

Explanation of the Internal Quality Control System MCA O (IQCS) & Reports



Introduction

Intended Use

The ERNDIM-MCA Internal Quality Control System facilitates the internal quality control of users of ERNDIM Control Materials and consists of:

- Control Materials with concentrations at two levels
- Website for data management and value assignment

This document describes how relevant information can be derived from the website www.erndimga.nl

Navigation on the website

Figure 1 shows the overview of the system and how to navigate on the website.



Amber = availability and ordering

Starting at www.erndimqa.nl (1), you can follow the buttons general information (2), webshop (3) and via Control Materials (4) you will find the available materials and how to order them (5).

Green = information

Also under general information (2) you can press the button Use Website (6) and find extensive information on the internal quality control system and the reports under the links Explanation Internal Control System & Reports (7) and instructions for how to report results and request reports under the button Instructions Website ERNDIM Internal Quality Control System(8).

Yellow = data

Starting from www.erndimga.nl (1) and the buttons login (9), and internal control (10) you can choose the control material and batch of the materials (11) and from there define your datasets (12), submit results (13) and request reports (14). Under reports you can choose the Review Day Report (15) and the Cumulative Table (16). When you click on an analyte in the Review Day Report (15) you get a Detail Report (17) of that analyte.

The reports

Review Day Report.

This report shows your most recent results per data set for the analytes in the two control levels.

The white columns show the name of the Control Material, the analyte names and units per analyte.

The colored part of the report shows the statistical data of your laboratory in comparison to those of all labs (yellow for level 1 and green for level 2):

- The first column shows the results of the last run you submitted. Run ID (heading of this column) number is made up of the date you submitted the results and your Erndim number (in the example below 231206 and ERN). A result printed in red means that this result is outside your acceptance limits.
- The column "My Accept Limits" show the acceptance limits that your laboratory set for this Batch Control Material.
- The column "My Running Mean" is the running mean of all your submitted results with exclusion of outliers (>3s)
- The column "All Labs Running Mean" is the mean of the means of all individual labs with exclusion of outliers (>3s).

Clicking on one of the analytes gives the Detail Report of this particular analyte. Example: when you click on "3 methylglutaconic acid" in the first column you get the Detail Report as shown and explained on the next page of this document.



Review Day Report

Quantitative Organic acids (urine)

Batch 2022.189 - erndim 2022_1891-1892

Review Day Repor	t									
Quantitative Organ (urine)	Batch 2022.189 - erndim 2022_1891-1892									
		Level 1					Level 2			
Analyte	Unit	231206 ERN	My Accept Limits	My Running Mean	All Labs Running Mean	231206 ERN	My Accept Limits	My Running Mean	All Labs Running Mean	
2 methylcitric acid	µmol/L	2.67	2.4-3.6	3.22	1.98	35.76	32-48	39.3	28.5	
2-OH Glutaric acid	µmol/L	26.7	23.2-34.8	27.5	27.1	216.72	180-270	225	274	
3 methylglutaconic acid	µmol/L	23.445	12.8-19.2	21.5	18.3	96.78	76-114	94.6	106	

Detail Report (per analyte)

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

The first box shows the statistical data of your lab. Per Level the running Mean, SD and n are shown as well as the acceptance limits you have set.

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 submitted in this batch of control material. The data are ranked from the 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 threshold between the light and dark grey zones are your acceptance limits. Dots in red are outside, dots in black within your acceptance limits.

ERNDIM

Detail Report Batch 2022.189 : 3 methylglutaconic acid Quantitative Organic acids (urine)

Parameter	Level 1	1 Level 2				
Mean	21.5	94.6				
SD	0.490	4.06				
N	16	16				
Accept Limits	12.8-19.2	76-114				

All Labs

All Labs							
	Mean	18.3	106				
	SD	3.71	10.9				
	N	54	54				







Cumulative Table

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

The white columns show the name of the Control Material, the analyte names and units per analyte.

In the yellow section "My Statistics", the 4 columns show your Running Mean, Running SD, Running n (= the number of results you submitted) your acceptance limits.

In the green section "My Latest Results Runs", the columns show the four most recent results you submitted, starting with most recent run on the left. If you want to see more than four results you can click on the button "Excel": then you get an Excel file with all your results.

ERNDIM	Cumulative Data Level 1
Quality Anurance in Laboratory Teering for IEH	Quantitative Organic acids (urine)
	Batch 2022.189 - erndim 2022_1891-1892

Cumulative Data Level 1									
Quantitative Organi (urine)	Batch 2022.189 - erndim 2022_1891-1892								
		My Statistics				My Latest Results Runs			
Analyte	Unit	My Running Mean	My Running SD	My Running n	My Accept Limits	231206 ERN	231122-2 ERN	231122 ERN	231108 ERN(
2 methylcitric acid	µmol/L	3.22	0.700	16	2.4-3.6	2.67	3.37	2.01	4.4
2-OH Glutaric acid	µmol/L	27.5	2.30	16	23.2-34.8	26.7	28.66	26.13	30.2
3 methylglutaconic acid	µmol/L	21.5	0.490	16	12.8-19.2	23.445	23.07	20.13	21.3