

## Explanation Reports -Analyte in Detail-



### **Analyte in detail: lay-out and underlying statistics**

This report provides most detailed information. Participant chooses a specific analyte in a specific specimen and gets a figure on the screen consisting of a table and a histogram (please watch Website for an example).

On top are sample number, analyte, deadline for this sample, unit, your method and your result. Then follow data for your method: n = number of labs using your method, mean, median and SD of labs using your method.

And then the same data for all labs.

The histogram has a double scaling on the left: in  $\mu\text{mol/L}$  and in Standard Deviations. In the histogram the result of the respective methods have a different colour (legend at the bottom) and your result is represented by a cross.

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-Gaussian 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 e.a. ClinChimActa 309 (2001) 183-189.