

## Survey for Hemogram including 5-part differential (HEM5D12, HEM5D4)

EQ A Provider:

ESfEQA GmbH  
Heidelberg

Survey Coordinator:

Dr. D. Groche

### Instructions for Use

#### Notes:

The usual precautions in the laboratory for potentially hazardous biological material apply for these samples. The blood donations used for production of the samples have been tested and yielded non-reactive / negative results for the following conditions: HBV (HBsAg), HCV (anti-HCV antibodies), HIV (anti-HIV1/2 antibodies), and Syphilis (anti-Treponema pallidum antibodies).

Various tasks of the proficiency testing scheme may occasionally be given over to qualified subcontractors. However, ESfEQA is responsible to the participants for the subcontractor's work.

Results from sample analysis may only be disclosed to colleagues from other laboratories after the testing period has been concluded.

By registering for and participating in this EQA participants agree to accept the general terms and conditions of ESfEQA GmbH. These can be retrieved online at [www.esfefa.eu](http://www.esfefa.eu).

#### 1. Intended Use

The samples are intended for use as quantitative control material for External Quality Assessment (EQA) in medical laboratories for the following analytes:

HGB (Hemoglobin), HCT (Hematocrit), MCH (Mean Corpuscular Hemoglobin), MCHC (Mean Cellular Hemoglobin Concentration), MCV (Mean Corpuscular Volume), PLT (Platelets), PDW (PLT Distribution Width), RBC (Red Blood Cells), WBC (White Blood Cells), RDW-CV (%), RDW-SD (fL), MPV (Mean Platelet Volume), Reticulocytes (RET, % and count).

**WBC 5-part differential:** Lymphocytes (LYM, % and count), Monocytes (MON, % and count), Neutrophils (NEU, % and count), Eosinophils (EOS, % and count), Basophils (BASO, % and count).

**Siemens** and **Sysmex** analyzer users: There are no NRBC in the controls. For the parameter WBC, report the sum of the NRBC and WBC channel.

**PLT on Mindray BC-6000, BC-6800 or BC-700 series:** users with PLT-O, PLT-I and PLT-H results are requested to report PLT-I results only.

#### 2. Product Description

The analytes are suspended in a plasma-like fluid with preservatives.

#### 3. Storage and Stability

The samples should be stored upright at 2-8°C. They are stable at least until the deadline for data submission as indicated on the sample labels.

After opening the samples are stable for 21 days, provided they are handled properly

#### 4. Sample Preparation and Analysis

Allow the samples to equilibrate to room temperature for 25 minutes prior to mixing. Mix the samples manually until the sedimented blood cells have been completely suspended. Therefore, roll the tubes slowly between the palms of the hands ten times in an upright position. Occasionally invert the tube, but do not shake the sample. Continue to gently agitate the sample until the blood cells have been completely suspended.

Do not mix the sample on a mechanical analyzer since this may damage the cells! Incomplete mixing of a vial prior to use invalidates both the sample withdrawn and any remaining material in the vial.

Analyze the samples in the regular/patient mode of the instrument according to the user's manual for the hematology analyzer.

In contrast to this, **Sysmex** and **Mindray analyzer** users are requested to run the hematology samples of this survey in the QC mode.

#### 5. Dates and Submission of Test Results

Testing Periods: Please refer to the sample labels. Results can be submitted anytime within the testing period indicated on the sample labels.

Please submit your results electronically to ESfEQA on <https://teqa.esfefa.eu>.

Contact your local distributor of ESfEQA programs or ESfEQA directly if you need assistance for registration in TEQA. Alternatively, though not preferred, use the result form provided on the ESfEQA homepage. In both cases, please indicate the instrument and method used for the analysis of the samples.

#### 6. Deadline for Data Submission

The deadlines for submitting results are indicated on the sample labels (time zone GMT +1).

#### 7. Reports and Certificates

The data will be evaluated by ESfEQA. The individual laboratory reports and certificates can be retrieved online at <https://teqa.esfefa.eu>.