LABQUALITY

2018-08-07

External Quality Assessment Schemes

Allergy in Vitro Diagnostics 3, 2018

FINAL REPORT

Product no. 2670, 2680
LQ920118014, LQ726318015,
183-1, 183-2/UK, SE

Items sent	2018-06-26
Round closed	2018-07-17
Report released	2018-08-07

The report contains
-individual histograms
(if results have been returned)
-numerical summary

Request for corrections
Typing errors in laboratory's result forms are on laboratory's responsibility. Labquality accepts responsibility only for result processing.

Requests must be notified by writing within three weeks of the date of this letter.

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Organisation of the Allergy rounds

The Labquality rounds are run in co-operation with the UK NEQAS rounds. The round had 31 participants from 8 countries in co-operation with Labquality.
Enclosed you will receive the Labquality´s reports from the Total IgE and ECP.

Samples
The samples 183-1 and 183-2 were liquid sera from UK NEQAS Distribution 183, kept frozen before the delivery. Sample 14 (total IgE) was liquid frozen serum and sample 15 (ECP) was lyophilized serum.

Presentation of results
The statistical parameters are calculated from the results that fall within the calculated limits for the group in question. The limits are obtained from the median value of the uncorrected results ± 3 * uncorrected SD if the group includes at least seven results.

For this scheme the reports are created in LabScala. You are now able to see the method specific histograms in the numerical summary. The name of the method is listed on top of the histogram picture. In client specific reports your own result is shown with an orange dot. The target area is presented as a yellow area in the picture. In the history graphs you are now able to see your performance graphically both against the assigned value (x_{pt}) and the z-score area of -2 -- +2.

From the beginning of 2018 we have made some changes in the statistical calculations and reporting. In case the client's result is the only one in the method group, no assigned value will be calculated, no target area shown, and no statistics calculated. In case there are 2-11 results in a method group and the uncertainty of the target value is too large (u(xpt) < 0.1 * maximum allowable error is not true) an automatic text is printed on the report: "The uncertainty of the assigned value is not negligible, and evaluations could be affected." In case there are 2-4 results in a method group, no z-score is calculated, and a text is printed on the report: "Due to the small number of results, the z score is not calculated." In case there are 5-11 results, the z-score is calculated and the report has a text: "Z score is uncertain due to the small number of observations."

Z-scores are calculated from the results of the EQA round concerned. Assessment of z-scores is based on the following criteria:
$-2.0 \leq z \leq 2.0$ is regarded as satisfactory;
$-3.0 < z < -2.0$ or $2.0 < z < 3.0$ is regarded as questionable ('warning signal');
$z \leq -3.0$ or $z \geq 3.0$ is regarded as unsatisfactory ('action signal').

Detailed instructions on interpretation of the results are given in LabScala (LabScala user instructions; EQAS interpretation guidelines).

For laboratories ordering paper printouts: The laboratory-specific histograms, numerical summaries and report letters of total IgE and ECP scheme are also available on **Labquality homepage** (www.labquality.fi). Please login to LabScala and fill in your laboratory's client code/personal user name and password. You are able to access your reports via LabScala by selecting "View reports" from the front page. Search for the specific scheme by name or code or press "Choose" to see all.

UK NEQAS sample 183-1 and sample 183-2 specific IgE **reports** will be available via www.immqas.org.uk pages after you have received notification from UK NEQAS.

Comments

Sample 14, **Total IgE**
This total IgE sample has also been in round 6, 2017.
All individual results except one were above (or near) the reference limits of adults as they were also in the last year´s round.
The CV of all results was 7.7% and the mean was 132 kU/L. The corresponding results in round 6, 2017 were almost the same; 6.8% and 132 kU/L.
The mean of the Phadia group (n= 19) was now 132 kU/L and CV% 6.4, the corresponding results in round 6, 2017 were 132 kU/L and 6.5% (n=18). Great!
The only result in Siemens BN ProSpec group was again much lower than the other results (63 kU/L, in round 6, 2017 it was 69 kU/L).
Siemens Immulite and Roche groups had both two results (CV% were 3.0 and 3.8 respectively). The two results of the Siemens Immulite group were also lower than the other results (mean 117 kU/L), but Phadia group had some similarly low results as well.

Sample 15, **ECP**
This ECP sample has not been in use in these rounds before.
All results were above the reference limits.
The mean of Phadia results was 76.7 µg/l and CV 6.5% (n=11). There were not results from other groups this time.

End of report