

Comment to Survey 2015-1

General information

You can find all the important information, detailed reports and instructions at www.mgzh.ch.

K1 - eGFR

At www.mqzh.ch you can find a calculator that uses the currently recommended CKD-EPI formula. Also, the reference range and the classification of the different stages with kidney disease are indicated below the calculator. On the basis of the formulas used, we have now formed three groups and, in each case, we used the mean eGFR value as the target value.

The following table lists the eGFR values per instrument calculated from the creatinine reference values of the different instrument groups..

Man, 30 years, 75 kg, black

| Method | creatinine | eGFR ml/min | eGFR ml/min | eGFR ml/min |
|---------------|------------|-------------|-------------------|-------------|
| | (µmol/l) | (CKD-EPI) | (Cockcroft Gault) | (MDRD) |
| | | 28.95 | 32.93 | 27.60 |
| starndard | 259.0 | 31.7 | 36.31 | 32.64 |
| chemistry | | | | |
| Reflotron | 296.9 | 26.9 | 31.68 | 27.88 |
| Fuji Dri-Chem | 250.5 | 33.0 | 37.55 | 33.93 |

H3 - Differential blood smear

Smear H3-A is derived from a patient with an EBV infection. Smear H3-B is derived from a patient with pernicious anemia. For smear B, many participants reported the code 29 as normal! During assessment of blood counts, please always note the measured values that we send along with the sample. In addition to the cases you will also find histograms of our hematology instruments at www.mgzh.ch in report H3.

K3 / K18 - HbA1c

From the survey specimens, the European Reference Laboratory for Glycohemoglobin measured a DCCT compliant HbA1c value of 5.54 % for the sample A, and 5.65 % for the sample B.

You can find the Certificate of Analysis with the DCCT and IFCC value on our website.

K8 cardiac marker with Cobas h232 and Cardiac Reader

At 0.13 mg/l the D-dimer concentration was significantly below the decision limit. We increased the tolerance by 30% in order to avoid too many unsatisfactory results due to the low target value.

K26 troponin I triage

Unfortunately, the scatter of the values was very large, resulting in many unsatisfactory results in the quantitative analysis. The values, however, were all above the decision limit, i.e., all participants received a positive result.

K34 lipase

Unfortunately, the lipase activity is highly method-dependent. We observed target values between 42.5 U/L and 203 U/L. We have introduced additional device-specific reference values with the new control and were able to improve the results of this survey sample.

S1 - Fecal occult blood

Our simulated stool sample did contain human blood; the result of all tests should be "positive."

U2 - Urinteststrips

This specimen contained urine from healthy donors that was spiked with leucocytes, glucose and HCG.

U3 - Urin Drugs

To one liter of urine, 1000 μg secobarbital, 1000 μg benzoylecgonine and 5 μg LSD were added. Accordingly, barbiturates, cocaine and LSD should test positive, all other analyzes negative..

B1 und B2 - Microbiology

We sent you the following samples:

B1 Strep A A simulated throat swab with the following pathogens:

Streptococcus pyogenes
The correct result was «positiv»

B2 Uricult 100 ml of buffer solution and a pellet with Escherichia coli > 10⁵

We expected >= 10⁴ CFU

B10 - Gram - stain

The ascites sample contained Gram-positive diplococci (Streptococcus pneumonia)

The shipping of the next survey is: Tuesday 9. June 2015

Further survey dates are on

1. September and 3. November 2015

Is your laboratory closed this week? Then send or fax us a quick note as soon as possible. We will send your samples 2 weeks later..

Best Regards

KTHEU

Dr. R. Fried