up with a curly bracket.
IMPORTANT: Make sure that the sum adds up to 100%, otherwise you will get a "not fulfilled".

Morphological data
After you have assessed the morphology of the leukocytes, platelets and erythrocytes, you must select the most important features of this blood count for the report. (max. 5 codes)
To do this, enter the codes below under "Findings":

General Codes

29 Normal findings (do not add any other codes)
30 Pathologic findings, refer to expert
31 Pathologic findings, not refered to expert
(Note: Even if you write code 30 on a blood count, the leukocyte differentiation must be done in any case).

Leukocyte assessment

01 Hypersegmentation
02 Left shift
03 Pelger-Hüet Abnormaly
04 Toxic signs of neutrophils (toxic granulation, basophilic strippling or vacuoles)
05 Atypical lymphocytes presumably reactive
06 Atypical lymphocytes probably neoplastic
07 Auer rods
08 other:

Thrombocyte assessment

09 Giant platelet
10 Platelet aggregates
11 other:

Erythrocyte assessment

12 Microcyten
13 Macrocytes
14 Hypochromasia
15 Polychromasia
16 Poikilocytosis
17 Elliptocytes/Ovalocytes
18 Stomatocyosis
19 Targetcells
20 Fragmentocytes
21 Spherocytes/Microspherocytes
22 Rouleaux
23 Erythrocyte agglutination
24 Howell-Jolly bodies
25 Basophilic strippling
26 Tear drops
27 other:
28 Parasites (please specifiy)

To meet the requirements, you must specify at least one code for both preparations and differentiate the leucocytes.