

## **Explanation Reports Internal Control System (ICS)**



## Review Day Report.

This report shows your most recent results per data set for the analytes in the control level(s).

The grey colums show the name of the Control Material, the analyte names and units per analyte. The rest of the report shows the statistical data of "My Lab" and "All Labs" per Level (Level 1 in yellow and Level 2 in green):

- The first column gives the last saved results (run) of your laboratory. Run ID number is made up
  of date and Erndim number. A result printed in red means that this result is outside your
  acceptance limits.
- "My Accept Limits" show the Acceptance limits that your laboratory set for this Batch Control Material.
- My Running mean is the running mean\* of all your saved results.
- All Labs Running Mean is the mean\* of all saved results of all laboratories.

Clicking on one of the analytes gives the Detail Report of this particular analyte.

## **Detail Report (per analyte)**

This report shows the day results of a specific analyte in comparison with historic results.

The first box shows all statistical data of your lab per Level, Mean\*, SD, n and your acceptance limits. The second box shows the statistical data of All laboratories that submitted results, mean\*, SD and n.

Below are the Shewhart charts for both levels. Every dot represents a result that your laboratory has obtained in this batch of control material. The data are ranked from most recent result (on the left) to less recent result (on the right); The chart shows up to 20 results on the screen, by scrolling former results will appear. Run ID's are above the charts, the limits are "My Acceptance limits" set by your laboratory.

From these charts your laboratory can conclude that a poor result (a red dot) is an incident when there are no other red dots. Another parameter confirming this conclusion would be that the running SD of your lab is much lower than the running SD of all laboratories.

## **Cumulative Table**

This report shows the cumulative data of the control materials per data set per level.

The grey colums show the name of the Control Material, the analyte names and units per analyte.

"My Statistics", the 4 yellow columns, show the statistics of your laboratory. Shown are "My Running Mean\*", "My Running SD", "My Running n" (= the number of results, that have already been saved by your lab) and "My Accept limits" (as set by your laboratory).

"My Latest Results Runs", the 4 green colums, show the results which have been submitted by your laboratory; starting with the results from the most recent run on the left, ranked to less recent with a maximum of 4 runs (the Excel file will show all runs you have saved).

\* Mean is the mean of all labs with exclusion of outliers.

Regarding the state of the art of most assays in the field of inborn errors of metabolism (quite primitive in respect to well established assays like Na, creatinin in general medical laboratories) outliers should be defined prudently. Standard exclusion rules (e.g. >3s) may not work effectively in schemes with non-Gauszian distribution (apart from ad random deviations, participants sometimes report grams instead of moles, micromoles instead of millimoles etc). Our mean is the mean calculated according to the publication of Sciacovelli et al. ClinChimActa 309 (2001) 183-189.