

May
2022



IN STAND

Report on Quality Assessment Scheme
Group No. 651
Immunophenotyping 04 - Cellular
Immunodeficiency Diagnostic

Prof. Dr. med. Ulrich Sack
Dr. rer. nat. Andreas Boldt

issued by:

IN STAND

Gesellschaft zur Förderung
der Qualitätssicherung
in medizinischen Laboratorien e.V.

Düsseldorf, 09.06.2022

EQAS Expert

Prof. Dr. med. Ulrich Sack
Universitätsklinikum Leipzig AöR
Institut für Klinische Immunologie
Johannisallee 30
04103 Leipzig

T +49 341 972 5500
F +49 341 972 5828
E ulrich.sack@medizin.uni-leipzig.de

Assistant EQAS Expert

Dr. rer. nat. Andreas Boldt
Universitätsklinikum Leipzig AöR
Institut für Klinische Immunologie
Johannisallee 30
04103 Leipzig

T +49-341 97 25830
F +49 341 972 5828
E immunlabor@medizin.uni-leipzig.de

Organisation and Logistics:

INSTAND e.V.
Ublerstr. 20
40223 Düsseldorf
T +49 0 211 1592 13-0
F +49 0 211 1592 13-30
E instand@instand-ev.de
I www.instand-ev.de

Further Information

In the following sections you can obtain more information about the EQA scheme, in addition to the documents sent by post.

Certificate

The certificate lists those analytes for which the requirements of the collaborative study are met.
A confirmation of participation will be issued for each analyte with which you have participated in the EQAS.

Validity of the certificates

The parameters are sorted according to the validity period of the certificates.
Validity begins with the closing date of the EQAs. This date will be printed on top of each certificate. The printing or delivery date have no effect on the period of validity.
Additionally, there is an indication whether a parameter is listed in the guideline of the German Medical Association for Quality Assurance of Laboratory Medical Examinations (RiliBÄK) (e. g. (R: B1a)).

Individual results

Your reported values for each analyte are listed here, as well as the applicable target value and dispersion limits for your collective. A small diagram on the right hand side allows a quick orientation about the location of your measured value within the accepted limits.
This information is given line by line for each analyte and sample.
Additionally, a "+" shows that the correct results for all samples were reported, whereas a "-" indicates that at least one sample with an incorrect result has been submitted.
If the unit reported on your survey sheet needed to be converted, the corresponding factor used is also listed in this report.

Overall results

In this section you will find a compilation of all collectives that have been created for the evaluation of a parameter. In addition to the quantity and coefficient of variation of the submitted values, we present the success rates for the individual sample and the total success rate for the parameter.
Furthermore, we present the results of all participants for both samples in a Youden plot, where your own results are highlighted.
The graphic display of the Z-Score shows the position of your own result in comparison to the total collective over the last 6 participations in this EQA.

Dispatched samples

For this EQA scheme two human whole blood samples have been sent out.

Determining target values

When an analyte is listed in the RiliBÄK Table B1a, the reference method value is set as the target value. This target value is determined by the reference laboratory of INSTAND e.V.
For the target value for all other analytes, the robust mean (Algorithm A according to DIN ISO 13528, Annex C) of a collective is used.
A prerequisite for this evaluation of a collective or subcollective (values that were obtained with the same method and / or reagent manufacturer combination) is that it consists of at least 8 results.
In individual cases, the evaluation of smaller collectives can lead to a statistically invalid valuation, if the assessment is performed on the basis of the consensus value.

For collectives with a size between 4 and 7 participants, certificates will be issued if the results are within the determined valuation range. Participants affected by this problem of a non-valid statistical evaluation will be notified. Should a collective include less than 4 participants, an assessment based on the consensus value will not be performed (\pm in the report) and only a certificate of participation will be issued. However, to enable the participant to compare his result with other results of the same sub-collective, all parameters are calculated in the same way as for statistically evaluated collectives.

Annotation of the EQA-scheme advisor

Dear participants of the EQA scheme 651,

Please find enclosed the current results. Due to increased requests, we have revised the input mask to be able to offer more parameters, especially for the laboratories that offer the advanced cytometric tests in the extended newborn screening.

Please review the gating strategy if there are significant discrepancies in your readings. There are multiple ways to narrow down cells for numerous populations. You can see the extent to which your values match those of other laboratories [here](#).

Up to now, we have mainly asked for absolute values, but by popular request we have now switched to offering percentage values for individual differentiations. It is important to note the reference populations, e.g. memory cells. In addition, you can now specifically indicate whether you have used intracellular staining or surrogate markers.

Unfortunately, the small number of laboratories participating in this EQA scheme does not allow a target value to be determined statistically for several parameters. Therefore, all participants will not receive a proficiency test certificate for these parameters, but a confirmation of participation.

One participant determined the Vbeta-TCR repertoire. The reported result is plausible and correctly interpreted.

With kind regards



Prof. Dr. med. Ulrich Sack